



Measuring general practice productivity

Development and evaluation of the general practice effectiveness tool

Summary

Jeremy Dawson Anna Rigby-Brown

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1 Overview

- General practice in England is under significant pressure, with a rising
 workload that is becoming more complex and intense. At the same time,
 funding has not been growing at the same rate as demand and the number of
 GPs has been declining. Practices are therefore under increasing pressure
 both to work more productively and to work in different ways.
- This study developed and tested a measure of effectiveness in general practice known as the general practice effectiveness tool (GPET), in consultation with GPs, practice staff, and members of the public.
- The GPET comprises 4 performance areas (clinical care, practice management, patient focus and external focus), which are covered by 11 objectives, measured by 52 indicators, gathered mainly from data that is routinely collected by practices.
- Fifty-one practices across England were trained to use the GPET. Thirty-eight of these used the tool for multiple months, and their data was analysed. The effectiveness of these practices improved moderately, particularly in the areas of practice management and patient focus.
- After the six-month pilot period, participants were asked about the acceptability of the tool and how easy it was to use. Some practices were positive about the tool, some were not certain that using the GPET helped them, and others said they could not spare enough time to use it fully. Most participants agreed that the content was appropriate, that using the tool was helpful for practices to improve and develop ways of working, and that there may be scope for developing it further. Some practices would be keen to use it in the future.
- The GPET can be used as an improvement tool within practices but it is not designed to be used as a performance management tool to compare practices, as differences between practice populations and local commissioning arrangements do not allow direct comparison of scores.

2 Background

General practices collect an enormous amount of data but there is little support to help practices use that data to assess how effective they are. The main mechanism for measuring quality at a national level – the Quality and Outcomes Framework (QOF) – is currently under review and has been criticised for being too narrow and ineffective. While the clinical elements of QOF have been substantially expanded, measures of organisational effectiveness and patient experience have been removed mainly due to a lack of good-quality data. Other published indicators such as the Care Quality Commission (CQC) inspection rating or the GP Patient Survey results are either not comprehensive, too irregular, or both, to be of regular use to practices. This project aimed to bridge that gap by developing a measure of productivity for general practices and then testing and evaluating its use across a range of general practices.

3 Designing a tool

The first stage of the study aimed to develop a standardised, comprehensive measure of general practice effectiveness, primarily using data that practices already collect routinely. The measure was developed using the Productivity Measurement and Enhancement System (ProMES). ProMES is a method that has been well-evaluated in other NHS settings. It creates a measure by working with team members to identify their main objectives; to choose indicators to measure those objectives; to create 'contingencies' (functions that weight the different indicators); and to translate raw measurements into standardised effectiveness or productivity scores. In this study we used an adaptation of the ProMES approach that works with large numbers of team members and patients to develop a measure that can be used commonly across many teams.

We held a series of workshops with general practice staff and members of the public to:

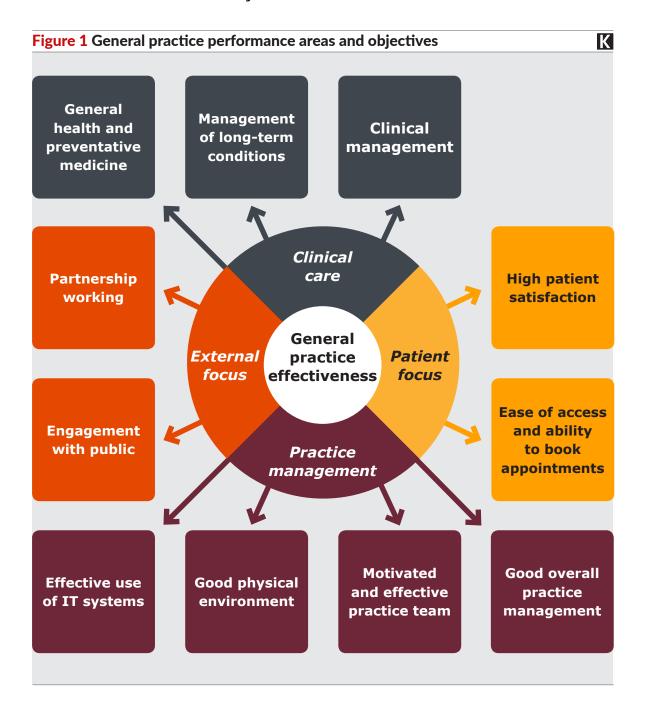
- define the objectives of general practice
- identify data that could be used as indicators of these objectives
- develop appropriate weightings for indicators and objectives.

The result of these workshops was an overall measure, which we named the general practice effectiveness tool (GPET).

We held a consensus exercise to examine the GPET, using a face-to-face meeting with representatives of national NHS, GP and patient bodies, followed by two online surveys. We also worked with the PRIMIS team at the University of Nottingham to develop standardised queries that could be automatically run by practices each month to extract the relevant indicators. The GPET was then converted into an online platform that would allow practices to enter all their indicators on a monthly basis and get an automated feedback report.

4 The tool

Data from the first phase of research identified 11 separate objectives of general practices. Typical ProMES exercises produce around 4–6 objectives and so we decided to organise the 11 objectives into 4 performance areas that would form an extra level between the objectives and overall effectiveness.



The 4 performance areas and 11 objectives are shown in Table 1 (shown also with the weighting each area was given from subsequent workshops and the consensus exercise).

Table 1 General practice performance areas and objectives and weighting

Performance area	Weighting within overall measure (%)	Objective	Weighting within performance area (%)
Clinical care	37	General health and preventive medicine	33
		Management of long-term conditions	33
		Clinical management	33
Practice management	30	Effective use of IT systems	21
		Good physical environment	19
		Motivated and effective practice team	31
		Good overall practice management	29
Patient focus	18	High patient satisfaction with services	50
		Ease of access and ability to book appointments	50
External focus	15	Good partnership working	44
		Engagement with public	56

A large range of possible indicators were suggested for many of these objectives, although for some – particularly in the external focus performance area – it was more difficult to identify appropriate sources of data that would be available to all practices. In total, 52 indicators were agreed across the workshops to measure these 11 objectives, gathered from a variety of sources:

- 19 from clinical information systems, with automated data extraction procedures developed for the two clinical systems used by practices in the study
- 14 from practice records (including staff records, meeting minutes, and attendance records)
- 15 from checklists answered by the data inputter (each includes several yes/no questions)
- 3 from patient views from an enhanced Friends and Family Test (FFT) questionnaire
- 1 from a 5-item questionnaire to practice staff.

An additional 10 indicators were thought to be potentially useful, but it was recognised that most practices would not have the data readily available. These were left as optional indicators that practices could choose to use if they wanted to but would not contribute to the overall effectiveness score.

5 Testing the effects, feasibility and acceptability of the tool

The second stage of the study aimed to test the feasibility and acceptability of the GPET by piloting its use with a range of practices over a six-month period. In total, 51 general practices from across 18 clinical commissioning group (CCG) areas in several regions agreed to participate. They received face-to-face training in using the GPET and a detailed manual on using the online system. These practices were then expected to use the measure over the following six months, entering data each month for each indicator. Every month a feedback report on each indicator, objective and overall effectiveness was generated by the online system for the practice. Practices were then encouraged to discuss these in team meetings.

The data entered was tracked centrally by the research team and analysed for completeness of data entry (using descriptive statistics), and for change over time (using multilevel growth modelling). We also tested different practice characteristics to see if there were any associations with both completeness of data entry and change in that completeness.

After the pilot phase, the research team carried out interviews with a representative from each practice and sent an online questionnaire to each practice manager. The interview and questionnaire both asked about overall perceptions of the GPET, including its content, usability, and usefulness. The practice manager questionnaire also asked for monthly financial data to help the research team to build a more traditional productivity index. We also interviewed patient representatives and held focus groups designed to establish whether the GPET was thought to be appropriate and useful from a patient perspective.

Of the 51 practices who were trained to use the GPET, a quarter did not submit any data after the training. Given that all the practices had originally volunteered to participate, the fact that a quarter did not engage further with the study when left to their own devices suggests that the burden on practices could seem relatively high. Of the 38 practices that did enter data, 10 did not enter data beyond the first five months. The most common reasons for lack of participation were lack of time or changes in practice personnel. Practices also reported that

data for 13 of the indicators in particular was problematic to collect, meaning that even among those practices that did fully participate, not all managed to complete every indicator. There were practical issues with data collection, including idiosyncratic use of read codes within the pilot sites that led to incomplete or incorrect data being pulled from clinical systems by the searches. This provided valuable learning and highlights the need for accurate recording of clinical activity in practice systems for a tool like GPET to function at its full potential.

We did not find much association between the characteristics of the practice and participation with the tool, although there was a greater level of participation from practices that had been involved in the development stage and from those practices using the EMIS clinical system (though it was likely to be because these practices were trained first).

There was some evidence that, over the course of the six-month pilot, practice effectiveness as measured by GPET increased. In particular there were significant increases in both the practice management and patient focus performance areas, and for each of the objectives within these areas (except for 'good physical environment'). We were particularly interested in the increases in scores for the objective of having a motivated and effective practice team, which may have been prompted by the use of a quality improvement tool. Although this tallies with previous ProMES research that has shown improvements in performance, we cannot know whether this improvement is due to the use of the GPET, as there was no control group and other factors (eg, time of year) may have contributed to improved performance.

The practice staff interviews and practice manager questionnaire both gave clear indications that there was a wide variety of perceptions of the GPET. Practice managers rated it on average 4.5 out of 10 for usefulness. Some practices found it useful and relatively easy to use. Several practices highlighted that the GPET included non-clinical, management indicators that have been removed from QOF and are actually helpful in looking at the quality aspect of the service provided and working to maximum effectiveness in providing that service.

Others did not think the tool added much value as it duplicated data already collected by other methods and involved manually transferring data from one system to another. Some pointed to difficulties with gathering certain indicators, entering data and using the online system, and finding the time to make the best use of it (factors that might be inherently improved with some further development of the tool). A majority of practices indicated that it had taken more time to use than they had anticipated.

Seventeen practices said they discussed feedback at team meetings, while 12 discussed it at individual meetings. Six said they made other use of the feedback, including informal chats, or sharing it with their patient representatives. In 13 of the practices, GPs had been involved in this discussion. Practice management staff had been involved in almost all discussions, and patient representatives had been involved in five practices (with other clinical and administrative staff involved in many practices also). More than half of the practices that did respond stated that no action had been taken to improve effectiveness as a result of using the tool, although that may have reflected the short timescale of the pilot. Twelve practices had made changes, including new audits, amending templates to improve data capture and introducing care plans.

Several practices said they would like to keep using it if they had the chance, and that they had had useful discussions about the results in team meetings. There was a general consensus that the areas covered by the GPET were appropriate, and there were no clear omissions, although a number of indicators were identified as needing to be collected less frequently than monthly, with quarterly being suggested. Unfortunately, many practices were unable to provide sufficiently detailed monthly financial data, which meant that it was not possible to generate a more conventional productivity index using inputs (ie, financial expenditure) as a denominator.

6 Conclusions

The model devised in the workshops to develop a tool that would measure effectiveness was found to be appropriate and comprehensive. Practices in the study particularly welcomed those items not currently measured through QOF or other existing measures. We think this model can serve as a basis for practices to measure their effectiveness, whether or not it uses the same indicators developed for the GPET. There were more problems brought up about specific types of indicator, especially those that relied on practice records where practices would not have collected or stored data in a uniform way. Therefore, any future use of the tool will need to consider which indicators may need some refinement, or more standardised methods of data collection.

There was considerable variation in the extent to which practices would use the tool as it was envisaged, and in how they perceived its usefulness and ease of use. Some practices were very positive about it and could highlight changes brought about through its use. Others could not see such a benefit, and the time needed for its use was not seen as a good investment.

This study initially attempted to create a measure of general practice effectiveness which would then serve as part of a formula for a more standard measurement of productivity: by dividing this 'output' (which combines quality and activity) by the 'input' of financial expenditure or some other measure of resource use. Unfortunately, this last step proved impossible, at least using the methods of this study.

The GPET itself requires further refinement but on the basis of this study we think it has the potential to be a helpful tool for practices. In particular, more research is needed to update the indicators produced from clinical systems to the new SNOMED codes (introduced since the study took place) and to refine other problematic indicators either via clearer guidance on data collection or alteration of the indicator itself, and by improving the online system so that it is easier for practices to use. We would also recommend an enhanced testing of the tool by comparing its use in practices receiving feedback, with a control sample of practices that do not view the results of their performance. This would enable a test of the hypothesis that it is specifically the use of the tool that has led to improvements in performance.