NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

QUALITY AND OUTCOMES FRAMEWORK (QOF) INDICATOR DEVELOPMENT PROGRAMME

Review of QOF indicators

QOF indicator area: Hypertension (BP5)

Potential output: Recommendations to amend the hypertension ongoing management indicator (BP5)

Date of Primary Care QOF Indicator Advisory Committee meeting: 8 June 2011

Contents

Introduction

The quality and outcomes framework (QOF) for the UK provides financial incentives to implement evidence-based interventions across a range of clinical and health improvement indicators. One indicator in the hypertension domain of the QOF measures the percentage of patients with hypertension who achieve a specific blood pressure treatment target of 150/90 mm.

QOF guidance explains that the reason for this indicator is that an individual target of 140/85 mmHg is recommended for most patients. However, the indicator has adopted an audit standard of 150/90 mmHg. There are other indicators for patients with diabetes mellitus (staged indicators DM30 and DM31, see 'Key considerations' section for details), and for patients with chronic kidney disease (CKD3).

As part of the review of QOF indicators, the British Hypertension Society has asked NICE to consider revisions to the existing indicator, specifically to consider a staged indicator with different treatment targets.

Background

As part of the consultation, the following changes were suggested:

- 90% of patients treated for hypertension should achieve an average of 2 or more consecutive readings of 150/90 mmHg or less.
- 50% of patients treated for hypertension (with or without diabetes) should achieve an average of 2 or more consecutive readings of 140/90 mmHg or less.

Initial assessment by the Health and Social Care Information Centre (HSCIC) for health and social care is that the suggestion to record 2 or more consecutive readings of blood pressure, as suggested by stakeholders, may not be practical or reflect clinical practice. The indicator wording of the staged indicators would therefore need to be considered further as part of indicator development. The HSCIC recommended piloting any staged indicators. See appendix A for further details.

Blood pressure targets achieved in trials

The revisions were proposed because epidemiological evidence from the proposing stakeholder suggests that a single target of 150/90 mmHg blood pressure control should be tightened in line with 'real world achievement in contemporary large-scale cardiovascular outcome trials', and that 150/90 mmHg as a sole target remains too high in view of epidemiological data supporting a relationship of cardiovascular events with systolic blood pressure.

The original NICE clinical guideline on hypertension (2004) made the following recommendations:

- Offer drug therapy, adding different drugs if necessary, to achieve a target of 140/90 mmHg, or until further treatment is inappropriate or declined. Titrate drug doses as described in the 'British national formulary' noting any cautions and contraindications.
- The aim of medication is to reduce blood pressure to 140/90 mmHg or below. However, patients not achieving this target, or for whom further treatment is inappropriate or declined, will still receive worthwhile benefit from the drug(s) if these lower blood pressure.

These were based on a review of the evidence that concluded that, 'In trials aiming to reduce blood pressure to below 140/90 mmHg using stepped medication regimes, between half and three quarters of patients' blood pressure reach target.'

A published review of more intensive treatment compared with less intensive treatment was also considered. This concluded that patients randomised to more intensive regimes had a non-significantly lower risk of death and coronary heart disease and a significantly lower risk of stroke. It also found that randomised groups that had a greater reduction in blood pressure tended to have a greater reduction in risk of death, coronary heart disease and stroke, consistent with evidence that people with lower blood pressure had a lower risk of these outcomes in every age group.

A partial update of the NICE clinical guideline in 2006 did not re-consider the evidence for treating to target, and the original recommendations stood.

The most recent update of the NICE clinical guideline was published in 2011. The guideline recommendations are generally in accordance with those stated above but a higher target of 150/90 mmHg was introduced for people older than 80. [Note that at the date of this meeting only draft updated guidance had been issued; the final version was published in August 2011.

Effect of current indicators on management and outcomes

An interrupted time series study (Serumaga et al. 2011) assessed the impact of a pay-for-performance incentive on quality of care and outcomes among UK patients with hypertension in primary care. The Health Improvement Network (THIN) database was used to identify 470,725 patients with hypertension diagnosed between January 2000 and August 2007.

After accounting for secular trends, no changes in blood pressure monitoring were attributable to pay for performance (level change 0.85, 95% confidence interval (CI) −3.04 to 4.74, p=0.669; trend change −0.01, 95% CI −0.24 to 0.21, p=0.615), control (level change −1.19, 95% CI −2.06 to 1.09, p=0.109; trend change −0.01, 95% CI −0.06 to 0.03, p=0.569), or treatment intensity (level change 0.67, 95% CI −1.27 to 2.81, p=0.412; trend change 0.02, 95% CI −0.23 to 0.19, p=0.706). Pay for performance had no effect on the cumulative incidence of stroke, myocardial infarction, renal failure, heart failure, or all-cause mortality in treatment experienced or newly treated subgroups. The authors concluded that ‘Good quality of care for hypertension was stable or improving before pay for performance was introduced. Pay for performance had no discernible effects on processes of care or on hypertension related clinical outcomes. Generous financial incentives, as designed in the UK pay for performance policy, may not be sufficient to improve quality of care and outcomes for hypertension and other common chronic conditions.’ An explanation for the results included the possibility that the appropriate changes in practice were already being made, and that the pay-for-performance targets for hypertension were set too low.

Improving health outcomes

The intention of the proposed staged indicator is to improve health outcomes further by providing an incentive to achieve tighter control of blood pressure in people with hypertension.

Key considerations

The following key considerations summarise the main points made in the briefing paper. The Committee is asked to consider these in its discussions:

- Are there any issues of principle with recommending lower treatment targets (specifically if individual targets can be negotiated and results seen accordingly, but the effect may not be seen on a population level)?
- Would the introduction of a staged indicator improve health outcomes? Current QOF indicators are already staged – see example below.

DM30. The percentage of patients with diabetes in whom the last blood pressure is 150/90 or less *NICE menu ID: NM01*	8	40–71%
DM31. The percentage of patients with diabetes in whom the last blood pressure is 140/80 or less *NICE menu ID: NM02*	10	40–60%

- Consecutive readings are suggested in the proposed wording; however, such readings should be used in primary care to diagnose hypertension. To what extent should consecutive readings be used to monitor hypertension and treatment changes?

Advisory Committee actions

The Advisory Committee is asked to consider whether the QOF hypertension indicator BP5 should be staged, by defining different treatment targets.

References

Serumaga B, Ross-Degnan D, Avery AJ et al. (2011) Effect of pay for performance on the management and outcomes of hypertension in the United Kingdom: interrupted time series study. BMJ 342: d108.

Appendix A HSCIC comments on the amendments to the hypertension ongoing management indicator

Technical issues related to the proposed changes were:

- If the intent is to look at more than 1 reading (that is, not simply the latest reading), this may be problematic (definition of average, latest 2 readings or any 2 consecutive readings that meet the target within the time period), and may need additional functionality.

Clinical issues included:

- The use of 2 consecutive measures does not reflect real clinical practice and will generate lots of extra work for practices.
- If this were to become a standardised approach to dealing with blood pressure readings it would affect all rule sets that look at patient blood pressure.
- From a clinical perspective it is clearly better to sample a series of blood pressure readings rather than rely on a single instance.

The recommendation therefore from the Health and Social Care Information Centre is that this indicator should be piloted for technical and implementation issues.