# Medicines Optimisation ... the story so far

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## Abstract

The achievements made under the Medicines Management banner are noted but ongoing failings in medicines safety, as exemplified by the EQUIP, CHUMS, PINCER and PRACtICe initiatives, are significant and need to be addressed. Additionally, the funding gap for the NHS and the failings that came to light at Mid Staffordshire hospitals (The Francis Report) led to the emergence of Medicines Optimisation.

In May 2013, the Royal Pharmaceutical Society established the principles for Medicines Optimisation. This was followed by the Kings Fund report on the risks of polypharmacy, the development of the NHS England Medicines Optimisation 'dashboard', NICE guidance and a range of local initiatives aimed at improving the way that patients are supported to use their medicines safely and effectively.

Keywords: medicines, management, optimisation, dashboard, polypharmacy, patient

### Background

There was much for pharmacists and their teams to be proud of under the term 'Medicines Management'. Across hospitals, primary care and carehome environments in the 1990s and early 2000s, pharmacists worked with doctors, nurses and NHS managers to ensure there was a much greater understanding of the evidence-based use of medicines and the risk of medication safety issues as well as an understanding of the costs associated with poor and inappropriate prescribing. Measurement of prescribing via ePACT and prescribing indicators took us a long way in terms of benchmarking prescribing practices.

Medicines remain the most frequently made healthcare intervention in England. In 2014, over one billion prescription items were dispensed in primary care alone. Data from England shows us that between 2003 and 2013 the average number of prescriptions per year for any one person has increased from 13 to 19. However, whilst the number of prescription items is growing, a number of key concerns have become very apparent and it has become clear that there are some significant failings in medication safety (see the EQIP study,<sup>1</sup> CHUMS,<sup>2</sup> PINCER<sup>3</sup> and PRACtICe<sup>4</sup>). We know that between 30 and 50% of medicines are not taken as intended. Evidence shows that 5-8% of unplanned admissions to hospital are due to avoidable medication issues and that the risk of people suffering harm from their medicines increases as the number of medicines taken by each patient increases.

There are a number of safety interventions, medication services and improvements that have been shown to support patients to get more from their medicines but these are not being fully utilised. The improved outcomes promised by these medicines at the clinical trial stage are not, therefore, always being realised. All of these issues demanded a step change in our approach to medicines that has not been delivered under the term 'Medicines Management'. The concept of Medicines Optimisation has been evolving in the NHS in England over the last four years or so. It provides a much greater focus on the patient and begins the transition from thinking of the cost and prescribing of a medicine towards a broader approach that tries to harness the value of a medicine whilst minimising harm for the patient.

## The need for change

#### The funding gap

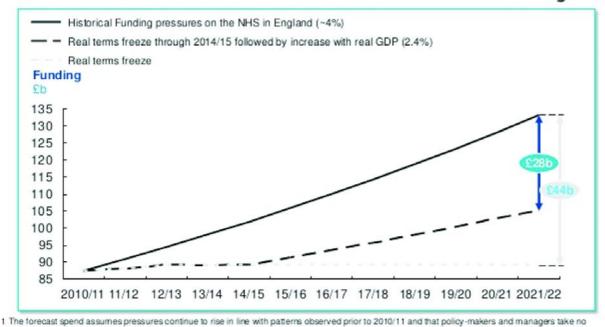
From around 2008 onwards, the realisation that the NHS would need to do things very differently gained momentum. It was not a new concept since Wanless, in his report 'Securing our Future Health: Taking a Long-Term View in 2002', outlined the size of the financial gap the NHS faced in the years to 2022.<sup>5</sup>

The growing older population, a greater number of people living with long-term conditions, more expensive treatments and a recognition that productivity in the NHS was often poor and hindered by fragmented and disjointed services as well as poor data upon which to commission services created a commonly used 'graph of doom' (see Figure 1).

In short, if the NHS remained as it was, there would be a funding gap in the region of £20 billion. This became commonly known as the 'Nicholson challenge' (David Nicholson was a former leader of the NHS) and was, in reality, the challenge of making efficiency savings of 4% compound a year for four years to save £20 billion. It was recognised that no such considerable efficiencies had been made by the NHS previously (or indeed any other western health service) but the response was the Quality, Innovation, Productivity and Prevention (QIPP) initiative.

# The NHS is facing a serious funding gap





action to improve efficiency and reduce costs. This estimate is based on the rising pressures on the NHS from 1) Demographics (principal population projection from ONS), 2) Health care activity (Chronic demands on acute 04/05-09/10; MH 08-10/11; primary care 95/96-08/09; prescribing 08/09-11/2) and 3) Health care costs (Pay 2% a year over GDP deflator; drugs in line with GDP). Assumes NHS funding continues to grow with inflation (GDP deflator)

SOURCE: Nuffield Trust: The funding pressures facing the NHS from 2010/11 to 2021/22: A decade of austerity?

#### Figure 1: NHS funding gap

#### The emergence of **QIPP**

For many of us, QIPP meant trying to support patients more to get better health outcomes but with greater efficiencies in the way that had been described by Wanless. Many QIPP progammes did great work in addressing safety and poor practice. However, in fairness, others viewed QIPP as synonymous with cuts, staff reductions and pay freezes and so, on the surface, the NHS did not do things as differently as was required.

#### The Francis Report

Matters were brought into a grim focus in 'The Francis Report' into the failings at Mid Staffordshire hospitals, where the consequences of a persistence of oppressive reactions to reports of problems in meeting financial requirements were very clearly highlighted.

#### A new focus was needed

Against this backdrop, there was a growing recognition that things needed to change in the medicines world. In some quarters there remained a focus on the cost and volume of prescribing. There was little understanding of the patient's perspective or any measure of the benefits patients really got from their medicines and how close, or otherwise, this came to the inherent promise that was apparent for many medicines at their clinical trial stage. At its worse, some Medicines Management activities were perceived as deliberately blocking access to newer medicines - and so Medicines Optimisation emerged.

# The development of Medicines Optimisation

Medicines Optimisation was a phrase coined by Dr Keith Ridge, Chief Pharmaceutical Officer for England, to address the suboptimal care that many patients were receiving.

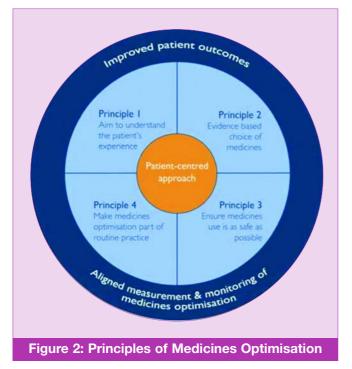
#### Medicines Optimisation principles

In May 2013, the Royal Pharmaceutical Society (RPS) published their Medicines Optimisation principles (see Figure 2).<sup>6</sup> Developed in collaboration with a number of patient groups and Royal Colleges, the simple circular diagram highlighting the principles became commonplace and should be familiar to all pharmacists and pharmacy technicians (see Figure 2).

NHS England, whilst only a few weeks old at that point, publicly signed up to the principles and the concept of Medicines Optimisation. Patients were to be at the heart of medicines pathways and the pharmaceutical industry was to be included in the approach to try to optimise the use of medicines in each patient.

#### Polypharmacy

The Kings Fund published its report into polypharmacy, where patients receive multiple medications. Whilst noting that there may be situations where it is appropriate for patients to receive multiple medications, the report outlined the consequences of inappropriate polypharmacy.<sup>7</sup> Where problematic or inappropriate polypharmacy occurs the intended benefits of the medicines



are, at best, not realised. At worse, they cause harm which may be severe or even death.

#### Medicines Optimisation dashboard

In June last year, NHS England published the first 'prototype' Medicines Optimisation dashboard.<sup>a</sup> This aimed to be a starting point in the long process of moving the focus away from solely cost and volume of drugs prescribed towards a greater emphasis of measuring how well-supported patients are in using their medicines to get the greatest benefit. Recently, the dashboard has been 'refreshed', following an evaluation by the University of Keele and Clinical Commissioning Groups (CCGs). Trusts and Academic Health Science Networks (AHSNs) can view their data to help shape their local strategies to systematically ensure that the patients in their care get the most from their medicines.

#### **NICE** guidance

The National Institute for Health and Care Excellence (NICE) has recently defined Medicines Optimisation as 'a person centred approach to safe and effective medicines use to ensure that people obtain the best possible outcomes from their medicines.'

Following publication of the NICE guidance on medicines optimisation,<sup>9</sup> it is important that NHS organisations now take a close look at their safety data, their outcome data and how well they use local community-based medicines services to gain greater patient outcomes and a better patient experience.

#### Initiatives in practice

There is a growing and strong evidence base from a number of areas including the Isle of Wight reablement project,<sup>10</sup> Community Pharmacy Future<sup>11</sup> work and Community Pharmacy West Yorkshire<sup>12</sup> that, where community pharmacy is properly embedded into the care pathway (especially upon discharge from hospital), patients have fewer medicine related problems, fewer A&E attendances and fewer readmissions. Therefore, can

any NHS organisation in England afford to ignore medicines optimisation and a greater focus on patient-centred care in relation to medicines?

#### **Declaration of interests**

Personal fees from MSD, outside the submitted work.

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