

Short report

Possible Quality and Outcomes Framework role to increase aspirin prophylaxis in Wales

Gareth Morgan MPH FRIPH
Welsh Aspirin Group Secretary, Swansea, Wales UK

ABSTRACT

Data from an all-Wales survey has shown that only about half of patients at high risk of vascular events take prophylactic aspirin. The Quality and Outcomes Framework (QOF) might be a policy mechanism to achieve the vigorous promotion of the drug for this indication in Wales. In this paper, cautious estimates suggest that NHS hospital cost savings arising from vascular events avoided in Wales might be used to fund the introduction of an indicator into the QOF for four points. The

suggested indicator that Welsh health service policy makers may introduce in 2007–08, possibly into the medicines management section of the QOF, might be: ‘All patients at increased risk of heart attack and ischaemic stroke not taking low-dose aspirin are encouraged to do so unless contraindications exist’.

Keywords: aspirin, cost saving, policy QOF, vascular events

How this fits in with quality in primary care

What do we know?

Only about half of patients at high risk of vascular events take prophylactic aspirin in Wales. The Quality and Outcomes Framework (QOF) might be used as a policy mechanism to improve prescribing rates for aspirin in high risk patients in Wales.

What does this paper add?

NHS hospital cost savings arising from vascular events avoided in Wales might be used to fund the introduction of an indicator into the QOF for 4 points.

Introduction

Aspirin is an inexpensive and easily available medicine that is widely used to treat a number of conditions.¹ In low doses (75–150 mg per day) it is used to reduce the risk of major vascular events such as heart attack and ischaemic stroke. Recent studies have also provided evidence that aspirin is cost-effective for this indication.^{2,3} Despite the clinical and economic evidence, however, data from an all-Wales survey has shown that only about half of patients at high risk of vascular events take prophylactic aspirin.⁴

The General Medical Services (GMS) contract allows the 22 local health boards (LHBs) in Wales to

commission primary care services for their local populations. An integral part of the contract is the Quality Outcome Framework (QOF) which is a financial incentive payment system using a maximum of 1050 points to measure achievement (see Box 1).⁵ In the following analyses, the possibility of using the QOF as a policy mechanism to achieve increased aspirin prophylaxis in high-risk patients is examined. The analyses consider cost savings, but an economic evaluation was not undertaken since the focus of the paper is on policy development.

Box 1 A summary of the QOF

On 1 April 2004, the General Medical Services (GMS) contract was introduced in the UK. The components of the contract are organised into three broad categories of payments, namely:

- 1 the global sum/minimum practice income guarantee (about 70% of payment)
- 2 the QOF (about 20% of payment)
- 3 enhanced Services (about 10% of payment).

The QOF is measured using a points system up to 1050 maximum based upon clinical (550 points) and non-clinical (500 points) domains. Each point achieved results in a payment calculated according to practice list size and disease prevalence. The QOF is therefore a financial incentive quality improvement system for the provision of quality primary care medical services within general practice.

The clinical domains cover coronary heart disease, stroke, hypertension, diabetes mellitus, chronic obstructive pulmonary disease, epilepsy, hypothyroidism, cancer, mental health and asthma. The non-clinical domains cover: records and information about patients, patient communication, education and training, practice management, medicines management, patient experience and additional services.

The QOF therefore covers a wide range of clinical and managerial issues that are important in the provision of quality medical services in primary care. Some of the indicators are of relevance to public health, such as smoking cessation and cervical screening. This is one of the reasons why aspirin promotion would fit well into the QOF process, and it also allows direct engagement with patients in primary care.

Methods

A healthcare system was modelled in Wales based upon average population sizes for general medical practices (5500 patients) and the average cost of a QOF point (£120).⁶ For the Welsh population of approximately 2.9 million people, there would be about 530 average general medical practices across the 22 LHB areas. Data on costs and outcomes have been estimated using published literature, including specific analyses from Wales. Table 1 presents a summary of the calculation formula used.

Data from a health impact assessment of increased aspirin use in Wales was used to estimate the number of vascular event hospitalisations that might be avoided from increased aspirin prophylaxis.⁷ It was estimated that the vigorous promotion of aspirin in high-risk patients not taking it across the principality might result in 150–1100 vascular event hospitalisations per annum being avoided. The cost of hospitalisation for a vascular event was taken to be £1800–£2300 per patient.⁸

No undesirable effects from low-dose aspirin were built into the analyses for two reasons. Firstly, the

Table 1 Summary of the calculation formula used and the results

Parameter	Formula	Results
Hospitalisation cost saving for vascular events following aspirin promotion in Wales	Number of events avoided per annum (150–1100 ^a) × hospitalisation cost per patient (£1800–£2300)	Possible saving to Welsh NHS hospitals of £270 000–£2 530 000 ^b per annum (result 1)
QOF points for aspirin promotion in patients at high risk of experiencing a vascular event	Result 1/number of average general practices in Wales (530) × average QOF point cost (£120)	4–40 points ^b (these values were then compared to other QOF indicators with similar point levels)

^a There is a wide variation of this estimate due to uncertainties of the number of high-risk patients not taking aspirin in Wales (80 000–225 000), the range of vascular event risk in this population (1.5–3% per annum) and also the range of the risk reduction with aspirin (15–30%).

^b As a result of the uncertainty of the estimates of vascular events avoided, the result on cost savings and QOF points also have wide variation. Because of the uncertainty, the results do need to be treated with caution, but the basic principle of needing aspirin promotion in Wales, particularly on clinical governance grounds, appears robust.

majority of patients at risk of experiencing serious undesirable effects can be identified in primary care and advised to avoid aspirin. Secondly, serious undesirable effects rarely occur and they are usually self-limiting.⁹

Events avoided multiplied by the hospitalisation cost per patient gave an estimate of annual cost savings to Welsh NHS hospitals that might be achieved following the vigorous promotion of aspirin. The QOF points that might be awarded for aspirin promotion were then calculated by dividing the cost saving by 530 (number of average general medical practices in Wales) and £120 (average QOF point cost). Indicators on the current QOF list with similar point levels were then identified for comparison purposes, so that reasonable policy recommendations might be suggested.

Results

Table 1 presents a summary of the results. If 150–1100 hospitalisations were avoided by the vigorous promotion of aspirin in Wales, then the cost saving to NHS hospitals could be £270 000–£2 530 000 per annum. Taking the lowest cost saving estimate of hospital admissions avoided, then approximately four QOF points could be afforded for all average practices across Wales, to encourage all eligible high-risk patients not taking aspirin to do so. With the highest estimate, approximately 40 QOF points could be afforded.

For comparison purposes, indicators of four points include 'repeat medication', namely the clinical reason for the drug can be identified in the patient records. Another example is that the practice will meet the prescribing advisor at least annually, and agree up to three actions related to prescribing, and subsequently evidence the change.

With the highest estimate, this can be broadly compared to clinical performance on three disease areas, namely epilepsy (16 points), cancer (12 points) and hypothyroidism (8 points), or 10 medicines management indicators (42 points). For clinical performance, the work is substantive and involves having effective patient care systems in place such as accurate disease registers. For medicines management, the

actions required are also substantive to ensure safe and effective prescribing.

Discussion

The finding that aspirin use in patients at high risk of vascular events requires vigorous promotion in Wales was first published at the Welsh Aspirin Group conference in 2004 titled *The Public Health Potential of Aspirin in Wales*.¹⁰ It now seems important to put in place a formal policy to address this issue.

The QOF might be an effective method to achieve promotion of aspirin prophylaxis to high-risk patients in primary care. The QOF requires the maintenance of disease registers for patients at high risk of vascular events, along with medication reviews. Identifying patients eligible for encouragement to take aspirin, unless contraindicated, therefore appears relatively straightforward. The work required to do this does not seem comparable to that required on either the three disease areas or the ten medicines management indicators. A cautious initial starting point for an aspirin promotion indicator might therefore be four points, which would break even at the lowest cost saving estimate. A suggested indicator that health service policy makers might consider introducing into the QOF in 2007/08 for 4 points is:

All patients at increased risk of heart attack and ischaemic stroke who are not taking low-dose aspirin are encouraged to do so unless contraindications exist.

This indicator might possibly be introduced into the medicines management part of the QOF in Wales, and Box 2 summarises the arguments for this. The suggested introduction could result in substantial gains to patients and significant cost savings to the Welsh NHS. In addition, significant savings to community rehabilitation and social care services as well as employers might also be anticipated in Wales.

The Welsh situation might not be applicable elsewhere. For other countries in the UK, the introduction of an aspirin promotion indicator into the QOF would need to be based on evidence of need, so up-to-date surveys of aspirin use in high-risk patients would seem an appropriate first step.

Box 2 The rationale and implementation of an aspirin indicator in the QOF

The all-Wales survey showing that approximately 50% of patients at high risk of vascular events are not taking aspirin represents a serious clinical governance issue, and urgent measures are needed to address the matter. Existing QOF indicators for the reduction of vascular events risk do not focus upon patient medication compliance. Although they do set targets for prescribing of medications that reduce the risk, they do not explicitly encourage high-risk patients without contraindication to take low-dose aspirin. This is an important reason why such an explicit indicator is required.

An estimated 80 000–225 000 high-risk patients in Wales (2.75–7.75% of the Welsh population) could be eligible to take low-dose aspirin. Using this percentage range, the number of patients requiring encouragement to take aspirin within an average practice could be 150–426 patients, an estimated 50–142 patients per GP. This estimate assumes that each average general practice has three GPs.

Patients could be identified through a variety of mechanisms. This would include through medication reviews (which is part of the QOF), opportunistically at individual consultations with the GP, within specialist nurse clinics, and from patient registers and records held within the practice. Each of these mechanisms, save the last, is associated with face-to-face contact with patients, thereby allowing the encouragement to be given directly. Registers and records might also be used to undertake patient searches to identify those eligible for encouragement to take aspirin. These patients could be followed up in a variety of ways, for example telephone contact, or perhaps using a practice information sheet on aspirin.

The key points about the introduction of an indicator encouraging patients at increased risk of vascular events to take low-dose aspirin is that the workload is manageable, relevant to the delivery of quality primary care medical services, and could be implemented in a variety of locally sensitive ways.

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CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Gareth Morgan, Welsh Aspirin Group Secretary, 41 Ffordd Beck, Gowerton, Swansea SA4 3GE, Wales, UK. Tel: +44 (0)1792 873474; email: morgan@ffordbeck.fsnet.co.uk

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