Implementation of NICE guidelines for adults with osteoarthritis in Scotland (JIGSAW-E)

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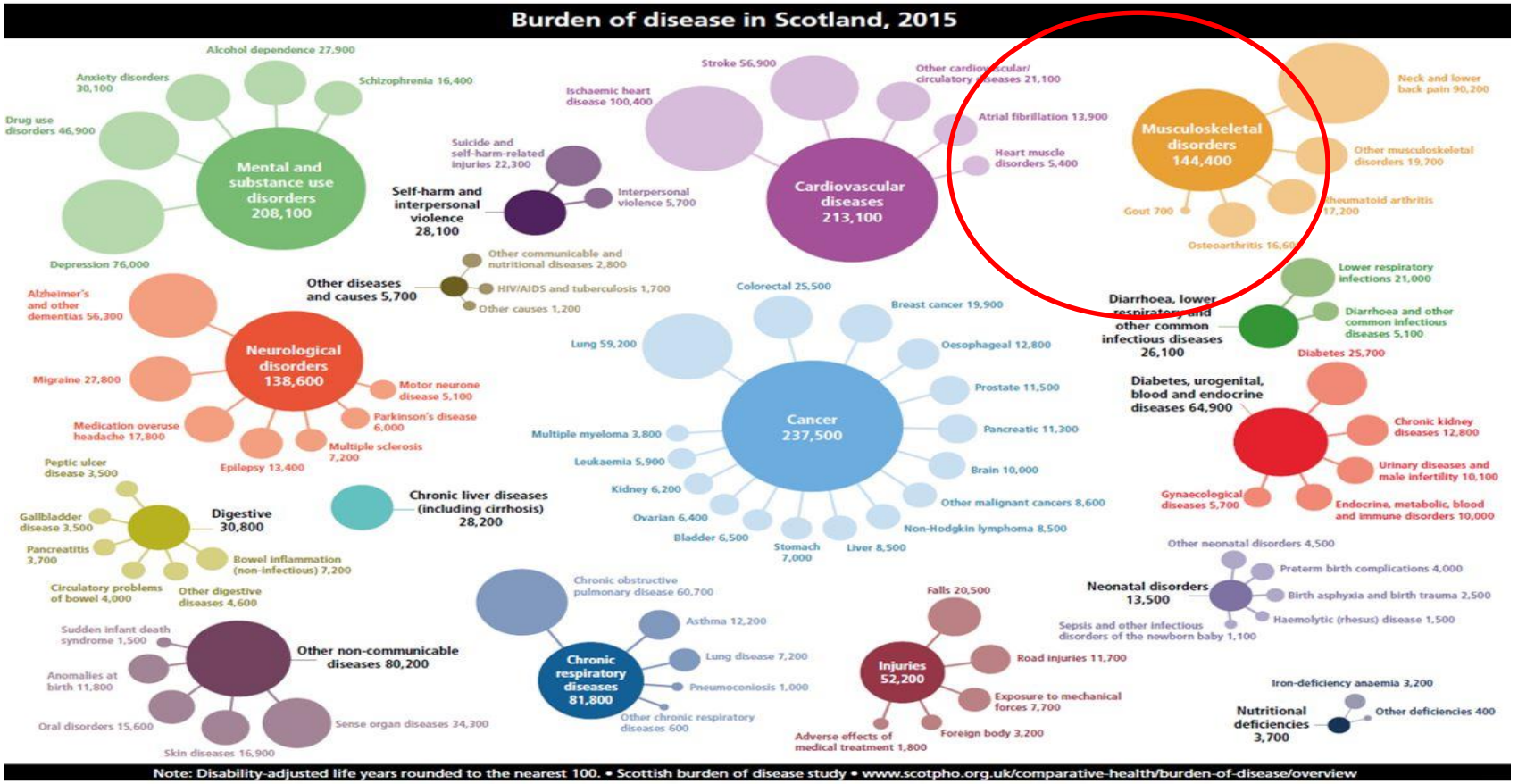
SISCC
Scottish Improvement Science Collaborating Centre

Structure of presentation

- Background: MOSAIC and JIGSAW in UK and Europe
- Feasibility study in Scotland
- Preliminary results and challenges to implementation
- What next?

Burden of Disease in Scotland 2015



Prevalence of OA

The Musculoskeletal Calculator estimates:[18]

18.2% of people aged over 45 years in **England** have osteoarthritis of the knee. That's 4.11 million people, 1.4 million of whom have severe knee osteoarthritis.

10.9% of people aged over 45 years in **England** have osteoarthritis of the hip. That's 2.46 million people, 726,000 of whom have severe hip osteoarthritis.

16.6% of people aged over 45 years in **Scotland** have osteoarthritis of the knee. That's 420,000 people, 104,000 of whom have severe knee osteoarthritis.

10.1% of people aged over 45 years in **Scotland** have osteoarthritis of the hip. That's 256,000 people, 64,000 of whom have severe hip osteoarthritis.

17.2% of people aged over 45 years in **Wales** have osteoarthritis of the knee. That's 275,000 people, 71,000 of whom have severe knee osteoarthritis.

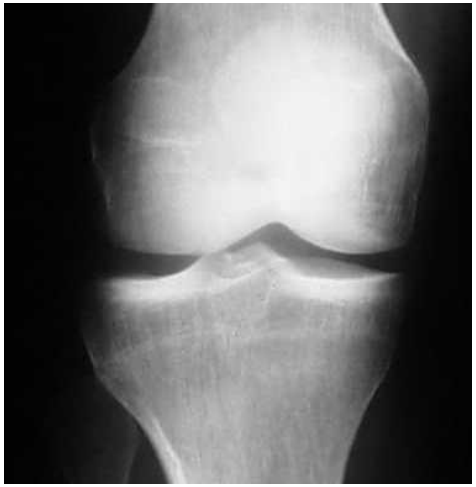
11.2% of people aged over 45 years in **Wales** have osteoarthritis of the hip. That's 180,000 people, 48,000 of whom have severe hip osteoarthritis.

Do you want to know how many people have osteoarthritis in your area? View the MSK Calculator data here

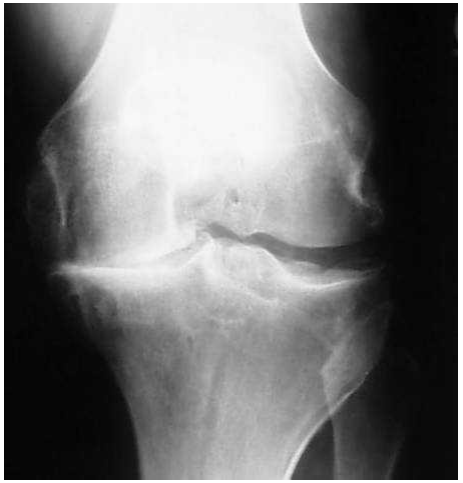
Versus Arthritis. The State of Musculoskeletal Health (2019)

Versus Arthritis. The State of Musculoskeletal Health (2019)

Diagnosis



Healthy knee



Osteoarthritic knee

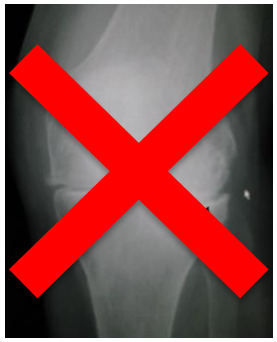
Diagnosis X-Ray Findings

- Narrowing of the joint space
- Sclerosis of the articular ends of the bone
- Osteophytic lipping
- Cyst formation
- Deformity of the joint

CAUTION : X-ray findings can be misleading and don't always correlate with pain – particularly in the spine

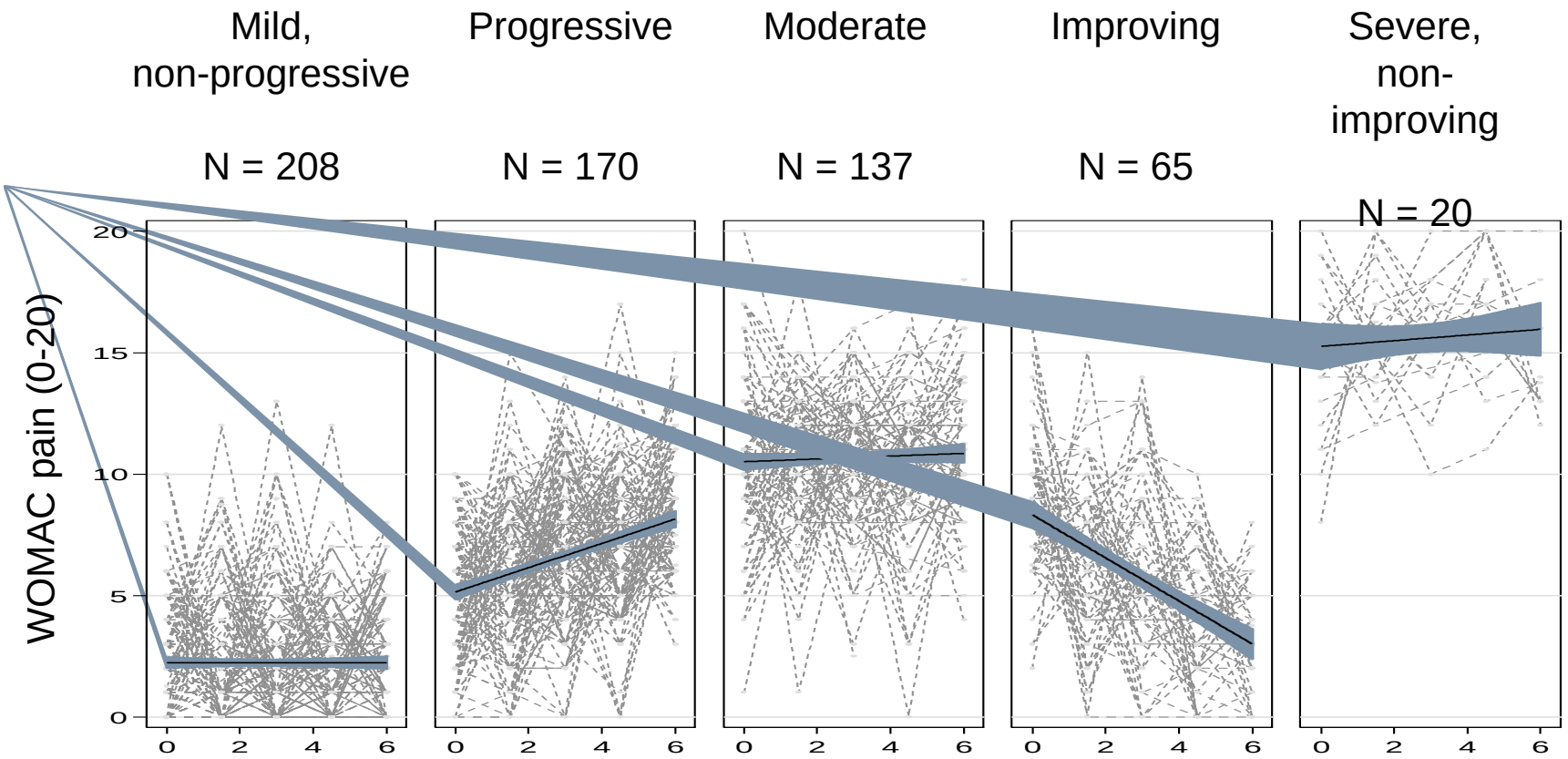
How to define - Symptoms or X-rays?

- Pain and function matter to patients
- X-ray imaging does not add much:
  - Most older people with joint pain have x-ray changes of OA even without any symptoms
  - Amount of pain not fully explained by degree of x-ray changes



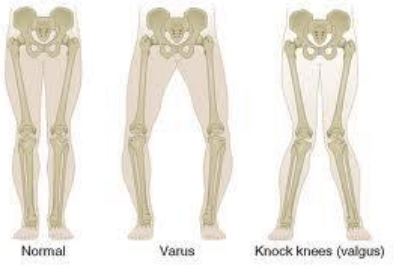
OA is a long term condition - not inevitably progressive

Six year pain trajectory in 600 people with knee OA



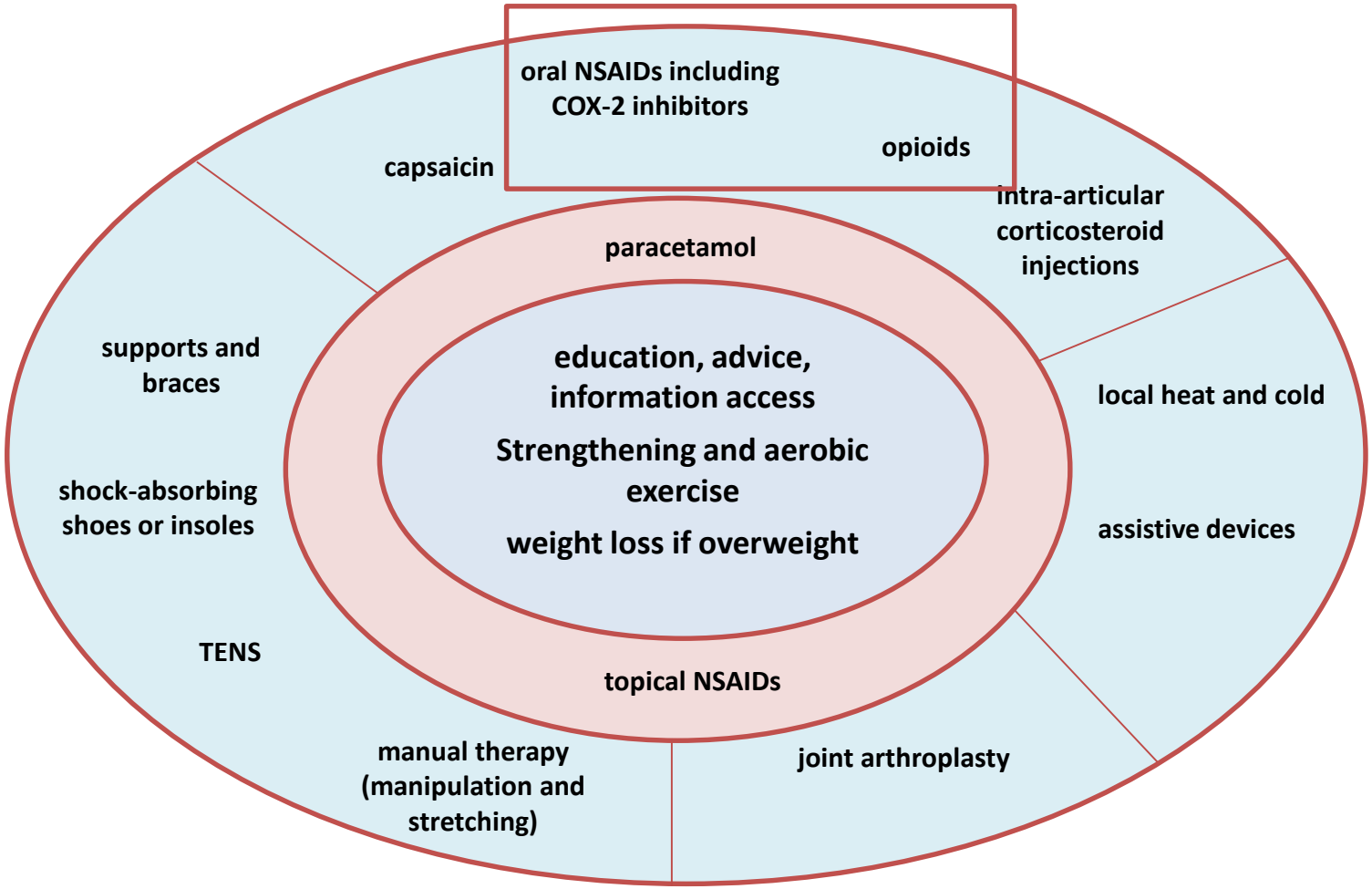
Nicholls *Osteoarthritis Cartilage* 20

Risk factors contributing to OA onset are complex



Risk factors for onset not the same as factors for progression

NICE Core Treatments for OA



Why Guidelines?

- ✓ Recommendations for holistic care, building upon best evidence

BUT:

Gap between what we know about best care and what we do to implement best care in our services.

Having guidelines alone (and multiple updates and revisions) is not enough to change complex systems.

Implementing osteoarthritis guidelines in UK primary care:
MOSAICS cluster randomised controlled trial

- To **determine the effect** of a **model OA consultation**, informed by NICE OA recommendations, to **support self-management** in adults aged 45 years and over with peripheral **joint pain**

- Uptake of core NICE recommendations

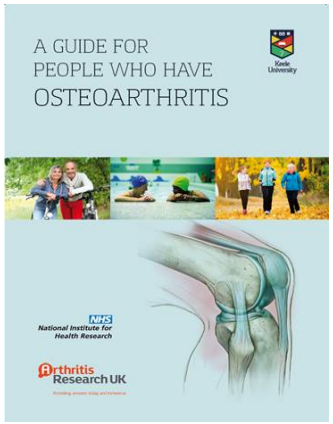
4 key Innovations

Patient presenting with joint pain 45 years and over

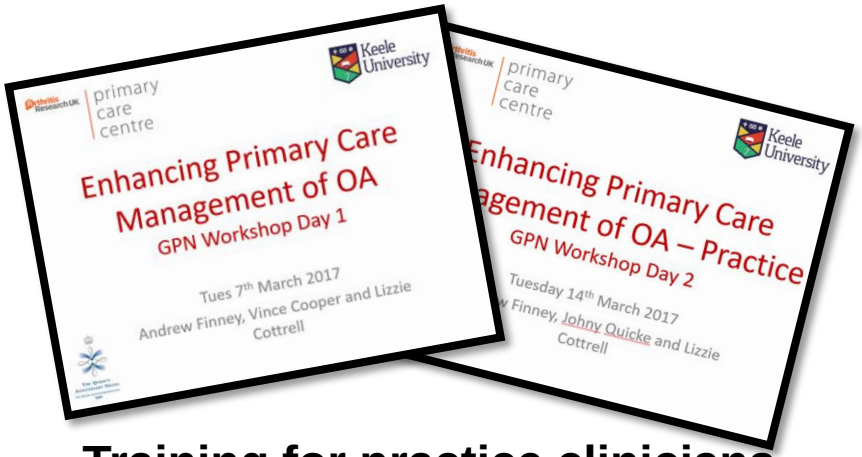
GP makes, gives, explains diagnosis, analgesia, promotes self-management, gives guidebook, refers to nurse

Practice Nurse supports self-management; guidebook; goal setting, exercise, weight loss, pain control

Model OA consultation approach



OA Guidebook



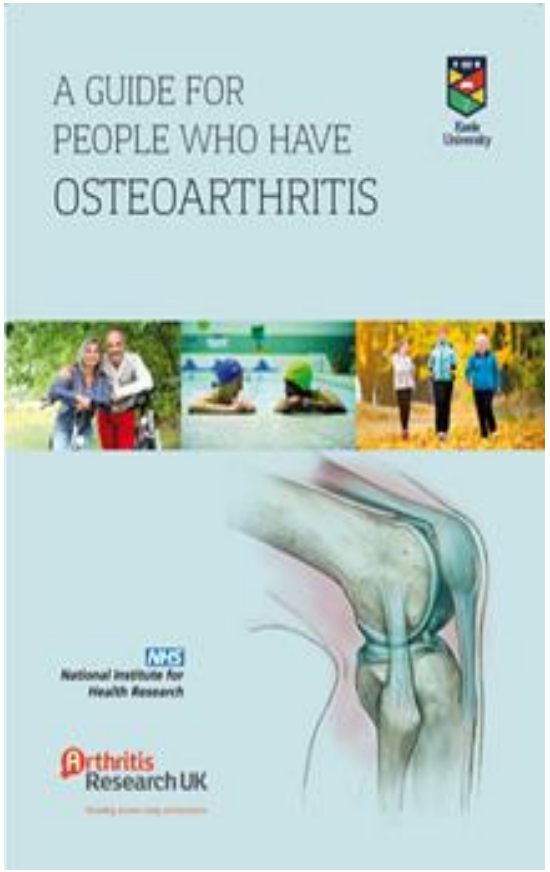
Training for practice clinicians

Measures to assess quality care

OA Guidebook

'to actually give them that [core treatment] backed up with written information I really think that makes a difference to the impact' (GP)

Morden A, Jinks C, Ong BN, et al. BMC Musculoskelet Disord. 2014 Dec 13;15:427.



Model OA Consultation

Porcheret M, et al. Developing a model osteoarthritis consultation: a Delphi consensus exercise. BMC Musculoskelet Disord. 2013 Jan 16;14:25.

Finney A, et al. Defining the content of an opportunistic osteoarthritis consultation with primary health care professionals: a Delphi consensus study. Arthritis Care Res. 2013 Jun; 65(6): 962-8.

Porcheret M, Main C, Croft P, McKinley R, Hassell A, Dziedzic K. Development of a behaviour change intervention: a case study on the practical application of theory. Implement Sci. 2014 Apr 3;9(1):42.

Model consultation

- Diagnosing OA on clinical criteria, **without routine use of X-ray**
- Providing clear diagnosis and explanation, including written information (OA guidebook)
- Giving positive messages about the natural history of OA
- Advise on pain relief and management
- Promoting and supporting **self-management**
- Physical activity advice
- Advice on weight loss (where appropriate)

What you say …

Drew Moore, Keele Univ. personal communication from MOSAICS study

Paskins et al. Ann Fam Med. 2015; 13(6): 537-44

Barker, K.L. et a What does the language we use about arthritis mean to people who have osteoarthritis? A qualitative study. Disability and Rehabilitation, 2014. 36(5): p. 367-372..

The result of getting it wrong…

Keele University

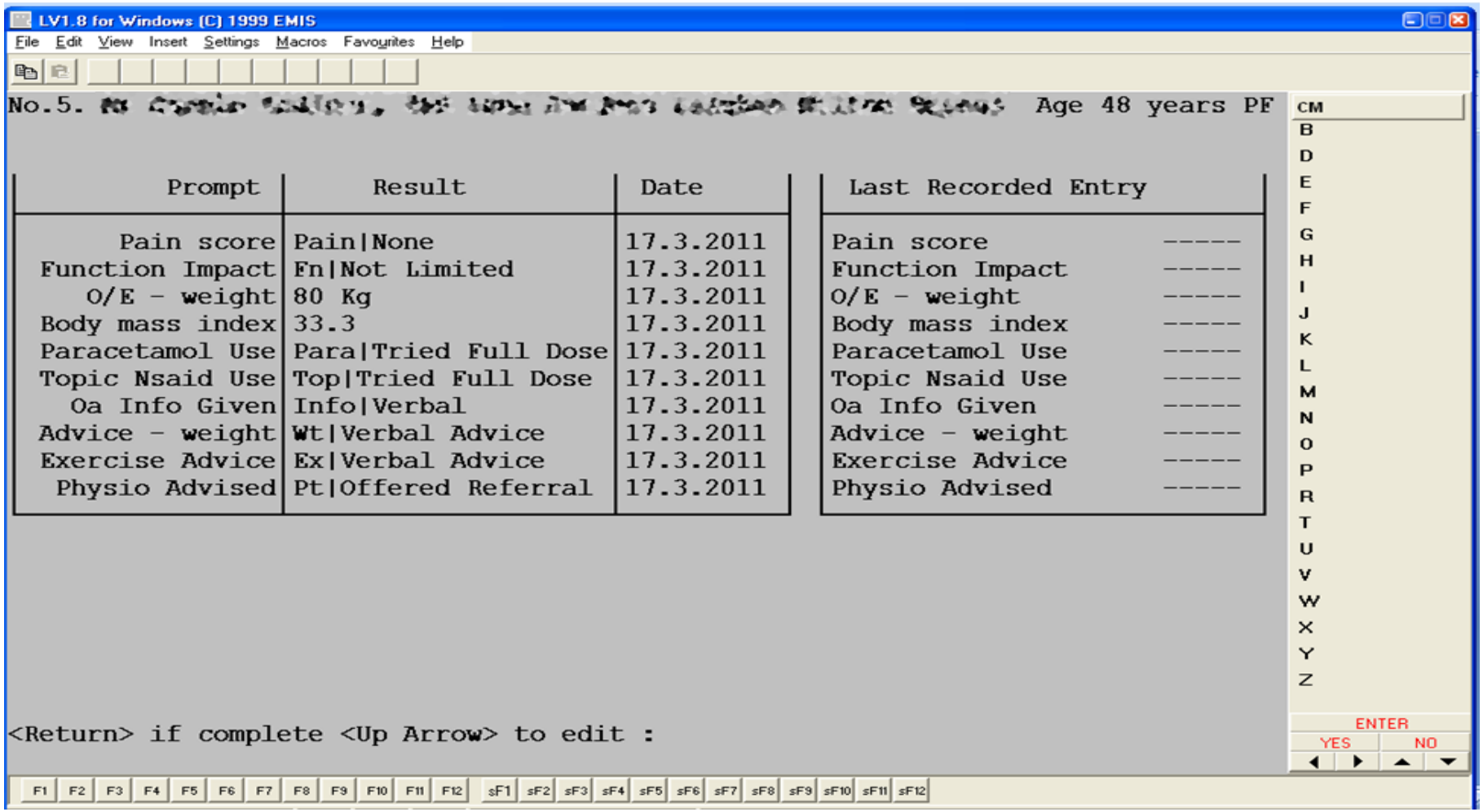
Nothing much can be done to help

If I exercise my joints will wear out even quicker

It's not safe for someone like me to exercise

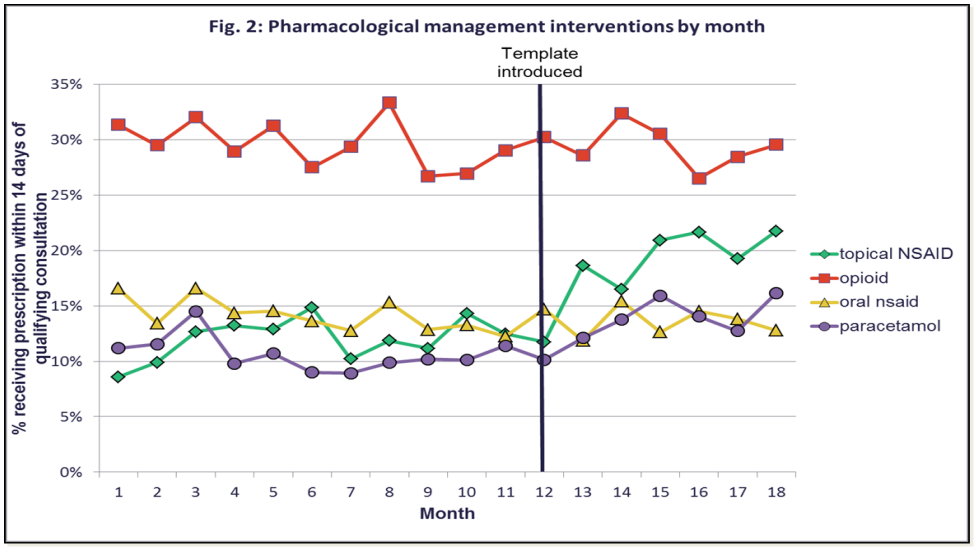
Rest is best

Example of e-template



OA Template

Effects on prescribing

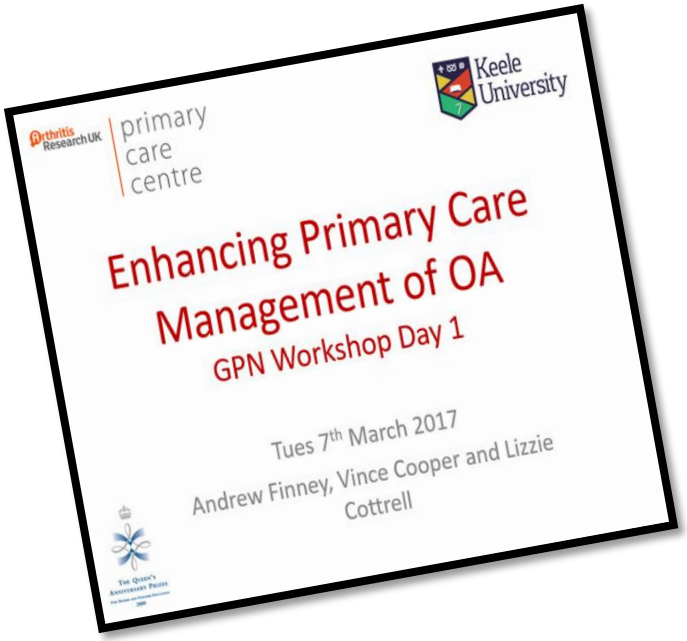


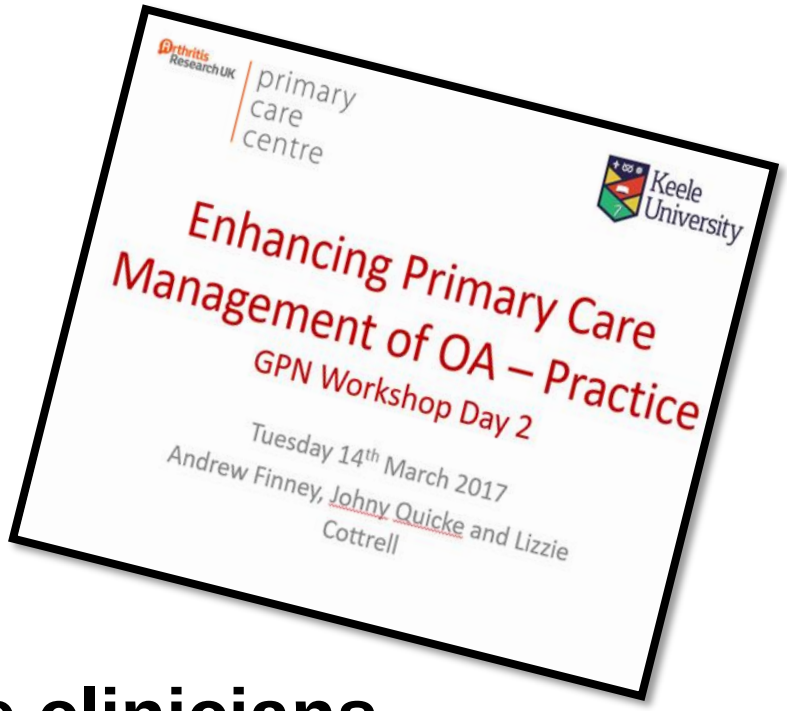
High use of opioids

Remains a need to improve non-pharmaco-logical care for OA.

Edwards JJ, Jordan KP, Peat G, Bedson J, Croft PR, Hay EM, Dziedzic KS.
Quality of care for OA: the effect of a point-of-care consultation recording template.
Rheumatology (Oxford). 2015 May;54(5):844-53.

Key Innovations





Training for practice clinicians

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Evaluation

- Clinical effectiveness
  - SF-12 (PCS) Physical Health
  - OMERACT/OARSI responder criteria, joint pain intensity, pain self-efficacy, patient enablement
- Uptake of core clinical recommendations
  - Self-reported Quality Indicators of OA care (PPI*)
  - Electronic medical record review of Quality Indicators of OA care
- Cost-consequences and cost-utility
  - EQ-5D

Evidence to support implementation

- NICE guidelines (2014) (updated 2019)
- Reduces NSAIDS use
- Reduce costs of referral to orthopaedic surgery
- Reduce time off work for patients
- No additional cost
- Potential to shift the balance of care

Dziedzic KS *et al*. Osteoarthritis and cartilage. 2018;26(1):43-53.

Oppong R *et al*. Cost-effectiveness of a model consultation to support self-management in patients with osteoarthritis. Rheumatology. 2018;57(6):1056-63.

Dziedzic KS *et al.* Implementation of musculoskeletal Models of Care in primary care settings: Theory, practice, evaluation and outcomes for musculoskeletal health in high-income economies. Best practice & research Clinical rheumatology. 2016;30(3):375-97.

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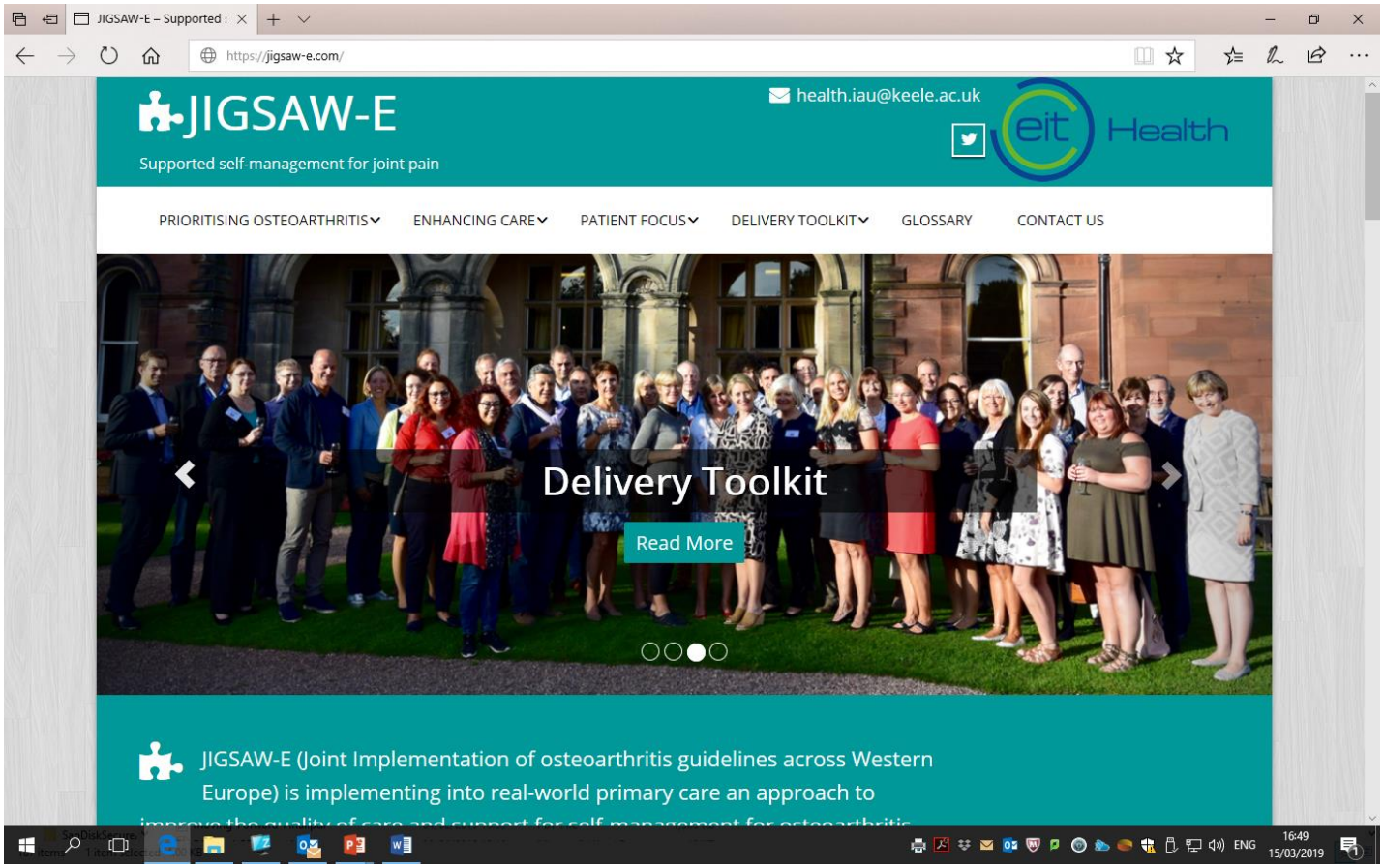
JIGSAW –IMPLEMENTATION (http://jigsaw-e.com)



JIGSAW Project aims to:

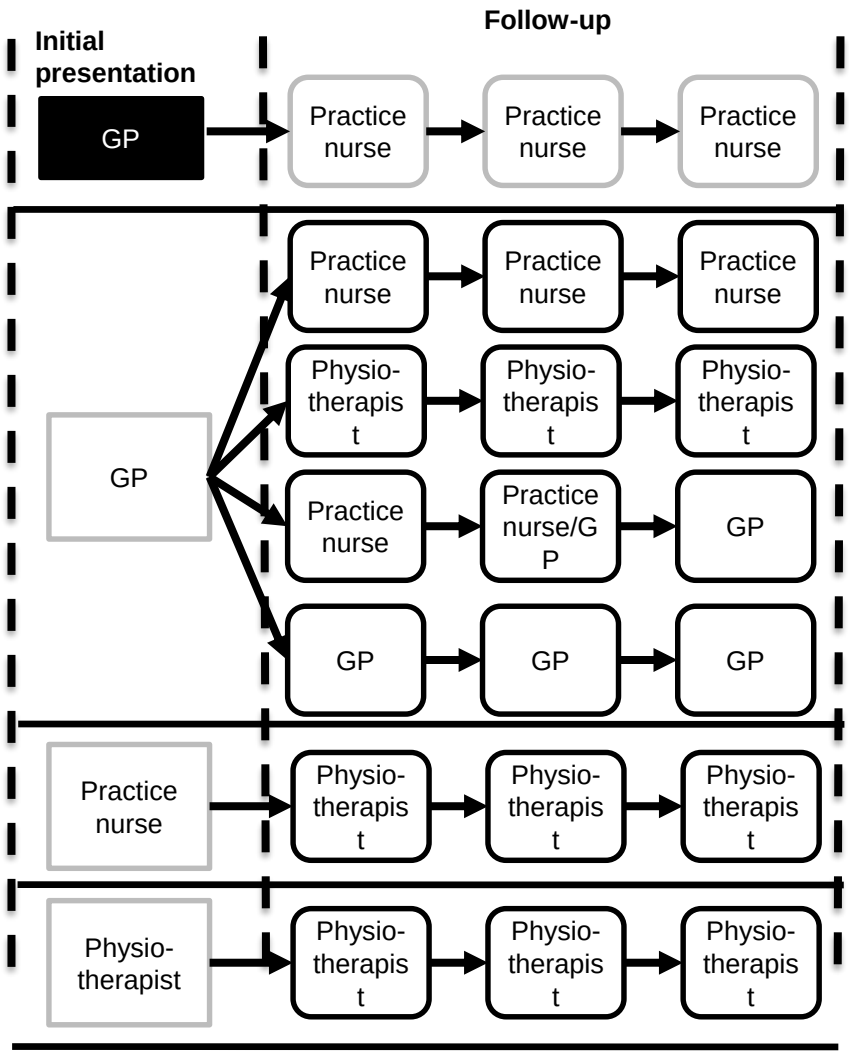
- Implement NICE OA Guidelines more uniformly
  - Involve nurses/physios in OA care
  - Enable and support self-management by patients
- Reduce GP workload for OA
- Rationalise orthopaedic referrals for OA
  - Appropriate patients and timing
  - Better prepared for better outcomes

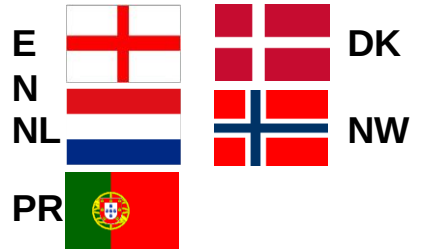
JIGSAW-E COLLABORATIONs across UK and Europe

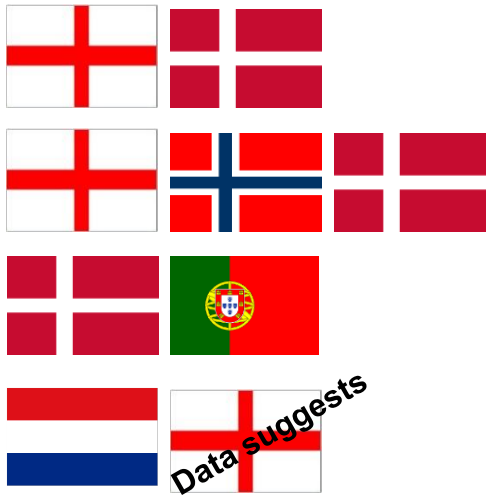
- England
- Netherlands
- Portugal
- Denmark
- Norway
- SCOTLAND?
- PPI throughout

Original MOSAICS model

Adapted models used within JIGSAW

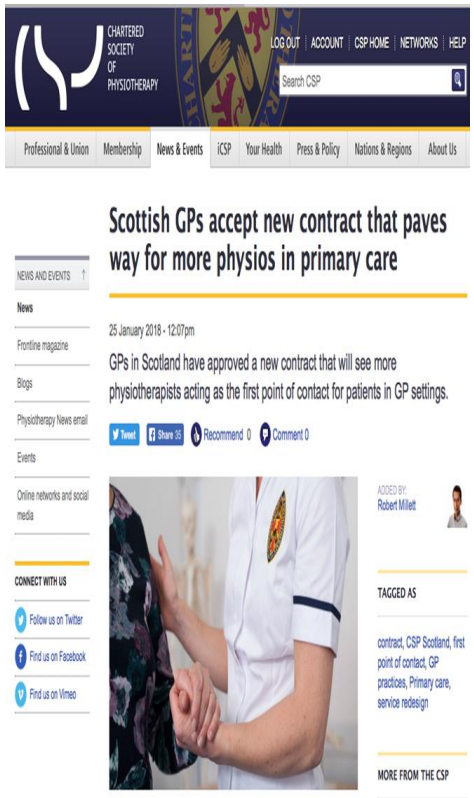




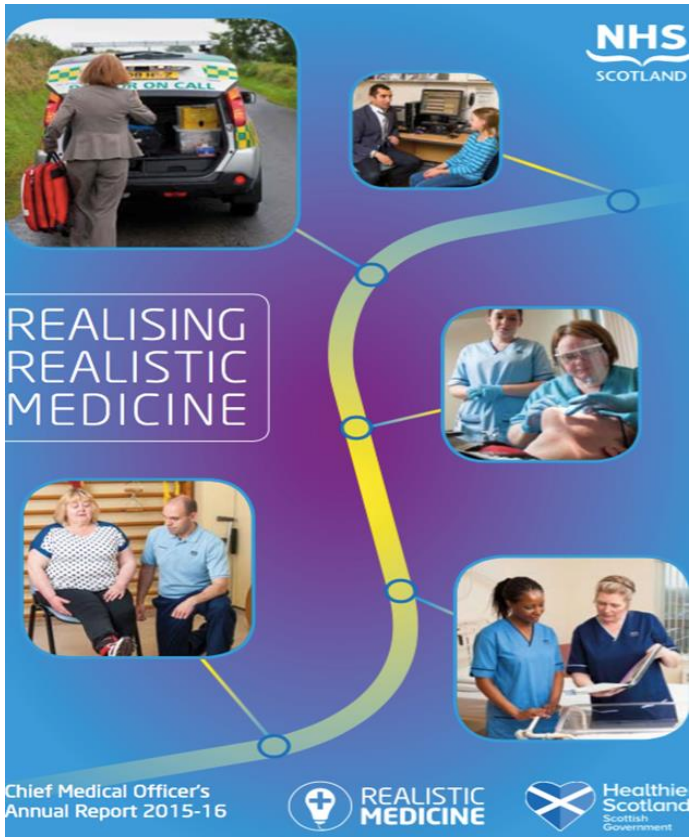


Why in Scotland ?

- Variation in standards of care
- Duplication across service providers
- NICE guidelines not followed
- GPs struggling to meet demand
- Long waiting lists for secondary hospital care



Why JIGSAW could work in SCOTLAND



- Government priority to streamline the management of MSK problems
- Timely opportunity to implement change in practice
- ESPs/FCPs appointed from 2017 in Scottish Primary Care - Variable across Scotland

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Implementation of a Model to support NICE Guidelines for the Management of Osteoarthritis (OA) in Primary Care

Helen Frost Edinburgh Napier University
Julie Cowie, Senior Implementation Research Fellow NMAHP, GCU,
Krysia Dzieziec, ARUK Professor of Musculoskeletal Research, Keele University

AIM

To explore the feasibility of implementing an evidence-based model to improve care of people with osteoarthritis in Scottish primary care

Objectives

Short term objectives

- To identify practices to adopt the model of care for OA in Scotland
- To identify staff to train and take on the role of ‘local champion’.

Long term objectives

- To spread and sustain high quality care for people with OA (>45 yrs.)
- To support evidence-based practice
- To explore the use and adaptability of the model for other high priority health problems e.g. management of diabetes.

Research questions

Q1) Explore knowledge, experience and views of GPs/FCPs and other stakeholders in the management of OA and JIGSAW-E model

Q2) Identify barriers and facilitators to implementing the JIGSAW-E model in Scotland

Q3) Explore the feasibility of the JIGSAW-E model through;

ii) implementing a “training the trainers” scheme

ii) recruiting local champions

Study design

Data collection:

- GPs/ESPs across GP Clusters in Scotland
- Participants recruited through practice managers as gatekeepers (via email and post with email and telephone reminders)

Semi-structured interviews (guided by TDF Atkins et al 2017)

- Qs refined to reflect emerging themes
- Face to face or phone interviews (approx. 30 mins; < 1 hr)
- Interviews recorded using encrypted audio recorder
- Transcribed
- Supported by field notes
- **Data analysis:** Coding and emerging themes (in progress)


WELCOME TO
PROGRESS
ENJOY THE JOURNEY

Preliminary Results

- March-Sept 2019 – contacted 90 GP practice managers across Scotland
- Target of 9/10 (1 pending)
- Total participants to date= 7 GPs 6 FCPs +

East: Forth Valley (1 FCP)

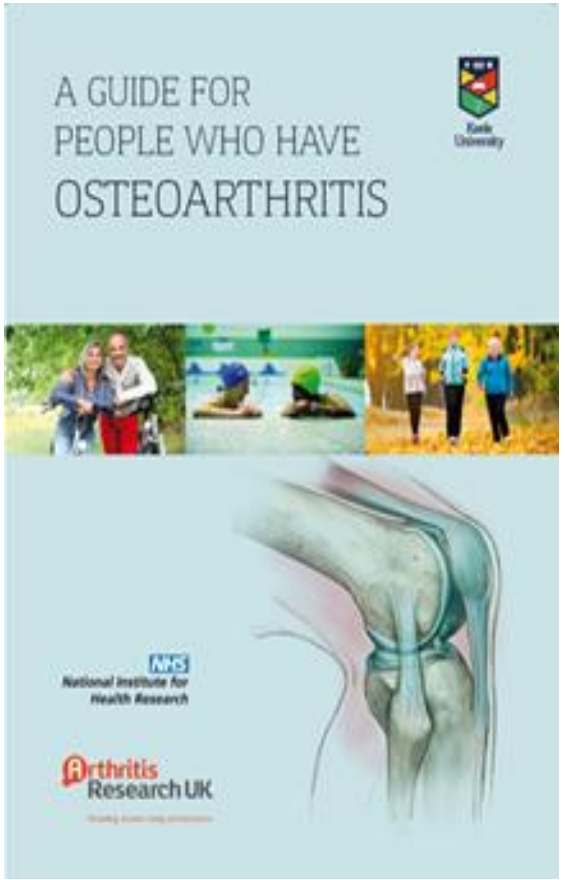
South East: Lothian (1 GP; 2 FCPs)

West: Glasgow & Ayrshire (5 GPs, 1FCP)

North: Highlands (1 GP, 2 FCP)

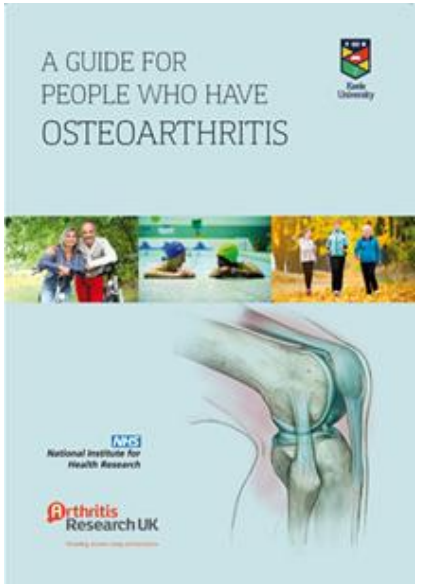
OA Guidebook

"…think it's always very handy to have reinforcements for the patients, and somewhere for the patient to get back into…." (GP 2019)



OA Guidebook- emerging themes: Adaption to handbook

"*And I think in particular in Scotland we'd need to make it more of a sort of Scottish…"*



"What I might suggest is that you produce some kind of summary of some of the key points, and we could give the full booklet to people who expressed a particular interest in it"

"*You could almost be doing with bringing that down to kind of the really important things and almost having two versions. Because there are people that really want to read into things, and you've got other people that that would just completely put them off. They wouldn't even open it I think."*

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Challenges to implementation

- Practice managers as gatekeepers (ethics)
- Lack of funding for payment for interviews
- GP time
- Lack of perceived benefit for GPs (benefits for reducing referral to secondary care)


WHAT
NEXT?

Phase 2: Workshop for key stakeholders,

- Draw on key themes arising from the interviews
- Discuss issues around engagement support for the implementation phase
- Identify possible ‘Champions’
- Introduce ‘Training the Trainer’ model
- Adaption of guidebook for Scotland
- 2 potential sites for implementation……

Evidence for FCP in UK

Primary Health Care Research & Development 2018; **19**: 121–130
doi:10.1017/S1463423617000615

RESEARCH

Physiotherapy-as-first-point-of-contact-service for patients with musculoskeletal complaints: understanding the challenges of implementation

Fiona Moffatt[1], **Rob Goodwin**[2] and **Paul Hendrick**[1]

[1]Assistant Professor, School of Health Sciences, University of Nottingham, Nottingham, UK
[2]Doctoral Student, School of Medicine, University of Nottingham, Nottingham, UK

Background: Primary care faces unprecedented challenges. A move towards a more comprehensive, multi-disciplinary service delivery model has been proposed as a means with which to secure more sustainable services for the future. One seemingly promising response has been the implementation of physiotherapy self-referral schemes, however there is a significant gap in the literature regarding implementation. **Aim:** This evaluation aimed to explore how the professionals and practice staff involved in the delivery of an in-practice physiotherapy self-referral scheme understood the service, with a focus on perceptions of value, barriers and impact. **Design and setting:** A qualitative evaluation was conducted across two UK city centre practices that had elected to participate in a pilot self-referral scheme offering 'physiotherapy-as-a-first-point-of-contact' for patients presenting with a musculoskeletal complaint. **Methods:** Individual and focus group interviews were conducted amongst participating physiotherapists, administration/reception staff, general practitioners (GPs) and one practice nurse (in their capacity as practice partner). Interview data were collected from a total of 14 individuals. Data were analysed using thematic analysis. **Results:** Three key themes were highlighted by this evaluation. First, the imperative of effecting a cultural change – including management of patient expectation with particular reference to the belief that GPs represented the 'legitimate choice', re-visioning contemporary primary care as a genuine team approach, and the physiotherapists' reconceptualisation of their role and practices. Second, the impact of the service on working practice across all stakeholders – specifically re-distribution of work to 'unburden' the GP, and the critical role of administration staff. Finally, beliefs regarding the nature and benefits of physiotherapeutic musculoskeletal expertise – fears regarding physiotherapists' ability to work autonomously or identify 'red flags' were unfounded. **Conclusion:** This qualitative evaluation draws on the themes to propose five key lessons which may be significant in predicting the success of implementing physiotherapy self-referral schemes.

Key words: implementation; musculoskeletal complaints; physiotherapy self-referral; primary care

Received 11 November 2016; revised 12 July 2017; accepted 17 August 2017; first published online 12 September 2017

Research

Fiona Downie, Catherine McRitchie, Wendy Monteith and Helen Turner

Physiotherapist as an alternative to a GP for musculoskeletal conditions:

a 2-year service evaluation of UK primary care data

Abstract

Background
Physiotherapists are currently working in primary care as first contact practitioners (FCP), assessing and managing patients with musculoskeletal conditions instead of GPs. There are no published data on these types of services.

Aim
To evaluate a new service presenting the first 2 years of data.

Design and setting
Analysis of 2 years' data of patient outcomes and a patient experience questionnaire from two GP practices in Forth Valley NHS, UK. The service was launched in November 2015 in response to GP shortages.

Method
Data were collected from every patient contact in the first 2 years. This included outcomes of appointments, GP support, capacity of the service, referral rates to physiotherapy and orthopaedics, numbers of steroid injections, and outcomes from orthopaedic referrals. A patient experience questionnaire was also conducted.

Results
A total of 8417 patient contacts were made, with the majority managed within primary care ($n = 7348$; 87.3%) and 60.4% ($n = 5083$) requiring self-management alone. Referrals to orthopaedics were substantially reduced in both practices. Practice A from 1.1 to 0.7 per

INTRODUCTION

There is a crisis regarding the rapidly declining numbers of GPs across the UK and with one-third of GPs in Scotland predicted to retire within the next 5 years,[1] this crisis is set to worsen. In 2015, 20% of GP training posts in Scotland were unfilled.[2] In some Scottish practices, the shortage of GPs has meant that business partnerships have been dissolved and affected practices have been taken over by the local health board, leaving remaining GPs struggling to meet patient demand for appointments. This occurred in two practices in NHS Forth Valley, Scotland, in 2015; unable to recruit enough GPs into each practice to ensure a safe service, a re-design was initiated, and it was decided to take a multidisciplinary approach to meet patient needs. Advanced nurse practitioners (ANPs), extended scope physiotherapists (ESPs), and mental health nurses were employed to assess and treat some of the patients that would traditionally have been seen by a GP. The introduction of ESPs to these practices presents an innovative role within the physiotherapy profession, with ESPs in Forth Valley being among the first in the UK to take up this post.

ESPs in primary care are the first point of care services is expected to increase.[4] ESPs in primary care are advanced physiotherapists who assess, diagnose, and manage patients independently, thus avoiding the GP appointments. The ESP will order investigations, refer to other services, and will often be able to administer steroid injections and/or independently prescribe medication, such as analgesia or anti-inflammatories for MSK conditions. ESPs will typically be graded as Agenda for Change band 7 or 8a and will already have several years of experience working as a specialist MSK physiotherapist. Recent publication of the scope and competencies of such roles ensures that ESP clinical practice is safe and regulated.[5] Advanced physiotherapists supporting medical teams in providing assessment and treatment of patients with MSK conditions is not a new concept.[6,9] Historical political drivers such as long orthopaedic waiting times[7,9] and the New Deal European Working Time Directive, which resulted in reduced hours for junior doctors, led to the introduction of ESPs working in orthopaedic clinics.[6] This role has rapidly expanded with ESPs in the MSK specialty working in many different clinical areas across the UK. Research has

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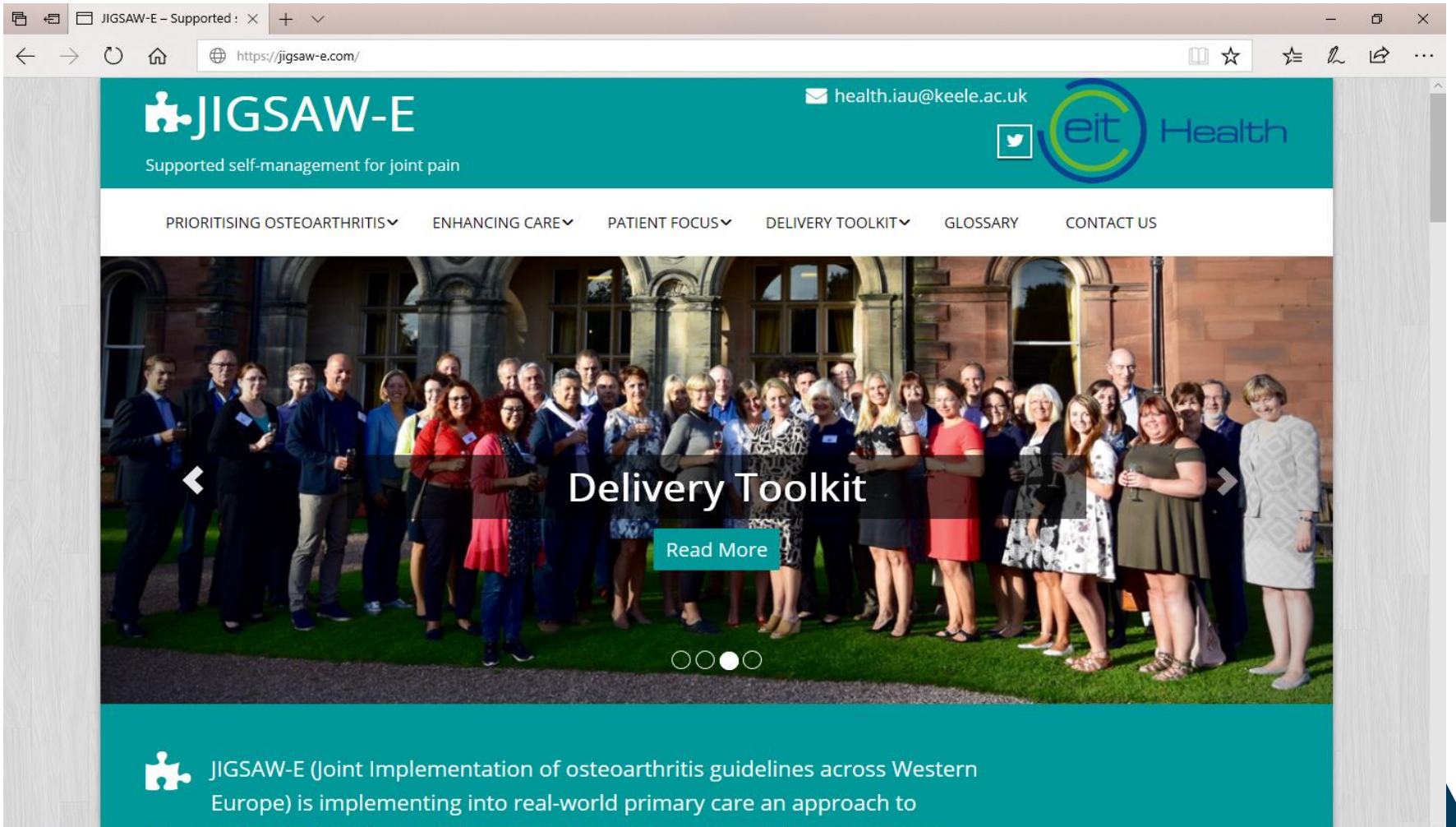
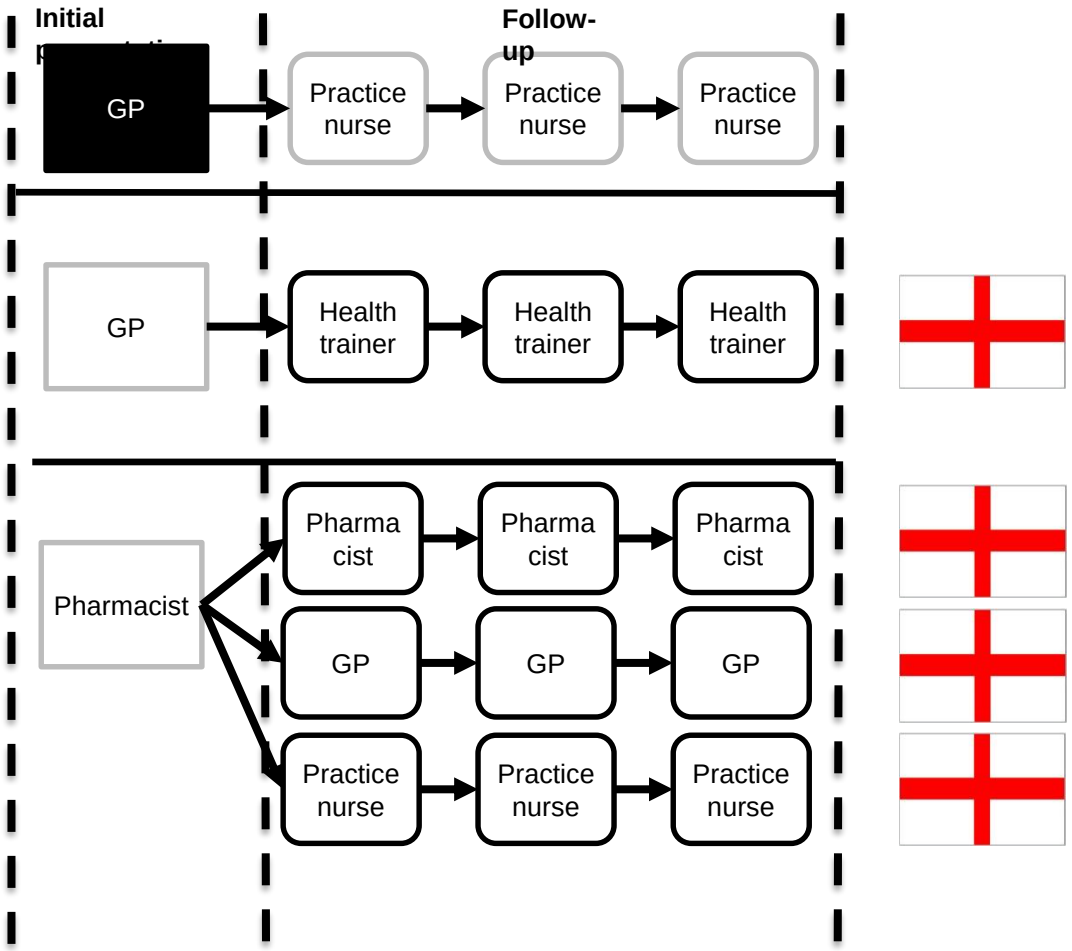
Website launch 2019(http://jigsaw-e.com)
All training material available and free!



Adaptation of service delivery model in England

Original MOSAICS model

Developing adaptations to models used within JIGSAW



The Rationale for JIGSAW-E in Pharmacy

- TO widen the public's knowledge of OA by using another route
- TO bring the JIGSAW model of OA care to patients before they seek help from their GP or Practice Nurse
- TO start to change the culture about OA – " not all doom and gloom" and tell a more positive story
- TO engage patients in the concept of self-management or self help
- TO effect better collaboration between pharmacy and GP services and utilise the untapped potential of the "pharmacy resource".

First steps - Dual approach for implementation

- Aiming to establish a model of deliver through a large pharmacy chain of stores nationally e.g. Lloyds Pharmacy (Scale and Pace)
- Delivering a more bespoke service through local independent community pharmacists (Local trust and continuity)

- Pilot with 3 pharmacies in Shropshire - Church Stretton, Much Wenlock and Woodside, Telford
- Initial discussions with Lloyds Pharmacy at a National level

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Thank you for listening

h.frost@napier.ac.uk

Acknowledgements

Acknowledgements are due to:

- The JIGSAW-team for material included in this presentation
- SISCC and EIT Health for funding