Can primary care nurses improve integrated care and self-management for long-term conditions – the person centred assessment method. 2015-2016

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Today

- What’s the problem?
- What’s PCAM?
- Describe the feasibility/pilot trial
- Did nurses using PCAM do what we anticipated/hoped?
- Was PCAM acceptable for nurses and patients?
- Lessons learned
What’s the problem?
Long Term Conditions

- COPD - chronic obstructive pulmonary disease
- DM – diabetes mellitus – types 1 and 2
- CHD – coronary heart disease
Health & Social Care

• Scotland’s 20/20 vision (2011)
• Integration of Health & Social Care

Public Bodies (Joint Working) (Scotland) Bill (Scottish Parliament 2014)
What’s the problem?

Long term conditions are an increasing burden to individuals and to society.

- 42% of the Scottish population lives with one or more LTC (Barnett 2012).

- Costs to NHS Scotland will reach £2.15 billion by 2025 (Bunt 2010).
What’s the problem?

Supporting self-management is a key to the management of long-term conditions (LTCs) in the UK.

– the association between chronic disease and socioeconomic deprivation has been well documented (Barnett 2012, Marmot 2010).
Healthy behaviours
- Nutrition
- Exercise
- Smoking
- Alcohol/drugs
- Sleep

Medical behaviour
- Delayed access
- Trust
- Understanding
- Priorities
- Compliance

Social factors
- Deprivation
- Inequality
- Access
- Built environment
- Carers
- Education
- Safety
- Security
- Reciprocation
- Housing

Biological mechanisms
- Shared genetics
- Early life experience
- Inflammation
- Cardiovascular factors
- Stress hormones
- Coagulation

Mental wellbeing/QoL
- Anxiety
- Depression
- Fear
- Anger
- Symptoms

Psychology
Why is biopsychosocial complexity important for LTC care?

1. Risk factors for increased morbidity and secondary conditions
2. Psychosocial problems interfere with post diagnosis treatment and self-management
3. The opportunity to address social inequalities in mental wellbeing

It’s so complex
When can we intervene?
Opportunity - Annual reviews - Scotland

- Diabetes – some 12 or 13 monthly, some 6 monthly.
- “SIGN…….states that everyone with diabetes receives nine care processes every year to monitor the effectiveness of diabetes treatment,” (State of the Nation 2015)
But Reviews are Busy

• With so much to do, the review risks becoming transactional rather than relational.
• A checklist rather than a discussion.
• Nurses feel they need to manage “patient agenda” vs nurse agenda.
• Time and training for psychosocial assessment is limited
How could mental wellbeing be related to LTCs?

**Healthy behaviours**
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- Smoking
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**Biological mechanisms**
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**CHD / D2 / COPD**
Frustration

Nurses and GPs often report frustration that year after year patients don’t learn the lessons and make the changes needed.

– Some say they don’t have the resources to take a supportive health psychology strategy & the problems are often beyond their influence
– Some view it as solely a patient level problem.
What’s PCAM?
How was PCAM Developed?

- INTERMED – chronic pain, diabetes
- MCAM – USA, diabetes, primary care, MDT
- MECAM – Keep Well, Scotland – adapted for anticipatory care – developed and used by nurses in socio-economically deprived populations. Adapted version being used in 1 Health Board.
- PCAM – Adapted for LTCs. Co-created by researchers, healthcare and patients.
PCAM aims to:

- provide a more whole person, bio-psychosocial, naturalistic assessment
- unravel the biopsychosocial complexity
- facilitate person centered care in a meaningful way
**Patient Centred Assessment Method**

**PCAM vs 1-2**

**Clinical ID:** __________

**ID:** 2 __________ **Date:** __ / __ / 2015

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### Health and Well-being

1. **Thinking about your patient's physical health needs,** are there any symptom(s) or problems (risk indicators) you are unsure about that require further investigation?
   - No identified areas of concern or problems already being investigated
   - Mild, vague physical symptoms or problems; but do not impact on daily life or are not of concern to client
   - Moderate to severe symptoms of problems that impact on daily life
   - Severe symptoms or problems that cause significant impact on daily life

2. **Are your patient's physical health problems impacting on their mental well-being?**
   - No identified areas of concern
   - Mild impact on mental well-being e.g. “feeling fed up,” “reduced enjoyment”
   - Moderate to severe impact on mental well-being, preventing engagement with usual activities
   - Severe impact on mental well-being and preventing engagement with usual activities

3. **Are there any problems with your patient's lifestyle behaviours (smoking, alcohol, drugs, diet, exercise) that are impacting on physical or mental well-being?**
   - No identified areas of concern
   - Some mild concern of potential negative impact on well-being
   - Moderate to severe problems on client's well-being, preventing engagement with usual activities
   - Severe impact on client's well-being with additional potential impact on others

4. **Do you have any other concerns about your patient's mental well-being?**
   - No identified areas of concern
   - Mild problems - don’t interfere with usual activities
   - Moderate to severe problems that interfere with usual activities
   - Severe problems interfering most daily activities

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### Social environment

1. **How would you rate their home environment in terms of safety and stability?** (Including domestic violence, insecure tenancy, neighbour harassment)
   - Consistently safe, supportive, stable. No identified problems
   - Safe, stable, but with some inconsistency
   - Safety / stability questionable
   - Unsafe and unstable

2. **How do daily activities impact on the patient's well-being?** (Include current or anticipated employment, work or caring responsibilities)
   - No identified general dissatisfaction but no concern
   - Some general dissatisfaction but no concern
   - Unlikely to cause low mood or stress at times
   - Severe impact on poor mental well-being

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### Health literacy and communication

- **Ability to find, understand and use information to live well**
  - Poor understanding of ability to undertake better management
  - Poor understanding of ability to manage health

### Support for Client

- **Overall support, advice, or help needed?**
  - Strong support
  - Moderate support
  - Minimal support

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### PCAM vs 1-2 June 2015
PCAM aims to provide a more whole person, bio-psychosocial, naturalistic assessment.

- **5 Domains**
  - Health and wellbeing
  - Social environment
  - Health literacy and communication
  - Support for client
  - Actions – referrals and signposting

- **Traffic light of need for support rather than scoring**

- **A system, not a scale**
  - Nurse skills and training are core
  - Naturalistic interview conducted throughout the review
  - Nurse completed form, guiding and recording...
    - A mini – reference card can be used during the consultation – to prevent interference with consultation.
  - Identifies risk or need
  - Action plan, patient centred, identifying barriers
  - Resource pack (a locally tailored, low tech’ list of local and national resources for referral / sign-posting)
It is anticipated that PCAM will:

- Open-up psychosocial discussion and
- Normalise person centred, holistic discussion
- Help to document that discussion
- Lead to more non-medical services / self-help; including social referrals
- Improve an understanding of the relationship between mental wellbeing, mental health and physical health
- Enhance self-management
How did we deliver training?

- We adapted training in response to experience
- All training was in nurses’ practice

- 2 1/2 hours presentation and discussion biopsychosocial complexity
  - Use of nurses own anon. cases
- 1 1/2 hours reflection
- 1 1/2 hours how to deliver PCAM with role play.
- *In your own words*
- ≥ 10 practice with 10 patients
- Review and open-access support
Feasibility/pilot Trial
PCAM is a Complex intervention

“Some dimensions of complexity

• Number of, and interactions between, components within the experimental and control interventions
• Number and difficulty of behaviours required by those delivering or receiving the intervention
• Number of groups or organisational levels targeted by the intervention
• Number and variability of outcomes
• Degree of flexibility or tailoring of the intervention permitted”

Craig et al, 2008
Cluster randomised feasibility/pilot controlled trial with embedded process and context evaluation

- Is it feasible and acceptable to use the PCAM in primary care nurse-led annual reviews for those with LTCs?

- Is it feasible and acceptable to run a cluster randomised trial of the PCAM intervention in primary care?
## Cluster randomised feasibility/pilot controlled trial with embedded process and context evaluation

<table>
<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td><strong>Effectiveness</strong></td>
<td>Does PCAM improve outcomes? Power calculation.</td>
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<td><strong>RCT Feasibility</strong></td>
<td>Can the RCT be delivered in a range of teams? What adaptations are needed?</td>
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<td><strong>Process Evaluation</strong></td>
<td>What was being tested? How was PCAM delivered?</td>
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<td><strong>Context evaluation</strong></td>
<td>What issues affect implementation and efficacy?</td>
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Challenges running primary care studies in Scotland
Practices taken under HB control
Short staffed
Getting sickness cover is difficult
Asked to do more and more
GPs and nurses nearing retirement

So, we are not proposing here to go into a full RCT
Before the RCT, we ran patient and staff focus groups

Adapted training, processes and materials
Practices recruited to study
N=6 (4% eligible)
NHS FV 0, NHS GGC 2, NHS Grampian 4

Nurses recruited to study
N=8
NHS GGC 3, NHS Grampian 5

Each nurse recruit ≥10 patients
Nurse completed form
Patient completed form.

Patient completed form 6-8 wks

Patient data anonymous to researchers, consent assumed by completion
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Nurse completed form
Patient completed form.

Patient completed form 6-8 wks

1 practice planned drop-out

CAU
N=2
NHS GGC 1, NHS Grampian 1.

PCAM
N=3
NHS GGC 1, NHS Grampian 2.

PCAM Training & Practice
Practices recruited to study
N=6 (4% eligible)
NHS FV 0, NHS GGC 2, NHS Grampian 4

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PCAM
N=3
NHS GGC 1, NHS Grampian 2.

PCAM Training & Practice

≥10 patients
Forms

≥10 patients
PCAM & forms

form 6-8 wks

Patient completed form 6-8 wks

190 patients with 111 followed-up
Practices recruited to study
N=6 (4% eligible)
NHS FV 0, NHS GGC 2, NHS Grampian 4

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N=3
NHS GGC 1, NHS Grampian 2.

PCAM Training & Practice

≥10 patients
Forms

form 6-8 wks

≥10 patients
PCAM & forms

form 6-8 wks

Audio-recording

Nurse & Patient Interviews

Patient completed form 6-8 wks

Audio-recording
Cluster randomised feasibility/pilot controlled trial with embedded **process and context** evaluation

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Process evaluation

• What are we actually testing?
• There will be variation in delivery between consultations, nurses, sites and over time.
• What is essential to improved outcomes and what can be adapted locally?
Testing what’s being delivered

- Anon. Audio recordings, reviews before and reviews after PCAM implementation.
- Are the PCAM items discussed during the review? If so, does it have fidelity to the PCAM model?
- Can lessons be learned for nurse training and support?
Potential issues audio-recording

• Acceptability to nurses and patients
  – 4/6 nurses consented
  – All patients asked agreed
• Mechanics of remembering to start and stop the recorder
CAU
23J621
PN: '...you're generally keeping quite well yeah?'
Patient: 'Bit stressed.'
PN: 'And it'd be quite fine if we'd treatment for that wouldn't it!'
Patient: 'Mh mmm.'
PN: So, breathing-wise, chest-wise, any issues, any coughs at all?'

PCAM
23G561
‘And how are you feeling in yourself with all of this going on, I mean emotionally?’ ........‘Does your mood ever dip or d'you ever feel that you're struggling emotionally with what's been going on?’.
Advice, Sign-post, Referrals Before and After Randomisation

Physical health
- GP/PN advised
- GP/PN Sign-posted
- GP/PN refer\^ accepted
- GP/PN refer\^ declined

Mental health
- GP/PN advised
- GP/PN Sign-posted
- GP/PN refer\^ accepted
- GP/PN refer\^ declined

Broader support
- advised
- sign-posted
- refer\^ accepted
- refer\^ declined

PCAM 1 n=168
PCAM 2 n=74
CAU 1 n=88
CAU 2 n=54
## Length of consultation (Mins)

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<tr>
<th>Phase</th>
<th>Group</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Median</th>
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<tbody>
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<td>1</td>
<td>PCAM</td>
<td>62</td>
<td>15</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>CAU</td>
<td>40</td>
<td>12</td>
<td>40</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>PCAM</td>
<td>43</td>
<td>10</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>CAU</td>
<td>33</td>
<td>15</td>
<td>40</td>
<td>25</td>
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<tr>
<td>1</td>
<td>PCAM vs CAU</td>
<td>1001</td>
<td>-1.677</td>
<td>0.094</td>
<td></td>
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<tr>
<td>2</td>
<td>PCAM vs CAU</td>
<td>362.5</td>
<td>-3.706</td>
<td>0.000</td>
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Patient Experience of PCAM

Consented N=6/40
Only PCAM post-randomisation

Patients blinded to allocation

Asked
• Experience of condition
• Experience of the review and any R/Sp
• Opinions about biopsychosocial influences
• Opinions about nurses asking psychosocial
• Most were happy with their care before
• Not all overtly noticed a difference
But
• They described it as being conversational in style
• Some experienced deeper conversation about mood and health behaviours
• There was benefit just talking with someone
• All thought nurses should be asking about psychosocial issues
• Where they had concerns about it, it was around the possible burden on nurses
Yeah it's more as a chat than, you know, sort of ticking a box, you know, she more sort of generally just chats and tries to get you to communicate. (Patient Interview, Participant 23G438)
And I do remember that the time before I was quite upset because it was... it was just about a year to when my husband died and things were just making me upset. So we talked quite a bit in June about how I was feeling compared to the time before and she listened quite a lot to me and asked if she could do anything more for me because she thought maybe if I went to see a dietician, but I couldn’t fit a dietician into my life just now [laugh]! So she was trying hard to try and help with the problems that she thought I was having. (Patient Interview, Participant 23G411)
I think she could basically ask anything she wants if she thinks it's relevant and it may have an effect on people, it must have an effect on people.

(Patient Interview, Participant 23G438)
Nurse Experience of PCAM

N=6 (PN, PM)
Only PCAM post-randomisation

Asked
• Experience of training
• Experience of PCAM review
• Experience of Resource pack
• Facilitators/barriers to continued use
Training

- Too much science, but it was useful
- Valued the training
- Using their own cases was useful
- Particularly valued experiential / role play
PCAM Review

- Changing practice initially was difficult but nurses quickly became more familiar and comfortable with PCAM
- Nurses were surprised at how it deepened conversation
- They felt it improved relationships and their understanding of patients
- Some had got positive feedback of impacts on patient’s lives

- Some felt it would be useful to integrate it into their clinical IT system
PCAM Resource Pack

- They reported using this frequently
- They had shared the pack with colleagues in the practice and outwith
- They liked the low tech’ aspect

- There are sustainability issues, one PM had taken update responsibility.
Now, yes, now. I'm not saying... at the beginning you were still sort of stuttering your way through it, you know, you were sort of finding your feet, you know, but now you keep all the sort... when they're coming in for the review obviously you're talking about health and wellbeing anyway, you know, but in the cases of maybe social environment and things like that, you know, it's something you would never have brought up before but now when someone mentions 'oh my father's...' 'oh, so what like is it at home?' you know, your window's there then, you know. (Nurse Interview, Participant 21E042)
We don't only use it in CHD, diabetes, COPD, we use it in everything from our asthma patients... we use it in every sort of... even our hypertensive patients we use it, you know, we're using it... well, me and my fellow nurse we're both incorporating it into our daily tasks if you get what I mean. (Nurse Interview, Participant 21E042)
ADePT analysis of PCAM

Process for Decision-making after Pilot and feasibility Trials (Bugge et al. 2013)

- Systematic identification of problems & potential solutions
- Improve transparency of decision making process
- Choice to go to explanatory / pragmatic trial?
ADePT Recommendations

CONTEXT

• Policy and the medical practice need to be supportive
• MDT involvement
• Be considerate of training fatigue
• Nurses need autonomy and confidence
• Co-ordinate with other related programmes
ADePT Recommendations

**TRAINING**

- Different starting points of understanding and culture
- Needs flexibility
- More experiential
- Needs to be longitudinal, allowing time for reflection & experience
- More work on health literacy and planning
- Boundaries
  - Nurse role
  - “Pyramid of Psychological Need”
ADePT Recommendations

Resource pack

• Needs a champion
ADePT Recommendations

DOING PCAM

- Needs to be supported
- Integrate into PMS
THANK YOUs

All staff and patients
Scottish Primary Care Research Network

Our PPI Representatives

Trial Steering Committee – Chair Prof. Brian McKinstry, University of Edinburgh

NIHR HS&DR

The MECAM team, University of Minnesota, USA
References

• BLF 2011 https://statistics.blf.org.uk/copd  Accessed 31/03/2017

http://www.pcamonline.org/about-pcam.html