CLAHRC North Thames Workshop

Date: 13th January 2015

Venue: BMA House, London

Title: Improving quality in primary care (summary)

Co-chairs: Professor Mike Roberts, UCLP lead for Integrated Co-morbidities Programme
Professor Naomi Fulop, UCL Professor of Health Care Organisation and Management
and NIHR CLAHRC North Thames Systems and Models Theme Lead

Overview

This CLAHRC North Thames workshop brought together over 40 clinicians, commissioners, individuals from the voluntary sector and patient representatives to stimulate learning about delivering and evaluating quality improvement in primary care.

Professor Elizabeth Murray, UCL Professor of e-health and Primary Care, presented evidence from a review on achieving change in primary care. The workshop was also the final stage in the CLAHRC North Thames evaluation of the 'Year in the Life'[1] quality improvement programme, comprising educational initiatives underpinned by relationship building and data sharing that took place across 189 practices in outer North East London. Researchers from the 'Year in the Life' (YiL) evaluation shared initial findings. Workshop participants then took part in round table discussions.

We summarise key learning points from the workshop in two parts.

Firstly, we focus on **delivering quality improvement in primary care.** We summarise key themes, on two key questions illustrated by comments and examples from the field given by participants[2]:

- **How can interventions in primary care work best?**
- **What is needed to improve care for COPD patients and others with long term conditions?**

Secondly, we focus on **evaluating quality improvement in primary care** drawing on observations and suggestions from workshop participants and learning from the Year in the Life evaluation to cover.

- **How can we tell if we've made a difference? Lessons for evaluating interventions in the real world**
- **What next for the YiL evaluation?**

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[1] 'Year in the Life' (YiL) evaluation has been the focus of a CLAHRC North Thames study: http://www.clahrc-norththames.nihr.ac.uk/innovations-to-improve-care-for-people-with-chronic-obstructive-pulmonary-disease-copd/
[2] Except for the twitter feed and the YiL examples, comments and examples are not attributed to any individuals nor are they *verbatim* quotes.

1. Delivering quality improvement in primary care

Key question: How can interventions in primary care work best?
Participants thought change could be more successful if it fitted into what was already in place, and was underpinned by shared values and strong relationships.

Key message
Don't change systems radically: 'fit' new activities or interventions into 'what's already there'

Participants observed that practices - and patients - have limited time for additional activities.
- *The time in a consultation is tight. If a tool is not integrated into the system it is not used unless a GP or nurse is particularly interested.*
- *Initiatives can create a treatment burden for patients and services, which decreases capacity for work in other disease areas.*
- *It's a better use of time for patients to discuss more than one condition in an annual review.*

They also noted that any additional activities need to be meaningful for people to commit to them.
- *Find meaningful ways of engaging patients in designing and commissioning services – this is best summarised by service asking the question of patients: "What can we do to help you?"*
- *A clinician needs to believe in the project for it to work long term.*

CLAHRC North Thames @CLAHRC_N_Thames · Jan 13
Discussing the gap between guidelines and frontlines #qipc

- *There needs to be buy in from practice. Each sector needs to have insight of other sectors.*

Key message
Change is driven by shared values and strong relationships: these take time to build

- *The thing that really drives it is the shared ideal of improving care for patients at home.*
- *Collaboration is needed for quality improvement (QI): we can look at the beliefs and behaviours in small teams and examples of working between teams (a tangible indicator could be exchange of mobile numbers between GPs and hospital staff).*

> **EXAMPLE FROM THE FIELD: Data sharing can be successful when supported by strong networks**
> One borough has organized networks of GP practices where representatives meet monthly to compare dashboards, discuss who is achieving what and why x is doing better. This has been hugely helpful and brought all practices and clinicians up to the same level. This success was related to the power of good data from public health and clinical effectiveness and peer competition/learning with an injection of funding to set up the networks. Setting up networks is a slow process so benefits often come later. Some networks are better than others and this seems to impact performance.

Key message
Interventions may be need change in whole organisations and healthcare systems
Several workshop participants considered that changing individual's behaviour may require their whole organisations to work differently, and perhaps interact with partners differently too.
- *At the organizational level there is a great opportunity to make a change to clinical care. Look across a whole borough and pick the right outcomes then watch over a few years.*

- *GPs are small businesses so uptake of some projects can be financially difficult- need to pool, perhaps in federations. This can reduce (but will not eliminate) costs.*
- *Efficiencies in one sector sometimes only make financial gains for other sectors, e.g. primary care changes may save costs in hospitals through reduced emergency admissions.*

Key question: What is needed to improve care for COPD patients and others with long term conditions?

Key message
'Join up' care better, particularly between primary care and hospitals
Many participants identified the need for better coordination between primary care and hospitals:
- *The link between local GPs and local hospitals has been broken, so there is no dialogue between primary and secondary care.*
- *Linking primary and secondary care data means we can follow the journey of the patient and better understand their experiences.*
- *More joined up primary and secondary care could reduce length of stay.*
- *Joined up pathways across boundaries and sectors should be underpinned by joined up commissioning. Current commissioning models act against this; could value-based commissioning change it?*

Dr LJ @drlaurajane · Jan 13
Great meeting @OfficialNIHR @CLAHRC_N_Thames discussing improving 1ary care esp #COPD. Common theme: financial structures are barriers #QIPC

Dr LJ @drlaurajane · Jan 13
But v positive to hear lots of shared values, + enthusiasm from across 1ary, 2ary care, public health, academics, commissioners #COPD #QIPC

Key message
Get the diagnosis right: is primary care the right place for this?
In COPD care in particular, participants observed that diagnosis is complicated but crucial for getting care right:
- *Misdiagnosis (e.g. asthma instead of COPD) leads to wasted resource on medicines/inhalers that won't work.*
- *A focus on diagnosis provides a starting point to measure interventions and we know we are targeting the right individuals.*
- *Given that more and more is being loaded onto general practice, look at models of care that shift some of this work outside of practices. You wouldn't do an ECG in the practice, why do spirometry?*

> **EXAMPLE FROM THE FIELD: Confirming COPD diagnoses in spirometry clinics could be an alternative to primary care**
> One CCG now commissions a *spirometry hub* so patients diagnosed with COPD in hospital can have their diagnosis confirmed and on-going COPD management arranged by specialists. They think this access to high quality spirometry and specialist input may result in these patients requiring fewer emergency admissions in the future.

Tackle the causes: reduce smoking as a priority

Several participants noted we know that efforts to cut smoking rates are effective, not just to prevent COPD, but also to improve health and wellbeing amongst people who already have COPD.

- *Stop-smoking activities need to operate at all levels, from individual practitioner training, to regional support and national strategies.*

2. Evaluating quality improvement in primary care

In the workshop, many participants spoke of their own challenges to conduct robust evaluation in the real world and noted it would be useful to collate strategies for making evaluations of interventions as robust as possible whilst acknowledging the constraints often faced in service settings. In this section, therefore, we have first sought to respond to this need for by sharing learning from the YiL for 'real world' evaluations and then several helpful pointers for the next steps of the YiL evaluation.

Key question: How can we tell if we've made a difference? Lessons for evaluating in the real world

Key message

Before you start, take time to understand the intervention you are evaluating
Consider:

- *What did the intervention seek to do and why?*
- *What was the context in which the intervention took place?*

LEARNING FROM YIL: Building a deeper understanding of YiL shaped the evaluation

Before we started the evaluation, we asked YiL planners about what they thought the Programme was seeking to achieve and how it sought to accomplish it. The planners on this Programme had worked together closely for over two years but interestingly, they still had different aspirations for the Programme and placed different weight on different types of outcome. We decided to focus on changes in **primary care management** and **impacts on emergency hospital admissions** and **costs** but acknowledged there might have been other significant changes as a result of the programme.

We sought to compare changes 'before', 'during' and 'after' the Programme. We built a **timeline** to track what happened in the Programme and when. The Programme had an official 'launch' but our timeline showed that activities in practices started some time after this official 'launch' date, so we used a later date as the start of our 'during' period. We also recorded on this timeline **changes to the local context** (e.g. other new services, NHS reorganisation) that might have had an effect on our chosen outcomes.

Key message

Think carefully about impacts that you would expect to result from your intervention...
A fall in emergency hospital admissions is often used as a measure that patients are getting better care out of hospital. Participants considered whether this outcome is an appropriate indicator of primary care quality for COPD patients.

- *It is not always possible or appropriate to prevent admissions, particularly in severe COPD patients.*

- *As a result of major technological advances in COPD care (giving non-invasive ventilation (NIV) for COPD patients in acute respiratory failure), we are looking after people better. This means there are now more people with advanced stages of COPD surviving with their condition that might have died in the past. The fact these patients may well present as emergencies in the future is actually a marker of success.*
- *We need a better understanding of why patients choose to seek urgent care (or not) and their experiences and outcomes. Some patients see hospital as a place of safety – you can try to change this, but this is how they feel. Conversely, there are also patients who should be in hospital but don't want to go.*
- *Acute breathlessness (like unexplained bleeding and pain) is one of the most common reasons people go to hospital and it's very frightening for both professionals and patients.*

Some modifications and alternatives to using emergency hospital admissions were proposed:

- *We need to avoid **unnecessary** admissions for mild/moderate COPD. Admissions may be appropriate for severe cases so could look at admissions for different stages of disease.*
- *Length of stay may be a better marker of the performance of the system than admissions.*
- *Ask patients about their experiences. And ask them the right questions: current measures are not always helpful e.g. the "friends and family" test[3] is getting 'tired' for repeat patients.*
- *Patients' quality of life is important to measure.*

… be open to capture unforeseen impacts

LEARNING FROM YIL: Improving data quality enabled commissioners to make better decisions

The YiL Programme fed back data to practices on how whether they were performing primary care processes recommended in NICE guidance for their COPD patients. Feedback strategies in quality improvement are generally based on the belief that healthcare professionals are prompted to modify their practice when given performance feedback showing that their clinical practice is inconsistent with a desirable target. However in YiL, feeding back data also revealed lots of problems with the accuracy of that data. The PCTs, practices and planners all put in lots of work to improve the quality of data recording and analysis.

A commissioner in one of the boroughs observed that as a result of improving data quality, they knew there were more patients with COPD than previously thought and most of these patients now had accurate severity recorded. This information was used as the basis for making commissioning decisions in line with population need. For example, in 2014, they tripled the numbers of pulmonary rehabilitation places available to COPD patients.

Key message

Make full use of routinely collected data. But check it!

Participants agreed that data routinely collected during service provision are essential for evaluating care and informing practice but also recognised the challenges to obtaining these data and interpreting them correctly.

- *We need continuous efforts to use routine data in evaluations and remove barriers to use them*

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[3] Patient feedback in many NHS services is obtained by asking patients" "Would you recommend this service to friends and family?" www.nhs.uk/NHSEngland/AboutNHSservices/Pages/nhs-friends-and-family-test.aspx

- *There are challenges to implementing data recording that accurately reflects disease prevalence and care delivered. Different actors want data on the same activities for different purposes: it can be hard to address everyone's needs with the same dataset.*
- *There can be a tension between practices' financial interests and accuracy of data recording.*
- *Quality of coding has improved, but at times it is hard to know if there is over-coding.*

LEARNING FROM YIL: Improving COPD data quality became a major part of YiL

Standardising practice records: During YiL, it became clear that practices were recording COPD data in different ways. Lots of information was contained in free text and not captured in Read Codes; some codes could overlap, e.g. it was difficult using Read codes alone to distinguish whether a patient's spirometry record related to their diagnosis (post-bronchodilator) or their regular monitoring (normal spirometry). To standardise data on COPD, YiL developed a COPD template which was linked to a standard set of Read Codes and installed in every practice; this served to not only to standardise what elements of care were entered in a patient's record but also to standardise the Read Codes assigned to these data on COPD care.

Identifying over-coding: People were historically put on the COPD register if they had a secondary diagnosis of COPD in hospital records. Whilst this may have been appropriate for some patients, it may also have led to over-coding of COPD for others where a suspicion of COPD was not subsequently confirmed. Over-coding might explain why 15% of patients on the COPD register that were sent a reminder for COPD checks did not have COPD or did not know that they had COPD.

CLAHRC North Thames @CLAHRC_N_Thames · Jan 13
Interesting discussion is better care or better recording responsible for positive changes #QIPC

Key message
Use comparators wherever possible
In order to conclusively attribute a change to a new service or innovation, an experimental design is needed[4]. For many reasons, these experimental conditions are not often used in service settings. The YiL was no exception; planners did not randomly allocate practices to intervention or control groups - they sought to engage as many as possible in the Programme. This presents challenges for conducting a robust evaluation; without a control group, we cannot know whether observed changes were due to YiL or would have happened anyway. However, looking at changes over time in other comparable populations gives us some indication of whether changes would have occurred anyway.

- *It is very difficult to conclude anything without comparators because of 'noise' in the system [*i.e. other changes that could affect outcomes*], miscoding and misdiagnosis.*
- *Choose wisely: comparisons to national average not always ideal – it may be better to compare against other similar areas.*

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[4] Craig, P et al (2008). Developing and evaluating complex interventions: new guidance. Medical Research Council. Accessed online 17 February 2015 at: www.mrc.ac.uk/complexinterventionsguidance

v3 17 Feb. 15

LEARNING FROM YIL: Choosing appropriate comparators may change your findings

National hospital episodes statistics (HES) provide standardised data on COPD emergency admissions for all areas of England. We used HES data on admissions for comparing changes in YiL boroughs over time with boroughs outside of Outer North East London.

The Office for National Statistics provides a list of local authorities with similar socioeconomic and demographic characteristics. We used this list to select boroughs with similar characteristics to those in Outer North East London as our comparators.

We found similar result when we used the whole of England as a comparator to when we used selected local authorities; hence our approach was to use the whole of England as a comparator for our main analysis.

Key message

Use a range of methods to understand why changes have occurred

Participants' experiences of an intervention can help understand whether there were barriers to its use and how participants perceived its impact. Experiences of delivering care can also reveal other factors that might have led to observed changes.

James Mountford @mountfordjames · Jan 13
Work like ONEL COPD year-in-the-life is 'messy', real life--quant&qual, realist methods rqd to evaluate @CLAHRC_N_Thames @UCLPartners #**qipc**

- *Staff experience of interventions / new processes are important to capture.*

LEARNING FROM YIL: Why did nurse consultations for COPD fall following the YiL?

Analysis of practice data indicated that there were fewer nurse consultations for people with COPD after the YiL programme than before it. This outcome was not predicted by the YiL planners and was a surprise to us as evaluators too. In interviews with practice staff, they talked of factors not connected to YiL such as shortages in practice nurse capacity and difficulties persuading some patients to attend review appointments.

Workshop participants also questioned whether (and why) the YiL Programme could have had this impact and suggested other contextual factors that might be responsible for the reduction in consultations:
- Since 2010, there has been an increase in other community services (e.g. integrated case management). Some COPD patients may be using these community or the specialist respiratory clinics services instead
- As general practice incomes fall some practices are making savings on staff. Practice nurses could be one of these savings.

- *Was there a 'dose response' relationship?*

Interventions may not be applied to the same intensity across an entire area. One way to assess whether a new service or innovation is the cause of observed changes is to see whether the intensity with which it was implemented ('dose') is related to the scale of change. If there is a 'dose-response' relationship, it could be an argument that the intervention was the cause of the change.

LEARNING FROM YIL: Were changes greater in practices that participated in more YiL activities?

Practices had varying exposures to the YiL Programme. It was not possible to measure the extent to which each practice member engaged with the entire Programme. For example, we did not have enough information on the extent to which practices used the feedback data shared by the Programme or whether the responded to the relationship and co-creation activities. However, we did build a measure of practice participation in YiL educational activities using sign-up sheets and attendance lists. We found there were very variable levels of participation, and in general participation in some boroughs was higher than others.

Next steps for the YiL evaluation

Workshop participants suggested other ways of looking at the findings from YiL to understand the potential effects of this programme on the quality of primary care. These included:

- Conduct analysis at borough level: were changes over time different when this same intervention was rolled out in different organisations?
- Follow up the cohort of COPD patients identified at the beginning of the Programme: how did their care change over time? What determined emergency admissions in this population?

We will disseminate findings through conferences, peer-reviewed publications and Breathe Easy group events. A link to these outputs will be available through the CLAHRC website.