



October 2019

CLAHRC BITE

Brokering Innovation Through Evidence

The 'Year in the Life' COPD quality improvement project:
What are the lessons for quality improvement in primary care?



The 'Year in the Life' (YiL) Programme sought to improve care for patients with chronic obstructive pulmonary disease (COPD) by improving adoption of national guidance. It was a diverse quality improvement programme that took place across four boroughs in north-east London—Redbridge, Barking & Dagenham, Havering, and Waltham Forest.

Often, real-world initiatives like this are hard to evaluate. One of the reasons for this, is that there often isn't a shared understanding about what they are seeking to achieve.

What was the aim of the project?

In this research, conducted after Year in the Life had finished, we first sought to build a shared understanding of what the programme sought to achieve ("programme theory"). We then used this programme theory to measure its impacts and to explore possible reasons for the impacts or lack of them.

What did we do?

We combined multiple methods of collecting and analysing data.

First we analysed documents (meeting minutes, papers, presentations) provided by the YiL project team, as well as interviews with YiL project team (n = 14) and local practice clinicians (n = 14). From this information we developed two "programme theories" – 'early' and 'evolved' – that captured how the team expected YiL to work and what they expected it to achieve. They also shared some ideas about



the experience of caring for patients with COPD and doing quality improvement in primary care.

'Early' theory predicted the programme would reduce emergency hospital admissions. 'Evolved' theory predicted practices with higher programme participation would increase guideline adherence which would then reduce admissions and costs.

We then used information from anonymised patient records to test these 'early' and evolved' programme theories using controlled before-and-after analyses.

Finally we discussed findings in a workshop with 40 clinicians, commissioners, individuals from the voluntary sector and patient representatives to stimulate learning about delivering and evaluating quality improvement in primary care.

What we found and what does this mean?

In relation to YiL specifically we found:

- Contrary to predictions in 'early' and 'evolved' programme theories, emergency admissions did not change following the programme.
- Consistent with 'evolved' theory, practices that participated more in the programme did better at adopting national COPD guidance.

Possible reasons for why YiL had some benefits but did not reduce hospital admissions included:

- Not enough practices participated fully in YiL to make the changes needed in COPD care to reduce admissions
- Factors other than primary care quality were more important influences on the risk of emergency COPD admissions.

Read the paper

Sheringham J, Solmi F, Ariti C, Baim-Lance A, Morris S, et al. (2017)

[The value of theory in programmes to implement clinical guidelines: Insights from a retrospective mixed-methods evaluation of a programme to increase adherence to national guidelines for chronic disease in primary care.](#)

PLOS ONE 12(3): e0174086.

The project also produced some useful wider learning.

Recommendations

Wider learning of relevance to quality improvement in primary care included:

- Programmes work best when you can 'fit' new activities or interventions into 'what's already there'
- Change is driven by shared values and strong relationships: these take time to build
- Adopting guidance may mean change is needed across entire healthcare systems

Wider learning of relevance to evaluation:

- Before you start, take time to understand the intervention you're evaluating: using this understanding to build a "programme theory" gives you a firm basis to design your evaluation. Make full use of electronic health records, but check coding and accuracy early on
- Use comparators wherever possible.

Partners and collaborators

- Nuffield Trust
- UCLP & 'Year in the Life' programme leads for evaluation advice and background on the programme
- Barking & Dagenham and Havering British Lung Foundation Breathe Easy groups advised on the research
- Health Analytics and BHR CCGs' analytics team provided the data for analysis

What next?

The research was useful in illustrating why YiL was not taken forward in other settings. The wider learning has been used to inform other CLAHRC evaluations and elsewhere to inform evaluation training.

Who needs to know

The study has lessons for

- Planners of quality improvement in primary care
- Evaluators of 'real world' interventions in health