



NHS Clinical  
Commissioners  
NHS Confederation

# The role and functions of CCG medicines optimisation teams

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# About

This report reflects on the crucial role and functions that clinical commissioning group medicines optimisation teams deliver in the existing healthcare architecture to improve patient care.

The NHS Confederation is the membership body that brings together and speaks on behalf of organisations that plan, commission and provide NHS services in England, Northern Ireland and Wales. The members we represent employ 1.5 million staff, care for more than 1 million patients a day and control £150 billion of public expenditure. We promote collaboration and partnership working as the key to improving population health, delivering high-quality care and reducing health inequalities.

NHS Clinical Commissioners, which is part of the NHS Confederation, is the membership organisation for clinical commissioning groups.

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# Key points

The healthcare architecture in England is changing. To support the integration of care services, the government's white paper, *Integration and Innovation*,<sup>1</sup> sets out a plan to establish statutory integrated care systems (ICSs). These bodies will replace and take over commissioning functions from clinical commissioning groups (CCGs) in April 2022, moving to a strategic resource planning approach.

- Ahead of this transition, this report reflects on the crucial role and functions that CCGs' medicines optimisation (MO) teams currently deliver in the existing healthcare architecture to improve patient care. Medicines are the most common therapeutic intervention and the second highest area of NHS spending after staffing costs. They are associated with a high degree of clinical and financial risk. CCGs' medicines optimisation work, therefore, plays a vital role in improving health outcomes and ensuring the most efficient use of NHS resources.
- ICSs\* are tasked with enabling system working, collaboration and integration. Medicines optimisation is one of the golden threads that run between all sectors of care, whether in

\* Broader details of the transition to Integrated Care Systems are addressed by the NHS Confederation in our report *Legislating on the NHS in England*.

prevention or treatment. CCG teams work as lynchpins for the medicines optimisation agenda, connecting different parts of the system. This makes CCG expertise well placed for this new world, linking and coordinating with multiple stakeholders – acute hospitals, mental health providers, GP practices, community pharmacies, social care providers, local authorities, and other care providers – seeking to smooth the journey for patients between different providers of care.

- In supporting this report, NHS Clinical Commissioners (NHSCC) hopes that ICSs and national policymakers will build their knowledge of CCG medicines optimisation and ensure the safe transfer of it as a commissioning function within the new architecture. The opportunity for leveraging the transition of the functions set out in this report to ICSs to enhance medicines optimisation – improving both quality of care and delivering financial efficiencies – is set out in a forthcoming report, *The Systemisation of Medicines Optimisation*.
- This paper sets out four main themes which outline the role and functions of CCG medicines optimisation teams:
  1. **Medicines commissioning: formularies, pathways and services:** The MO team is responsible for commissioning medicines for the CCG-responsible population using approved processes leading to inclusion in the local formulary. The skills required for the thorough appraisal of medicines – critical appraisal, data analysis, assessment of clinical and cost-effectiveness and value for money – apply to the wider commissioning environment, and the MO teams are also involved in commissioning services and pathways, either in their own right or as part of wider commissioning teams.
  2. **Medicines finance:** the MO team is involved in setting and monitoring the primary care prescribing budget, and responsible for workstreams to manage expenditure.

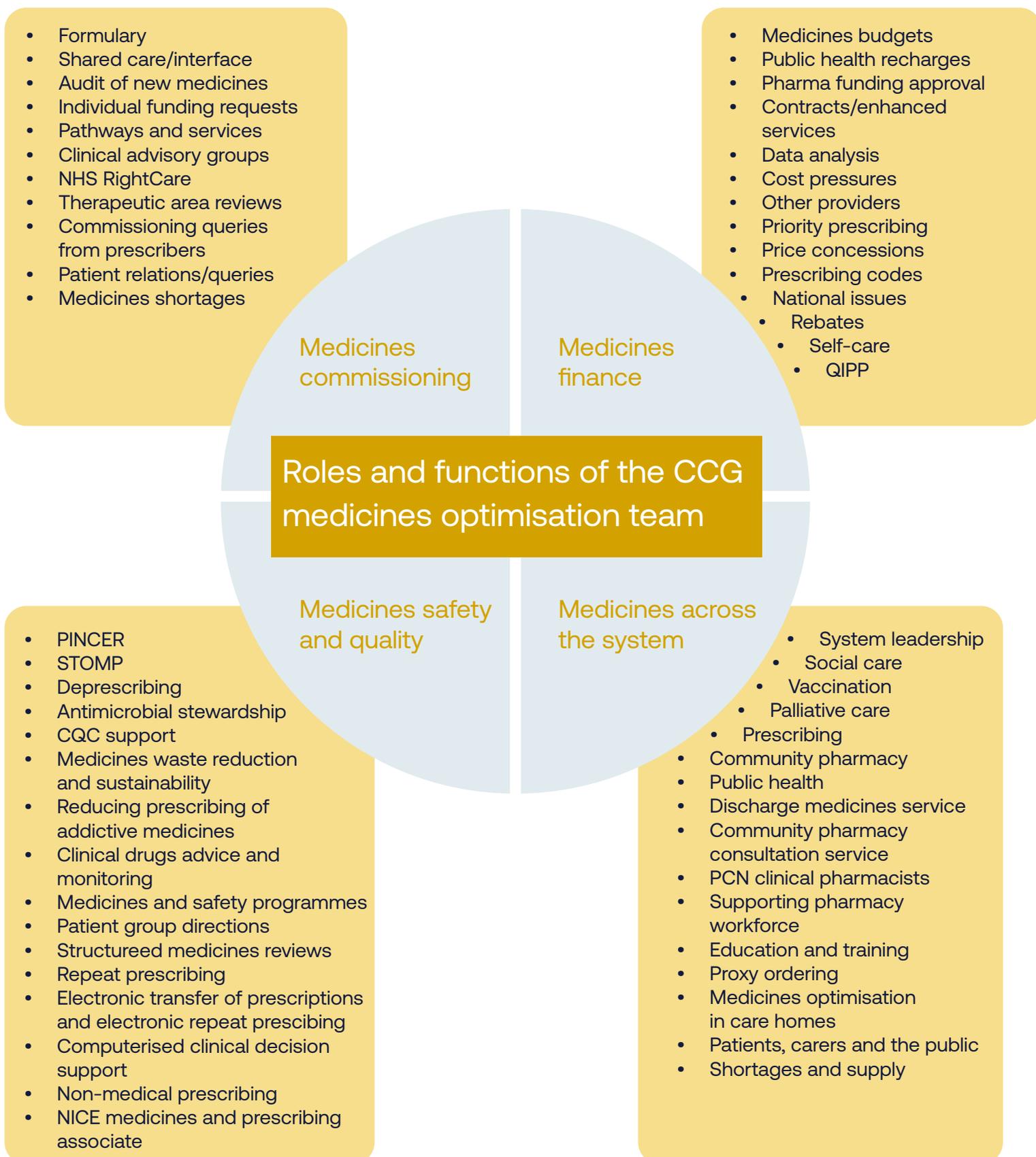
Many CCG MO teams also play an active role in setting, monitoring and managing the budget for expenditure on high-cost drugs in commissioned services.

**3. Medicines safety and quality:** the MO team works across the system to implement, support and monitor high-quality, safe prescribing and use of medicines, including actions to improve antimicrobial stewardship, reduce inappropriate prescribing, implement national alerts and assure quality in commissioned services.

**4. Medicines across the system: collaboration, coordination and support:** The MO team acts as a link or bridge between disparate parts of the medicines system, providing information, supporting the implementation of cross-sector working, improving communication, and encouraging joined-up provision.

- The diagram on page 10 shows most of the roles and functions which sit under these headings, but the list continuously evolves and this iteration should not be considered to be exhaustive. The themes themselves are one way of organising and presenting the wide variety of activities that MO teams undertake. In practice, few of the activities sit fully under one heading and many overlap.
- As ICSs start to take place in their shadow form, we hope that the role of medicines optimisation is truly considered in advance of structures and governance processes being established. The white paper refers to the need for ICSs to embed system-wide clinical and professional leadership through their partnership board and other governance arrangements. As we set out in a forthcoming report, medicines optimisation should be part of this system-wide clinical and professional leadership; diverse clinical leadership belongs in all places where clinical decisions are being made. <sup>2</sup>

Figure 1: At a glance



# Introduction

## Why do we need a CCG medicines optimisation team?

Clinical commissioning groups have had identified responsibilities in relation to commissioning for quality, informed by the NHS Constitution and the Health and Social Care Act which state that: ‘each clinical commissioning group must exercise its functions to secure continuous improvement in the quality of services provided to individuals for or in connection with the prevention, diagnosis or treatment of illness.’<sup>3,4</sup> As we move to integrated care systems, these functions will still need to be delivered, with particular emphasis on prevention and continuous improvement.

Used correctly, medicines prevent, treat or manage many illnesses or conditions and are the most common therapeutic intervention in healthcare.<sup>5</sup> The NHS spent £20.9 billion on medicines in 2019/20 – this is the second-highest area of spending in the NHS, after staffing costs.<sup>6</sup> Medicines also have the potential to cause harm. Between 5-10 per cent of all hospital admissions are medicines related, two-thirds of medicines-related hospital admissions are preventable and 30-50 per cent of medicines prescribed for long-term conditions are not taken as intended.<sup>7</sup>

CCG commissioners are responsible for ensuring services and pathways in which medicines are used are commissioned to standards that deliver cost-effective use of resources, reduced risks associated with medicines use, and improved patient

outcomes and experience with medicines. Managing these responsibilities is the role of the CCG medicines optimisation (MO) team.

## What is medicines optimisation?

NICE defines medicines optimisation as ‘a person-centred approach to safe and effective medicines use, to ensure people obtain the best possible outcomes from their medicines’.<sup>8</sup> The concept is frequently summarised as ‘right medicine, right patient, right time’. This phrase takes on different emphases in different settings – within the commissioning arena it can be interpreted at a population level as well as that of the individual.

In practice, medicines optimisation in the commissioning setting may be considered to be the enabling of safe, legal, evidence-based, clinically and cost-effective prescribing, supply and use of medicines within the resources available.

Effective medicines optimisation contributes to:

- the improved health of individuals and the population as a whole
- improved patient care and satisfaction
- making the best use of available resources
- making better use of professional skills
- the delivery of clinical governance.

## Medicines optimisation teams

Advice in relation to the safe, legal, clinically and cost-effective use of medicines in a health economy has been in place for many years, with health authorities recognising the need for pharmaceutical advisers in the mid to late 1990s. Medicines management teams emerged from primary care groups and developed further within primary care trusts.

When clinical commissioning groups (CCGs) formed in 2013, many employed their own medicines management teams or contracted with external providers to provide a medicines management service. In the same year, the Royal Pharmaceutical Society published *Medicines Optimisation: Helping Patients Make the Most from their Medicines*.<sup>9</sup> As the language of ‘medicines optimisation’ was more frequently used, many medicines management teams changed their titles to medicines optimisation teams, as a truer reflection of the role.

Today, medicines optimisation (MO) teams continue to be staffed largely by pharmacists (clinical experts in medicines) and pharmacy technicians (experts in systems and processes relating to medicines). Both are registered professions regulated by the General Pharmaceutical Council. Some MO teams also include other disciplines, such as dieticians or project managers.

The pharmacists leading MO teams are generally senior managers within their organisation. Many are at associate director level, in recognition of the importance of the MO function, the broad range of clinical and population health skills they bring to the organisation and their professional contacts across the system. Senior pharmacists within the team will take the lead in formulary and broader commissioning issues, on finance and safety. Others may have specific remits around more directly clinical issues. Technicians often lead on data analysis and supporting the implementation of systems relating to safety and efficiency. All members of the team will be involved in effective communication, answering queries, and resolving difficulties.

## Common misconceptions

It is a common misconception that CCG medicines optimisation teams only exist to support the CCG to deliver financial cost savings and drug switches, that is to say, quality, innovation, productivity and prevention (QIPP) targets, against the CCG prescribing budget. Prescribing is the most common therapeutic

patient-level intervention in the NHS and hence the strong focus on prescribing budgets, accounting for approximately a tenth of CCGs' overall budgets. However, this paper seeks to demonstrate the wide range of roles and functions that CCG medicines optimisation teams either directly deliver or support the delivery of, with finances and financial savings being a small part of our work.

CCG medicines optimisation teams have also been viewed primarily as the local 'formulary watchdogs', providing reminders and advice to primary care prescribers on commissioning/formulary positions of medicines. Again, this is a very small part of their role. The reality is that most prescribing decisions are made on an individual basis, between the prescriber and the patient. The role of the MO team is to support prescribers to access all the positive influences on their prescribing decisions to ensure cost-effective and high-quality prescribing occurs.

## The medicines optimisation agenda

Today, the medicines optimisation team supports the clinical commissioning group's aim to improve the health of the population by optimising the use of medicines through:

- promoting the safe, evidence-based and cost-effective use of medicines
- providing up to date, unbiased information about medicines, treatments and care pathways
- supporting practitioners and patients to make the best use of medicines
- minimising the harm caused by medicines
- developing local guidelines and care pathways to optimise the optimisation of conditions
- collaborating with local hospital trusts and other healthcare providers to support these aims.

## Medicines optimisation within the health and social care system

Medicines optimisation is a true reflection of the roles and functions of CCG teams. Finance is important, as is quality; they are not mutually exclusive and must co-exist. Medicines are the most widely used intervention in health and hence medicines optimisation – getting the right medicine to the right person at the right time – is key to optimising the health of our population. CCG medicines optimisation teams provide expert advice on every aspect of medicines optimisation, spanning prescribing, dispensing, administering, monitoring and use of medicines, procurement processes, governance, assessing clinical evidence and interface issues. CCG MO team workstreams also aim to support partners and providers to deliver medicines optimisation in a way that is high quality, efficient, safe, well led, timely and responsive, effective and equitable.

Medicines optimisation has a significant role in supporting CCGs' commitment to ensuring the services they commission are both safe and effective in meeting the needs of patients and providing a good patient experience. They contribute to delivering and improving the health, safety and wellbeing of patients and the public. Professionalism and safe and effective practice are central to that role.

Medicines optimisation covers and overlaps with a wide range of workstreams. This document details the majority, but they are ever-expanding and evolving. All this work has the person at the centre, whether that be a service-user or a patient. As medicines optimisation teams transition to an ICS landscape, preserving these functions as well as 'systemising' medicines optimisation will be essential to improving patient-centred care and health outcomes.

# Roles and functions

The medicines optimisation team has several overarching functions. These functions have significant overlap and hence some areas could easily be considered better suited to 'sit under' one of the other headings.

- Medicines commissioning: formularies, pathways and services
- Medicines finance
- Medicines safety and quality
- Medicines across the system: collaboration, coordination and support.

# Medicines commissioning: formulary, pathways and services

## Formulary

### The NHS Constitution

The NHS Constitution for England, produced by the Department of Health in 2009 and updated in 2015, provides patients with the right to medicines and treatments that have been considered by the National Institute for Health and Care Excellence (NICE) through the technology appraisal (TA) process.

The constitution states that, where appropriate, positively assessed medicines and treatments be made available to patients and be included in the formulary adopted by the local healthcare providers and commissioners:

‘You have the right to drugs and treatments that have been recommended by NICE for use in the NHS if your doctor says they are clinically appropriate for you.’<sup>10</sup>

If a medicine has been through NICE and given a positive assessment, then the CCG should ensure it is available to appropriate patients within 90 days of the guidance being published.

Not all medicines are considered by NICE and therefore the decision to use other drugs is made on a local level. The constitution provides a second right for patients:

‘Medicines (and treatments) that have not yet been considered by, or have not received a positive recommendation for use in the NHS through a NICE technology appraisal process, should be considered by the local NHS using a robust assessment of the best available evidence.’<sup>11</sup>

The constitution states:

‘You have the right to expect local decisions on funding of other drugs and treatments to be made rationally following a proper consideration of the evidence. If the local NHS decides not to fund a drug or treatment you and your doctor feel would be right for you, they will explain that decision to you.’<sup>12</sup>

## Area prescribing committees and formulary processes

Locally, decisions on whether medicines and other prescribable products may be used locally are made by the area prescribing committees (APC). Area prescribing committees are made up of a range of healthcare professionals with a special interest in commissioning medicines, including:

- CCG GP prescribing leads
- hospital doctors/consultants from the local hospital
- primary care doctors (GPs)
- specialist clinicians, such as from the local mental health providers
- hospital pharmacists
- medicines optimisation pharmacists
- medicines optimisation representatives from the local community services provider(s).

The geographical footprint of the APC is usually determined by the principal acute provider and mental health and community services contracts held by commissioners. In settings where CCG commissioners work particularly closely together, the APC may cover a population of significant size (such as Birmingham, Sandwell, Solihull and environs APC).

The committees meet monthly and follow the NICE guidance on developing and updating local formularies.<sup>13</sup>

When the committee decides on whether a medicine should be used locally, the committee considers:

- what impact the medicine has on patient care
- what the timelines are for new medicines reaching the market
- the severity of disease and patient numbers affected that the medicine is aimed at
- the clinical effectiveness of the medicine
- the effect on patient safety of the medicine
- any gaps in treatment or other available treatments
- the cost-effectiveness of the medicine
- the resource impact of the medicine.

The committee considers evidence available from reputable sources and individual drug manufacturers. The committee seeks the highest grade of clinical evidence available in assessing safety and cost-effectiveness, for example, large scale double-blind randomised controlled trials of new medicines compared to established treatments. Comparisons solely against placebo or medicines that are not commonly established treatment will not be regarded as highly, nor will anecdotal reports or individual clinician opinion.

Decisions by the committee must be made in a systematic, consistent and transparent way, with the aim of fairly and rationally distributing NHS resources across different patient groups and competing demands.

Local prescribing policies may be developed to cover situations where there is no national guidance but there is a local demand for the treatment. Local policy will normally contain specific details about the clinical condition, the group of patients that are covered by the policy and the treatment criteria.

Additionally, NHS England and NHS Improvement established a network of advisory regional medicines optimisation committees (RMOCs) in 2016 to explore ways of optimising the use of medicines for the benefit of patients and the NHS. Representatives from CCG MO teams sit alongside decision makers, healthcare professionals and patients to share best practice, understand the evidence base and coordinate action to reduce unwarranted variation and improve outcomes and value from medicines use.

The APC will be cognisant of guidance provided by the regional medicines optimisation committee in its discussions and decision making.

## Formulary

A formulary is a locally maintained document that lists the medicines that are deemed suitable for prescribing within the local area. If it is agreed at the area prescribing committee meeting that a medicine should be used locally then the medicine is added to the formulary. In most areas, the formulary will also include other products prescribable on FP10, including oral nutritional supplements, wound care/dressings, stoma and continence products and technology/devices, such as Gammacore® or FreeStyle Libre® system.

All medicines that have been assessed under a NICE technology appraisal are added to the formulary. Use of the medicine is generally restricted to the clinical indications that are described in the NICE guidance and so a medicine may be available for some conditions (that is to say, those considered by NICE) but not for others.

The formulary also details who is responsible for the prescribing of each medicine. Many medicines accepted for use will be prescribed by GPs, hospital doctors and non-medical prescribers, but some will have local restrictions on their use. Some will be prescribed in limited circumstances and some will only be prescribed in hospital settings. Some medicines will not be included on the formulary at all.

The CCG expects prescribing to be in line with the local formulary. All prescribers are expected to consider whether the medicine they intend to prescribe is on the formulary. There are some circumstances where there will be a requirement to prescribe a drug that is not on the formulary and in those circumstances the CCG asks prescribers to consider the evidence and whether the circumstances are exceptional compared with those of other patients.

As part of the formulary processes, CCG MO teams must have good critical appraisal skills to review the evidence for drug submissions to be added to the formulary, complete horizon scanning to ensure the CCG is aware of what products may be requested as additions to the formulary over the next 12 months and any related cost impact, and ensure all the correct governance processes are in place for making changes to the formulary.

MO teams support the implementation of NICE guidelines in primary care, ensuring the formulary is up to date and reflects the NICE guidance.

## Shared care/interface issues

Shared care guidelines are local policies to enable prescribers to accept responsibility for the prescribing and monitoring of medicines/treatments in primary care, in agreement with the initiating specialist service. Shared care details the responsibilities of each prescriber and ensures the patient is monitored safely and in an appropriate health care setting.

NHS Specialist Pharmacy Service has introduced Shared Care for Medicines Guidance – A Standard Approach, seeking to implement national shared care guideline templates.<sup>14</sup> CCG MO teams will support the implementation of these national shared care templates, collaborating with providers to ensure a collective stakeholder approach to shared care.

The MO team ensures relevant, up-to-date shared care guidelines are in place and support any interface-related issues with shared care medicines. MO teams also liaise with the local medical committee (LMC) regarding the ‘amber drugs’ local enhanced service to ensure that GP practices are remunerated appropriately for any extra responsibilities regarding drug monitoring.

### Audit of the use of new medicines

When a new medicine is added to the formulary, the MO team seeks assurance that it is being prescribed in line with the approved indications. Some commissioners use verification systems such as Blueteq®, which require provider clinicians to confirm that a patient meets the criteria of a NICE TA or local policy before reimbursement arrangements are put into place.

### Individual funding requests

Local decision-making processes around medicines cannot consider all situations. There are situations where an individual patient’s circumstances are exceptional and such situations are considered on an individual basis. If a prescriber thinks that a particular medicine should be used, they can apply to the local CCG using this process. Individual treatment requests are considered by a specialist panel that will consider the clinical evidence for the treatment, its cost-effectiveness and any national or local policies regarding the medicines. The MO team supports the local individual funding request (IFR) processes by providing information and advice in line with the local commissioning position.

## Pathways and services

### New commissioned services/ new patient pathways

Commissioners need to ensure that the care pathways they develop or commission from providers have a sound evidence base and are engineered to deliver safety and efficiency. The clinical skills of MO team pharmacists in relation to critical appraisal and other aspects of evidence-based medicine find much wider applicability than pure 'medicines commissioning.' MO team pharmacists are frequently key members of multidisciplinary CCG teams which review existing and support the design of new local care pathways, referral criteria and clinical guidelines.

As a minimum, the MO team supports the review of clinical pathways that contain medicines, to ensure that the medicine content is up to date, relevant, safe and in line with local formularies. The direction of travel of the NHS is moving care closer to home for patients. This means that services usually provided solely in acute hospitals are being moved to community settings. Many of these services involve medicines, for example, giving intravenous zoledronic acid in the community. MO team input is needed into the redesign of these services to ensure that the new service is safe and the correct governance processes are in place.

In some CCGs, MO team pharmacists will be leading the commissioning of services particularly related to safe and effective use of medicines (such as services to address medication overuse) or to improving patient access to medicines.

Some CCG MO teams have set up a palliative care drugs service in local community pharmacies to ensure that patients with palliative care needs have access to the right medicines without unnecessary delay. Pharmacies that are commissioned to provide this service stock a locally agreed list of medicines and make a commitment to ensure that the users of the service have prompt access to these medicines, in response to the presentation of an

NHS prescription, during the pharmacies' contracted opening hours. In the event of there being insufficient stock to fill an immediate need, the pharmacy will liaise with another community pharmacy in the service with stock and/or other local community pharmacies. The pharmacy will aim to locate a pharmacy with sufficient in-date stock and request that they reserve that stock for collection by the user. If no further stock can be located, the pharmacy will contact the prescriber to discuss a suitable alternative.

However, in many CCGs, MO team pharmacists will be actively involved in commissioning a wide range of new pathways to ensure high-quality, safe, and seamless patient care across interfaces – all within the finite financial and capacity resources available.

CCG MO team pharmacists lead on national medicines-related issues on behalf of the commissioner, for example, the use of Avastin® (bevacizumab) for intravitreal administration such as in the treatment of wet AMD or the supply of additional direct oral anticoagulants (DOACs) during COVID-19.<sup>15</sup> They ensure they link with other key stakeholders to ensure the CCG is fully engaged with national issues that may affect the CCG and/or local providers.

## NHS RightCare

NHS RightCare<sup>16</sup> is a national NHS England-supported programme committed to delivering the best care to patients, making the NHS's money go as far as possible and improving patient outcomes. NHS RightCare aims to help to ensure the best possible care is delivered as efficiently as possible, which is essential for both patients and the NHS. Reducing unwarranted variation and increasing value through medicines optimisation is a crucial element of NHS RightCare's innovation work.

Through analysis of large volumes of data, the RightCare programme aims to indicate where a CCG differs significantly from comparator CCGs to highlight potential areas for improvement.

MO teams determine which data has been used, and the degree to which it provides a reliable indicator for the medicines-related measure under consideration. They then apply their knowledge of therapeutics and understanding of the local context to ascertain whether the apparent variation is real and/or unwarranted. If so, they further use their knowledge of the local context to determine whether the proposed scale of savings is realistic and to advise finance colleagues accordingly. They would then work with other members of the commissioning team to review and optimise the clinical pathway under consideration.

### Therapeutic area reviews

The MO team supports the review of entire therapeutic areas, for example, asthma, COPD, diabetes to ensure that the medicines are evidence-based and cost-effective. These reviews may be triggered by a concern regarding the quality of prescribing, the cost of prescribing or if a new medicine enters the market or new national guidance, for example, NICE, is published. These reviews involve multiple stakeholders, clinicians from primary and secondary care.

# Medicines finance

## Management of prescribing and medicines budgets

Most, if not all, CCG MO teams work closely with finance leads to set the primary care prescribing budget, using cost and volume prescribing data, horizon-scanning information and their professional insight to inform their advice. Many CCG teams apply similar methods to input into the setting of high-cost drugs budgets for commissioned services.

Senior MO team members are also involved in monitoring prescribing expenditure and cost pressures. Primary care drug costs are subject to many variables, some of which are outside the control of the CCG, such as shortages of generic drugs leading to price increases because of market forces; fluctuations in reimbursement prices of Category M medicines within the Drug Tariff, related to the Community Pharmacy Contractual Framework; and even 'price gouging', where a company seeks to increase prices unreasonably. MO team members will work to understand the implications for local prescribing spend and work with each other and national bodies to try to rectify the situation.

Within commissioned services, expenditure on high-cost drugs can be accelerated by an earlier than expected NICE TA, or one which recommends use in a wider population than was expected.

Where projected overspends are within CCG control MO team members will instigate remedial actions to address the potential overspend.

## Analysis of data

The MO team reviews an extensive range of prescribing/medicines data sources to ensure that prescribing is cost-effective and safe, which takes time and subject expertise.

Examples of data sources include:

- ePACT2<sup>17</sup>
- Open Prescribing<sup>18</sup>
- PrescQIPP<sup>19</sup>

Most CCG MO teams also have their own in-house data resources, tailored to address specific local issues. These resources are also used for the quality and safety agenda – see the quality and safety section.

## Cost pressures

In recent years significant increases in concessions and no cheaper stock obtainable (NCSO) have placed CCG prescribing budgets under additional pressure. CCG MO teams monitor the impact of price concessions, horizon scan for their impact, collaborate with finance colleagues to ensure the CCG are informed of the potential impact and look to alternative cost contingency plans to mitigate the effects of price concessions.

## Correct prescribing codes/budgets/cost centres

Prescribing costs are attributed to the prescriber, within a GP Practice, within a CCG. When a prescriber moves out of the CCG area or comes into the prescribing area, the prescribing code must move with the prescriber to ensure the prescribing costs are attributed to the correct organisation.

CCG MO teams work with the CCG finance team to ensure that prescribing costs are attributed to the correct prescriber and prescribing budget. When the costs are attributed to the wrong organisation the MO team works to resolve these errors and ensure the CCG does not underpay or overpay on prescribing costs. (Setting providers up as new cost centres – see ‘other providers’).

## Public health recharges

In 2013 the commissioning of several public health services moved from primary care trusts to local authorities, including smoking cessation, sexual health and substance misuse. The local authority is responsible for commissioning these services for the local population and are also responsible for paying for the cost of medicines associated with these commissioned services. Some of the prescribing takes place in GP practices and hence the cost associated with prescribing falls to the CCG. The MO team ensures that these costs are recouped and work with the finance team to re-charge these costs back to the local authority.

## Other providers

As a CCG, the majority of prescribing happens in GP Practices. However, CCGs have many contracts with other providers, for example, hospices, out of hours providers, health and justice providers, local mental health providers. The CCG is responsible for the prescribing costs of the external providers and the need to ensure that all our providers are providing safe, high-quality care.

At times the MO team is required to review contract associated with other providers and set up providers as new cost centres, so they have a prescribing code attributed to that specific cost centre

## QIPP

The Quality, Innovation, Productivity and Prevention (QIPP) programme is all about ensuring that each pound spent is used to bring maximum benefit and quality of care to patients.

The NHS spent £20.9 billion on medicines in 2019/20, this is the second-highest area of spending in the NHS, after staffing costs.<sup>20</sup> Approximately, a fifth of a CCG's annual budget is spent on medicines. Therefore, it is logical that medicines and prescribing are a strong focus of CCGs' annual QIPP plans.

The CCG MO team QIPP plan is a significant workload, with a wide range of projects. Some previous QIPP projects were relatively straightforward cost-saving projects, for example switching drug A to drug B, but much of this low hanging fruit has been addressed. The more recent projects are much more complex and include multiple stakeholders to address the issues, for example:

- prescribing indicative budgets model
- prescribing incentive schemes
- a review of the prescribing of oral nutritional supplements (sip feeds)
- a review of the prescribing of stoma and continence appliances
- a review of the prescribing of dressings/wound care products.

More recently the focus has been on cost avoidance and CCG MO teams advocate for a medicine optimisation approach to cost efficiencies, ensuring the right medicine, for the right person at the right time. A more holistic approach to the whole patient pathway, not just the spending on medicines, considers savings from, for example, avoiding an admission to hospital, or reduction in healthcare professional time.

## Rebates

Primary care rebate schemes (PCRS) are contractual arrangements initiated by pharmaceutical companies, directly or via third-party companies, which offer financial rebates on particular branded medicines.

The MO team oversees all PCRS in the CCG and ensures that the PCRS policy is followed. The MO team works with finance

colleagues to track the savings made by any PCRS and ensure these are received.

## Priority Prescribing Programme

As part of the NHS England and NHS Improvement Medicines Value Programme (MVP),<sup>21</sup> CCGs have been asked to review low-value medicines, decreasing or stopping the use of medicines that are neither clinically or cost-effective. This work sits under the national Priority Prescribing Programme, formerly the Low Value Medicines Programme.

Working across the system, but particularly with general practice leads, MO teams have led on devising and implementing a package to support a reduction in the number of items that should not routinely be prescribed in primary care:

- products of low clinical effectiveness, where there is a lack of robust evidence of clinical effectiveness or there are significant safety concerns
- products that are clinically effective but where more cost-effective products are available, including some products that have been subject to excessive price inflation
- products that are clinically effective but due to the nature of the product are deemed a low priority for NHS funding.

## Self-care programme

A condition that is suitable for self-care does not require medical advice and can be treated with items that can easily be purchased over the counter from a pharmacy. To manage increasing demand, CCGs promote self-care where possible for minor health concerns, in line with the national guidance, Conditions for which Over-the-Counter Items Should Not Routinely be Prescribed in Primary Care: Guidance for CCGs,<sup>22</sup> and in highlighting:

- the normal length of time that it takes for a self-limiting condition, such as a cough or cold, or a virus, to clear up of its own accord (usually one to two weeks)
- that it is more cost-effective to the NHS and often quicker to seek advice from local pharmacists than GPs
- that buying over-the-counter products for minor, acute conditions will save the NHS a great deal of money.

If a person needs the advice to be able to self-care – for instance, if they are not sure if their condition is minor, or one that goes away of its own accord, or they need clinical advice on how to relieve symptoms – the NHS advises they visit a local pharmacy.

MO teams support this national campaign on a local level, working with GP practices and the CCG communications team to promote self-care. Encouraging self-care frees up GP practice appointments, allowing GPs time to focus on more complex, long-term conditions and reduces primary care prescribing spend.

## Other QIPP programmes

A wide range of QIPP programmes have been devised and implemented by MO teams across CCGs. Many of these focus on reducing waste and hence have a quality and safety focus as well as reducing prescribing expenditure.

## Contracts/enhanced services

CCGs usually hold several contracts with providers for commissioned services relating to medicines, for example ‘near-patient testing local enhanced service’. CCG MO teams work with the finance and contracting team to ensure the contracts are up to date and correct. CCG MO teams liaise with the provider organisations and their representatives, for example, the local medical committee, regarding the content/wording and payment related to any additional contracts/enhanced services.

## Pharmaceutical funding approval

CCG education events are usually sponsored by pharmaceutical funding. The MO team provides support to ensure that the sponsorship is appropriate in line with the CCG policies on sponsorship and conflicts of interest.

# Medicines safety and quality

## Safety programmes

Medication has a huge potential to do good, but errors can occur at many points in the medication cycle – prescribing, dispensing, administering, monitoring and use. The World Health Organization (WHO) identified medication without harm as the theme for its third Global Patient Safety Challenge which aims to reduce severe avoidable medication-related harm by 50 per cent globally in five years by targeting healthcare providers' behaviour, systems and practices of medication, medicines, and the public.<sup>23</sup> In response to this challenge, the Department of Health and Social Care (DHSC) commissioned a report on the prevalence and cost of medication errors which reported that an estimated 66 million potentially clinically significant errors occur per year, 71 per cent of which are in primary care.<sup>24</sup> While most errors are spotted (and corrected) at the point of error or do not threaten patient safety, a drastic reduction in the number of errors is now being called for. There is a need to develop and implement interventions to reduce medication error associated with avoidable harm.

The Medicines and Healthcare products Regulatory Agency (MHRA) regulates medicines, medical devices and blood components for transfusion in the UK. The medicines optimisation team supports the cascade of messages from MHRA to prescribers, support prescribers to develop action plans and ensure they have acted on any relevant safety alerts.

National Patient Safety Alerts (NPSA) that relate to medications that were published between 2002 and 2012 by the National Patient Safety Agency are now hosted by NHS England and NHS Improvement. MO teams support the cascade of these alerts and ensure that GP practices have appropriate action plans relating to the alerts.

## National Medicines Safety Programme

The Medicines Safety Programme is an ongoing programme of regular 'known' medicines safety issues. Examples of known areas are:

- valproate pregnancy prevention programme<sup>25</sup>
- prescribing errors associated with drugs that require regular blood test monitoring, such as clozapine, digoxin, gentamicin, lithium and methotrexate
- prescribing errors related to anticoagulants – warfarin, DOACs, injected heparin and low molecular weight heparins
- prescriptions for medicines were omitted or delayed
- prescribing errors relating to opioid analgesics
- prescribing errors related to insulin
- paraffin based skin products – the risk of fire.

MO teams send out information/updates/alerts every month and will focus on a specific medicine safety area. The information is sent out to support the information that is sent out from MHRA and to offer further support to GP practices in implementing any actions required in the safety alert.

MO teams will also flag any ad-hoc medicine safety issues, for example, a significant MHRA alert, as and when they arise and ensure that GP practices are aware and have taken any relevant action.

Medicines optimisation teams work with the CCG quality team to support the investigation of medicines-related safety incidents and develop systems and processes, as appropriate, to share learning from medicines-related safety incidents to our providers and partners and prevent them from recurring.

Medicines optimisation teams link with the medicines safety officer network to share learning and implement best practice in medicines safety.

As part of the GP Contract, primary care networks (PCNs) are expected to carry out structured medication reviews and medicines optimisation. PCNs are expected to use appropriate tools to identify and prioritise patients who would benefit from a structured medication review, which would include those on medicines commonly associated with medication errors.<sup>26</sup> Examples of such tools would be PINCER and ePACT2 medicines safety dashboard – as detailed in the box on pages 33 and 34.

## PINCER: Pharmacist-led IT-based intervention to reduce clinically important medication errors in primary care

Prescribing errors in general practice are an important and expensive preventable cause of safety incidents, morbidity, hospitalisations and deaths. This is a significant quality and safety issue that is widely relevant to UK healthcare. A large-scale study in English general practices identified prescribing errors in 5 per cent of prescription items, with one in 550 items containing a severe (potentially life-threatening) error. This equates to approximately 1.8 million serious prescribing errors in English general practices each year.<sup>27</sup> Further studies have shown hazardous prescribing in general practices to be a contributory cause of around one in 25 hospital admissions, and the annual hospital admission costs in England for adverse drug events are £650 million (at 2013 prices).<sup>28</sup>

The intervention comprises core elements:

- Searching GP computer systems to identify patients at risk of potentially hazardous prescribing using a set of prescribing safety indicators.
- Pharmacists, specifically trained to deliver the intervention, providing an educational outreach intervention where they meet with GPs and other practice staff to:
  - discuss the search results and highlight the importance of the hazardous prescribing identified using brief educational materials
  - agree an action plan for reviewing patients identified as high risk and improving prescribing and medication monitoring systems using root cause analysis (RCA) to minimise future risk.

- Pharmacists (and pharmacy technicians) working with, and supporting, general practice staff to implement the agreed action plan.

The PINCER quality improvement tool allows GP practices to easily interrogate their clinical data and identify patients who are potentially at risk of harm through prescribing errors or inadequate drug monitoring. Practices can quickly access lists of patients identified as having been prescribed drugs commonly and consistently associated with medication errors.

NICE's medicines optimisation guideline recommends that:

‘Organisations and health professionals should consider applying the principles of the PINCER intervention to reduce the number of medicines-related patient safety incidents, taking account of existing systems and resource implications.’<sup>29</sup>

## ePACT2 medicines safety indicator/ dashboard

A set of prescribing indicators have been developed as part of a programme of work to reduce medication error and promote safer use of medicines, including prescribing, dispensing, administration and monitoring. The programme of work is in response to the World Health Organization (WHO) global challenge – medication without harm.<sup>30</sup> More information can be found in the report of the Short Life Working Group.<sup>31</sup>

The purpose of the indicators is to identify hospital admissions that may be associated with prescribing that potentially increases the risk of harm and to quantify patients at potentially increased risk.

The indicators aim to:

- support local reviews of prescribing, alongside other risk factors for potential harm
- minimise the use of medicines that are unnecessary and where harm may outweigh benefits
- identify where the risk of harm can be reduced or mitigated, including prescribing of alternative medicines or medicines that mitigate risk such as gastro-protective agents
- reduce the number of hospital admissions that may be associated with medicines
- reduce the number of patients that are potentially at increased risk of hospital admission that may be associated with medicines.

CCG MO teams use the data from the ePACT2 medicines safety dashboard to support the medicines safety agenda, identifying areas where further interventions and support to prescribers is required. Many of the indicators within the ePACT2 medicines safety dashboard are similar to the PINCER indicators and similar indicators are also included within the GP contract.

## Antimicrobial stewardship (AMS)

Antibiotic stewardship (AMS) refers to a set of coordinated strategies to improve the use of antimicrobial medications to enhance patient health outcomes, reduce resistance to antibiotics and decrease unnecessary costs.

Antimicrobial resistance is a national and global threat to health,<sup>32</sup> as no new antibiotics have been developed in the past 30 years and increasing bacterial resistance to those antibiotics in current use means infections are becoming harder to treat. There are currently 25,000 deaths a year in Europe caused by infections that have no effective antibiotic treatment.

Although the number of antibiotic prescriptions dispensed in primary care has reduced by 13.2 per cent in five years (between 2013 and 2017), further progress is required, as defined by the NHS Long Term Plan:

‘The health service will continue to support implementation and delivery of the government’s new five-year action plan on Antimicrobial Resistance. We will continue to optimise use, reduce the need for and unintentional exposure to antibiotics, as well as supporting the development of new antimicrobials. We will ensure access to old and new treatments, preventative measures (including vaccines) and appropriate tools (including diagnostics and electronic prescribing in both hospitals and community settings). And we will continue to support system-wide improvement, surveillance, infection prevention and control practice, and antimicrobial stewardship, ensuring resources are available for clinical expertise and senior leadership at all levels.’<sup>33</sup>

A pharmacist from the MO team will lead the local system-wide antimicrobial stewardship group, supporting the development of local antibiotic guidelines for primary care.

The GP Contract<sup>34</sup> states that PCNs must work with CCGs to optimise the quality of prescribing of antimicrobial medicines. CCG MO teams support GP practices and PCNs with data and areas to focus on and signposting to other available resources related to AMS.

The MO team accesses NHS Business Services Authority's ePACT2 antimicrobial stewardship (AMS) dashboard<sup>35</sup> which has been developed to support the national Antimicrobial Resistance Strategy. The ePACT2 AMS dashboard provides prescribing data to support local stewardship activity and reporting.

There are several AMS indicators:

- Antibacterial BNF 5.1 Items/STAR PU
- % Co-amoxiclav, Cephalosporins & Quinolones Items
- Antibacterial BNF 5.1 Items/STAR PU versus % of Co-amoxiclav, Cephalosporins & Quinolones Items
- Trimethoprim: Nitrofurantoin Items Ratio.

There are also other national AMS targets which CCG MO teams support the use/implementation of, for example, Public Health England (PHE) AMR local indicators<sup>36</sup> and TARGET (Treat Antibiotics Responsibly, Guidance, Education, Tools).<sup>37</sup>

The purpose of these indicators is to encourage an improvement in the appropriate antibiotic prescribing in primary care. Antimicrobial-resistant infections impact patient safety and the quality of patient care. Evidence suggests that antimicrobial resistance (AMR) is driven by overusing antibiotics and prescribing them inappropriately. Reducing the inappropriate use of antibiotics will delay the development of antimicrobial resistance that leads to patient harm from infections that are harder and more costly to treat. Broad-spectrum antibiotics, such as co-amoxiclav, cephalosporins and quinolones, should be prescribed in line with prescribing guidelines and local microbiology advice. Reducing inappropriate antibiotic use will also protect patients from healthcare-acquired infections such as *Clostridium difficile* infections and reduce the risk of Gram-negative bloodstream infections.

CCG MO teams also provide support to the investigation of healthcare-acquired infections, caused by *Clostridium difficile*, to see if the prescribing of antibiotics was a contributory factor.

## Deprescribing

Polypharmacy is defined as ‘the concurrent use of multiple medications by one individual’.<sup>38</sup>

Appropriate polypharmacy is defined as ‘prescribing for an individual for complex conditions or multiple conditions in circumstances where medicines use has been optimised and where the medicines are prescribed according to best evidence’.<sup>39</sup>

Inappropriate polypharmacy is defined as ‘prescribing of multiple medicines inappropriately, or where the intended benefits of medications are not realised’ or ‘Any prescription for drugs or appliances that is unnecessary (without indication or benefit), unwanted (by the patient) or unjustifiable due to its risk/benefit ratio.’<sup>40</sup>

Polypharmacy in people with multimorbidity is often driven by the introduction of multiple medicines intended to prevent future morbidity and mortality in individual health conditions. However, the absolute benefit gained from each additional medicine is likely to reduce when people are taking multiple preventative medicines, while the risk of harms increases.

Problematic polypharmacy may arise if medicines are used without a good evidence base for doing so, or if (taking into account the person’s views and preferences) the risk of harm from treatments is likely to outweigh the benefits, or where one or more of the following apply:

- the medicine combination is hazardous because of interactions
- the overall demands of medicine-taking, or ‘pill burden’, are unacceptable to the person
- these demands make it difficult to achieve clinically useful medicines adherence
- medicines are being prescribed to treat the side effects of other medicines, but alternative solutions are available to reduce the number of medicines prescribed.

CCG MO teams support the deprescribing agenda through running education and training events for prescribers, sharing deprescribing toolkits and working with key stakeholders in the patient pathway to look at opportunities for deprescribing. This also links in with reducing the prescribing of potentially addictive medication (see below) and reducing medicines waste (see below).

## Reducing the prescribing of potentially addictive medication

In September 2019 Public Health England published the report Prescribed Medicines Review, which was updated in December 2020 – Dependence and Withdrawal Associated With Some Prescribed Medicines: An Evidence Review.<sup>41</sup>

Public Health England reviewed the scale, distribution and causes of drug dependence. The review covered adults (aged 18 and over) and five classes of medicines:

- benzodiazepines (mostly prescribed for anxiety)
- z-drugs (sleeping tablets with effects similar to benzodiazepines)
- gabapentin and pregabalin (together called gabapentinoids and used to treat epilepsy, neuropathic pain and, in the case of pregabalin, anxiety)
- opioids for chronic non-cancer pain
- antidepressants.

In the review, PHE made five recommendations:

1. Increasing the availability and use of data on the prescribing of medicines that can cause dependence or withdrawal to support greater transparency and accountability and help ensure practice is consistent and in line with guidance.
2. Enhancing clinical guidance and the likelihood it will be followed.

3. Improving information for patients and carers on prescribed medicines and other treatments and increasing informed choice and shared decision-making between clinicians and patients.
4. Improving the support available from the healthcare system for patients experiencing dependence on, or withdrawal from, prescribed medicines.
5. Further research on the prevention and treatment of dependence on, and withdrawal from, prescribed medicines.

The Faculty of Pain Medicine in collaboration with Public Health England have an Opioids Aware campaign<sup>42</sup> and many CCG MO teams have supported the implementation of the campaign in a variety of ways, for example, in many of the Yorkshire CCGs, they have implemented 'CROP' – The Campaign to Reduce Opioid Prescribing.<sup>43</sup>

Opioid medicines, such as codeine or morphine, work well for short-lived pain (such as following injury) and cancer pain. They may not work and can be harmful in chronic pain. There is concern that patients with chronic pain are being given more and stronger opioids without trying other, less harmful options.<sup>44</sup>

The CROP project supports GP practices to review their prescribing of opiates and ensure prescribing is appropriate, safe and reviewed regularly, with the overall aim to reduce, or at the very least halt, the growth in prescribing of opiates.<sup>45</sup>

More recently, NICE has published guideline NG 193 Chronic Pain (Primary and Secondary) In Over 16s: Assessment Of All Chronic Pain And Management Of Chronic Primary Pain.<sup>46</sup> The guideline refers to non-pharmacological management of chronic primary pain and says many traditional pharmacological therapies, such as paracetamol, non-steroidal anti-inflammatories and opiates should not be initiated to manage chronic pain. The medicines

optimisation teams will be vital in supporting the implementation of this guidance – providing education and training to prescribers, completing audits of current prescribing behaviours and working collaboratively with other healthcare professionals to develop new pathways to review existing patients on pharmacological therapies and to ensure that new patients are offered non-pharmacological therapies first-line.

## Stopping overmedication of people with a learning disability, autism, or both

STOMP stands for stopping over medication of people with a learning disability, autism or both with psychotropic medicines. It is a national project involving many different organisations which are helping to stop the overuse of these medicines. STOMP is about helping people to stay well and have a good quality of life.<sup>47</sup>

Psychotropic medicine is more likely to be inappropriately prescribed to people with a learning disability or autism. The NHS Long Term Plan<sup>48</sup> states that they will expand STOMP and Supporting Treatment and Appropriate Medication in Paediatrics (STOMP-STAMP) programmes to stop the overmedication of people with a learning disability, autism or both.<sup>49</sup>

The aims of STOMP are to:

- encourage people to have regular check-ups about their medicines
- make sure doctors and other health professionals involve people, families and support staff in decisions about medicines
- inform everyone about non-drug therapies and practical ways of supporting people so they are less likely to need as much medicine, if any.<sup>50</sup>

MO teams are supporting mental health providers and commissioners with the medicines element of the STOMP programme.

## Medicines waste reduction and sustainability

It has been estimated £300 million of NHS prescribed medicines are wasted each year.<sup>51</sup> The cause of medicines waste is multifaceted.

Pharmaceutical waste can be split up into five types:

1. **Non-compliance** – the patient does not take medicines as prescribed. For example, taking at irregular intervals or in incorrect doses.
2. **Intentional non-adherence** – patient stops taking medication due to adverse side effects or personal beliefs.
3. **Unintentional non-adherence** – patient stops taking medicine or fails to take at correct intervals due to forgetfulness.
4. **Non-preventable waste** – the patient dies, and unused medicines are wasted, or a change in treatment means current dispensed medicines are no longer required.
5. **Preventable waste** – patient stockpiles medicines ‘just in case’. All items from repeat prescription are dispensed even if the patient no longer takes the medicine.<sup>52</sup>

One of the major concerns from this waste being created is that patients may not be experiencing the intended outcomes of their prescribed treatment. This can be due to either the patient not taking treatment as directed or by their situations not being reviewed regularly enough to ensure their prescription meets their evolving treatment needs. It is this concern for patient outcomes that are of primary concern to NHS England. The focus needs to be

put on both personalising patient's experience, but also avoiding the unnecessary demand that not optimising this experience can put on the NHS system. It is for this reason that highlighting best practice in waste reduction is important and that the outcomes be replicated wherever possible.<sup>53</sup>

Medicines optimisation waste reduction initiatives assist in ensuring that each patient receives the right medicine, at the right dosage, at the right time. While each initiative has a positive financial outcome, this is seen as a secondary benefit, with the key focus being on improving patient outcomes.<sup>54</sup>

These initiatives include:

- ensuring patients are responsible for ordering their own medication
- offering medication reviews to patients when they are discharged from the hospital to ensure they understand their new medicines regime (now part of the NHS Discharge Medicines Service)<sup>55</sup>
- supporting GP practices with their repeat prescribing policies to ensure that repeat prescribing is safe and appropriate.

Medicines also need to be destroyed safely, either by taking medicines to a dispensing contractor or by using an appropriate medicines waste bin, for example for sharps or cytotoxic medicines, and having these collected by a commissioner of a service. MO teams deal with queries and issues relating to the safe disposal of medicines.

Medication waste also has considerable environmental consequences. The manufacturing process, packaging and disposal of unused medicines, both correctly and incorrectly, all have an environmental impact. If medicines are disposed of incorrectly, such as by flushing them down a toilet or drain or via household rubbish, this leads to direct accumulation of pharmaceuticals in the environment, which leads to pollution to

the aqueous environment which has a detrimental effect on its ecosystems.<sup>56</sup>

The NHS is committed to reducing its carbon footprint. For example, the NHS Long Term Plan refers to the need to switch to dry powder inhalers where clinically appropriate, which use significantly less fluorinated gases than traditional metered-dose inhalers, reducing the NHS carbon footprint by 4 per cent.<sup>57</sup>

This is also echoed in the GP Contract where it says that PCN pharmacists will actively work with their CCG to optimise the quality of prescribing of metered dose inhalers, where a low carbon alternative may be appropriate.<sup>58</sup>

Sustainability is a major global challenge, that can only be overcome by taking responsibility and joining forces. CCG MO teams work with other key stakeholders to reduce medicines waste, both from being created in the first place and to ensure any waste that is created is destroyed sustainably.

## Controlled drugs advice and monitoring

Controlled drugs are defined and governed by the Misuse of Drugs Act 1971<sup>59</sup> ('the Act') and associated regulations. Controlled drugs are managed and used in a variety of settings by health and social care practitioners and by people who have prescribed them. Controlled drugs are closely regulated because they are susceptible to being misused and can cause harm. To ensure that they are managed and used safely, legal frameworks for governing their use have been established.

Since the Shipman Inquiry's fourth report in 2004,<sup>60</sup> the government has introduced significant legislative changes to the Act to strengthen the governance arrangements for controlled drugs. Arrangements have been established to encourage good practice in the optimisation of controlled drugs, as well as helping to detect unusual or poor clinical practice, criminal activity or risk to patients.

MO teams support systems and processes for using and managing controlled drugs safely in primary care NHS settings. We support primary care to improve working practices to comply with legislation and have robust governance arrangements. The aim is to support primary care to reduce the safety risks associated with controlled drugs.

MO teams provide ad-hoc advice regarding:

- GP practices developing systems and processes, including governance arrangements, storage, stock checks, transportation and destruction and disposal record keeping, risk assessment and reporting controlled drug-related incidents
- for individual health professionals on prescribing, obtaining and supplying, administering and handling controlled drugs
- for health professionals monitoring use, including governance and systems for reporting concerns and incidents.

## Patient-group directions

A PGD is a written direction that allows the supply and/or administration of a specified medicine or medicines, by named authorised health professionals, to a well-defined group of patients requiring treatment of a specific condition.

PGDs can only be used in certain circumstances and the provider needs to ensure that all the correct governance processes are in place, including input from a pharmacist. MO teams provide advice and support regarding local PGDs.

## Primary care support

### Structured medication reviews

From April 2020 the GP contract states that PCNs must offer structured medication reviews. (20) MO teams support the provision of sharing resources for conducting high-quality structured medication reviews.

The GP Contract states that the PCN needs to actively work with their CCG to optimise the quality of prescribing of (a) antimicrobial medicines, (b) medicines that can cause dependency, (c) metered-dose inhalers, where a low carbon alternative may be appropriate and (d) nationally identified medicines of low priority.<sup>61</sup>

CCG MO teams work with GP practices/PCNs to identify areas where structured medication reviews will have the most impact on the needs of the population, for example, reducing the prescribing of potentially additive medication, such as opioids (see above).

### Repeat prescribing processes

Medication errors make up a fifth of all errors occurring in general practice and many of these are preventable.<sup>62</sup> In the UK most NHS patients receive medicines intended for long-term use as repeat prescriptions. These are prescription items that are generated without the need for a consultation from a list of authorised repeat medicines. Extra care must be taken when repeat prescribing, especially if the prescriber signing the prescription was not the original prescriber and did not see the patient.

The GMC guidance on prescribing applies equally to repeat prescriptions.<sup>63</sup> The independent prescriber must only prescribe evidence-based treatments when they have adequate knowledge of the patient's health and are satisfied that they serve the patient's needs. Also, prescribers should make use of electronic and other systems that can improve the safety of their prescribing.

Practices should have a repeat prescribing protocol in place, which should be validated by a clinical governance lead in the practice. All staff should be trained to use the protocol, which should be dated and reviewed every two years or more frequently if issues are identified earlier.

CCG MO teams provide support and advice to GP practices when implementing their repeat prescribing policies/protocols to ensure that all the relevant information is included and share best practice. MO teams also support queries regarding quantities on prescription, Dossett boxes, patients travelling abroad and more.

### Electronic transfer of prescriptions and electronic repeat dispensing

The Electronic Prescription Service (EPS)<sup>64</sup> allows prescribers to send prescriptions electronically to a dispensing contractor of the patient's choice. This makes the prescribing and dispensing process more efficient and convenient for patients and staff. EPS has benefits for prescribers (GP practices), dispensing contractors (such as community pharmacies) and patients.

Electronic repeat dispensing (eRD)<sup>65</sup> allows the prescriber to authorise and issue a batch of repeatable prescriptions for up to 12 months with just one digital signature. The main benefits of increasing eRD:

- increases time and capacity by reducing administration workload significantly and reducing the frequency of authorisation of prescriptions
- keeps GP practice team and patients safer (during COVID-19) by reducing unnecessary patient contacts
- Community pharmacy can plan its workload accordingly. eRD improves quality and safety by ensuring GP practices are up to date with monitoring, bloods and medication reviews.

Many MO teams have worked with NHS Digital, NHS England and NHS Improvement and the IT teams, to support GP practices to enable EPS. In some cases, CCG MO teams have written protocols and provide direct hands-on support to GP practices to implement eRD.

## Computerised clinical decision support systems

Most CCGs subscribe to a computer-based prescribing decision support system, for example, Optimise Rx® and ScriptSwitch®. The software supports clinicians to make informed decisions at the point of prescribing. They are designed to encourage best practice, safety and cost saving.

The knowledge base is continually maintained by the provider's team of clinicians and researchers in line with current safety, best practice and cost-saving guidance and are available immediately to prescribers.

The software content is taken from a wealth of nationally recognised, evidence-based sources, for example:

- best practice guidance from NICE
- MHRA Drug Safety Updates
- prescribing safety indicators from the King's Fund, Royal College of General Practitioners and PINCER Trial
- START and STOPP Criteria
- latest Drug Tariff Pricing.

MO teams support the local implementation of the clinical decision support solution software, tailoring the messages that are on the trigger list depending on our local priorities.

## Care Quality Commission (CQC) support

Many of the services that CQC regulates have a role in managing medicines. Through inspection, CQC has seen that medicines present a clear risk to people when not used properly. The CQC's State of Care report for 2017/18 highlighted that, of the five key questions that CQC ask on inspections, performance for the safe key question is poorest, and this commonly affects overall ratings for all types of provider across all sectors. A significant part of the CQC assessment of the safe key question looks at how services manage medicines.<sup>66</sup>

Some CCG MO teams support GP practices and social care providers by offering advice and guidance regarding medicines optimisation either in preparation for a CQC visit or following a CQC visit where issues have been identified. The CCG work in collaboration with CQC, as an independent regulator, to help providers of health and care services to understand the common areas of risk and where services need to improve how they use medicines.

## Medicines quality in commissioned services

In some CCGs members of the MO team will be involved with the CCG quality team in gaining assurance of the quality of services commissioned from local providers. As noted above, this may find particular focus on antimicrobial stewardship, but may also include serious incidents/never events, patient complaints or monitoring compliance with NICE guidelines within commissioned services, as well as contributing to overall assurance processes.

## Non-medical prescribing lead

Non-medical prescribing (NMP) is the term used to describe any prescribing by a healthcare professional other than a doctor or dentist. A high proportion of the primary care health professional workforce are not GPs, the primary care workforce includes nurses,

pharmacists, physiotherapists and paramedics. If they have a prescribing qualification, they are called ‘non-medical prescribers’ or ‘independent prescribers’.

The principles that underpin non-medical prescribing are:

- improve patient care without compromising patient safety
- make it easier for patients to get the medicines they need
- increase patient choice in accessing medicine
- make better use of the skills of healthcare professionals
- contribute to the introduction of more flexible teams working within GP practices or commissioned services.

The role of the CCG NMP lead is to confirm that all prescribing by NMPs is managed and governed robustly in GP practices/services and the clinical commissioning group to ensure:

- professional and statutory obligations are met
- prescribing benefits patient care by improving access to medicines
- robust standards are in place for non-medical prescribing
- clarity on accountability and responsibility
- there is a framework and guidance under which potential applicants can determine eligibility to undertake an approved prescribing programme.

The CCG NMP lead supports providers (GP practices) and individual NMPs to ensure that the prescribing by NMPs is within their competencies and hence is high quality, safe, in line with local guidance and as a result, creates capacity within general practice and improves patient care.

Members of the MO team are also named as the ‘authorised signatories’ for NMPs. Authorised signatories are responsible for notifying NHS prescription services of organisational and prescriber changes, so they attribute prescribing costs to the correct person and the correct prescribing budget and provide accurate and detailed prescribing information.

## NICE medicines and prescribing associates

Many NICE medicines and prescribing associates work in CCG MO teams.<sup>67</sup> NICE associates help to support the delivery of key messages from NICE, for example supporting the implementation of the latest guidelines, and promote high quality, safe, cost-effective prescribing and medicines optimisation. Associates help to identify key medicines issues in the new guidance, share examples of good practice and use the network of experts to problem-solve specific medicines optimisation issues. Associates pass on knowledge across their professional networks and support each other as an expert group.

# Medicines across the system: collaboration, coordination and support

## Networks and leadership

### System leadership

CCG medicines optimisation teams already link and collaborate with multiple stakeholders – acute hospitals, mental health providers, GP practices, community pharmacies, social care providers, local authorities, and other care providers – seeking to smooth the journey for patients between different providers of care. Medicines optimisation is one of the golden threads that run between all sectors of care, whether in prevention or treatment. CCG medicines optimisation teams work as lynchpins for the medicines optimisation agenda, connecting the system together.

### Vaccination programme

CCG MO teams have always provided advice regarding the medicine aspect of national vaccination and immunisation programmes and ensure other stakeholders are linked in, as relevant, for example, community pharmacy for the flu vaccination programme.

Over the past six months, CCG MO teams have been a vital part of the national COVID-19 vaccination programme, offering expert advice to PCNs, large vaccination centres and community pharmacies on all pharmaceutical aspects of the COVID-19 vaccination programme. CCG MO teams are involved in ‘signing off’ vaccination sites, ensuring the sites have the correct pharmaceutical governance processes in place, for example, storage, handling and preparation, transport and disposal of COVID-19 vaccines. CCG MO teams have been providing ongoing expert advice to vaccination sites, as and when issues arise, working as part of a system-wide vaccination support group.

## Supporting the pharmacy workforce

The NHS Long Term Plan<sup>68</sup> sets out how patients and the public will increasingly rely on clinical care provided by pharmacy professionals:

- Clinical pharmacist prescribers will be a central part of multi-professional teams across PCNs. It is intended that pharmacy technicians will also support this new part of the primary care workforce.
- Community pharmacy teams will deliver consistent, high-quality care of patients with minor illnesses and support the public to live healthier lives.
- Hospital pharmacists will continue to be part of specialist teams but will extend their practice into primary care, including providing consultant pharmacist support.
- Medicines safety will be improved, wastage reduced and medicines optimised through structured medication reviews led by clinical pharmacists.<sup>69</sup>

The challenge now is ensuring sustainability and consistency across the country for services we know have a demonstrable

impact, while ensuring workforce supply and development, so we have pharmacy professionals where they are needed with the right skills and support.

Members of MO teams are part of ICS level pharmacy workforce groups that seek to address the pharmacy workforce issues at 'place' and 'system' level.

## Clinical pharmacists in GP practices/ primary care networks

As part of the Long Term Plan, NHS England and NHS Improvement has provided funding for clinical pharmacists in GP practices/ primary care networks. This is part of a wider expansion of the general practice workforce so that patients have better local access to a range of highly trained health professionals for their needs.<sup>70</sup>

Many CCG MO teams support PCNs with the recruitment of clinical pharmacists and provide direct support to clinical pharmacists via practice pharmacy forums and virtual networking.

Some CCG MO teams will arrange for one or more of their pharmacists to meet on a regular basis (for example, monthly) with all the pharmacists who work in GP practices/PCNs. The forums are designed to offer leadership and a support network to practice pharmacists. They provide a space to discuss any issues that practice pharmacists are facing, time for networking and an education session on a specific topic of relevance.

## Education and training

Many CCG MO teams provide education and training to a range of clinicians, including GPs, nurses and pharmacists. This may be at scheduled large events, such as 'protected learning time' workshops or smaller ad-hoc events with individual GP practices.

## Public health

CCG MO teams liaise with neighbouring local authorities regarding the commissioning of medicines related to public health services, for example, smoking cessation, substance misuse and sexual health. They also liaise with providers of public health services to ensure any aspects of medicine supply is high quality, safe and cost-effective.

Some CCG MO teams support public health colleagues in the production of the statutory Pharmaceutical Needs Assessment.<sup>71</sup>

Local authorities are the commissioners for many social care settings, for example, care homes. CCG MO teams collaborate with local authorities to ensure that social care providers have robust medicines optimisation policies and procedures in place.

## Community pharmacy

Community pharmacies are providers of NHS services and care. Traditionally the role of a community pharmacist as a healthcare professional was seen as dispensing prescriptions, but over the past ten to 15 years this has changed and now community pharmacies offer a range of clinical services.

Community pharmacy is commissioned by NHS England and NHS Improvement and contractual issues are dealt with by the organisation. CCG MO teams support the development of services above and beyond the basic community pharmacy contract and liaise on any interface issues between community pharmacy and other NHS providers.

CCG MO teams are supporting the rollout of the Community Pharmacy Consultation Service (CPCS)<sup>72</sup> and support collaboration between PCNs and community pharmacy to maximise the opportunities for medicines optimisation, for example by using the New Medicines Service (NMS) provided by community pharmacies.<sup>73</sup>

## NHS Discharge Medicines Service

The NHS Discharge Medicines Service<sup>74</sup> is a new essential service for community pharmacy contractors, which began on 15 February 2021. As an essential service, it must be provided by all community pharmacy contractors.

When some patients leave hospital, they might need extra support taking their prescribed medicines. This may be because they have had changes to their medicines, have started something new, or just need a bit of help to ensure they are taking their medicines safely and effectively.

Patients say they do not always remember everything they are told in hospital so having someone go through it again, discussing side effects and checking that they understand is very helpful.

The service has been established to ensure better communication of changes to a patient's medication when they leave the hospital and to reduce incidences of avoidable harm caused by medicines. By referring patients to community pharmacy on discharge with information about medication changes made in the hospital, community pharmacy can support patients to improve outcomes, prevent harm and reduce readmissions.

Guidance from the National Institute for Health and Care Excellence (NICE) cites evidence that when people move from one care setting to another, between 30 per cent and 70 per cent of patients have an error or unintentional change to their medicines. This presents a significant risk to their safety.<sup>75</sup>

Maintaining safe care as patients move across health and care services is a national priority for the NHS. Improving the safe transfer of information about medicines also supports hospitals in meeting NICE's medicines optimisation guidance that says, 'a consenting person's medicines discharge information should be shared with their nominated community pharmacy where possible'.<sup>76</sup>

CCG MO teams have been supporting the rollout of the NHS Discharge Medicines Service for many years – formerly called refer to pharmacy or transfer of care around medicines (TCAM). CCG MO teams have supported the liaison between community pharmacy teams and acute hospital pharmacy teams and GP practices to ensure the service has the desired impact and all relevant stakeholders are engaged.

## Community Pharmacy Consultation Service

The NHS Community Pharmacist Consultation Service (CPCS) was launched by NHS England and NHS Improvement on 29 October 2019, to progress the integration of community pharmacy into local NHS urgent care services, providing more convenient treatment closer to patients' homes.

The first phase of the CPCS offered patients the option of having a face-to-face or remote consultation with a pharmacist following an initial assessment by an NHS 111 call adviser. Following a period of successful piloting, the service is being extended (from November 2020) to include referrals for lower acuity conditions from general practice, as well as from NHS 111.<sup>77</sup>

CCG MO teams have been supporting the rollout of CPCS, liaising between community pharmacies and GP practices to ensure a seamless rollout of the service and linking in with the self-care agenda and any locally commissioned community pharmacy minor ailment services.

## Social care: care homes, domiciliary care and other care providers

The CQC identified the six most common areas of risk with medicines across health and care:

- prescribing, monitoring and reviewing
- administration
- transfer of care

- reporting and learning from incidents
- supply, storage and disposal
- staff competence and workforce capacity.<sup>78</sup>

NICE has guidance and quality standards covering medicines management for people in care homes or their own homes, and when moving between settings, for example, NG67 Managing Medicines for Adults Receiving Social Care in the Community.<sup>79</sup>

CCG MO teams provide leadership and support to social care providers and work collaboratively with local authorities and providers around medicines optimisation. They participate in regular forums with care providers to raise awareness of the importance of the safe and effective use of medicines.

MO teams support care providers in managing medicines safely in all social care settings. They provide information and advice to social care staff to assist them to meet the fundamental standards concerning medicines optimisation, for example, advice on homely remedies, supporting patients with self-administration, safeguarding and medicines, use of monitored dosage systems, covert administration, and supporting patients with swallowing difficulties, including specific advice on using unlicensed medicines

### Online ordering for care homes (proxy ordering)

Ordering medication is a routine but vital part of the optimisation of medicines in care homes.<sup>80</sup> Currently, most care homes do this using the paper repeat slip provided by the surgery. This must be physically taken to the surgery and the paper requests sorted by the surgery staff and transferred to the computer system.

However, it is possible to use an online ordering process. The request is transferred directly to the surgery from the care home in a simple electronic process. This means the process is easier and safer to manage both at the home and the surgery, and there is a clear audit trail of what has been ordered.

CCG MO teams are supporting care homes and GP practices to implement online ordering in line with the national NHS England and NHS Improvement guidance Ordering Medication Using Proxy Access.<sup>81</sup>

## Medicines optimisation in care homes

NHS England and NHS Improvement introduced a Medicines Optimisation in Care Homes (MOCH) programme, the focus being on care home residents using the Pharmacy Integration Fund (PhIF) to support the deployment of expert pharmacy teams to work in care homes from 2018/19 to 2019/20.<sup>82</sup>

The Medicines Optimisation in Care Homes programme focused on care home residents, across all types of care home settings and aims to deploy dedicated clinical pharmacy teams to:

- provide care home residents with equity of access to a clinical pharmacist prescriber as a member of the multidisciplinary team, with the supporting infrastructure for achieving medicines optimisation according to need
- provide care homes with access to pharmacy technicians who will ensure the efficient supply and optimisation of medicines within the care home, supporting care home staff and residents to achieve the best outcomes from medicines.

The programme was aligned to the Framework for Enhanced Health in Care Homes, which was co-produced by the care home vanguards. Medicines optimisation and optimisation when integrated within this framework has been shown to:

- improve the quality of care through better medicines use
- reduce the risk of harm from medicines through medicines optimisation and safer medicines systems and staff training

- release resources through medicines optimisation and waste reduction (estimated by the vanguards to £223 per resident per year), reduction in hospital admissions and release of care home nurse time.<sup>83</sup>

Each ICS that participated in the MOCH programme had a lead CCG. CCG MO teams have facilitated the MOCH programme at ICS level, supported the evaluation of the programme and supported the transition of the MOCH pharmacy staff to PCN clinical pharmacy roles.

## Information and queries

### Prescribers

All prescribers can email their CCG MO team with queries regarding the local commissioning position of medicines. This service provides support for GP practices regarding a range of queries ranging from relatively simple to complex. The MO team offer professional clinical advice regarding what a prescriber should consider before prescribing a drug, in line with General Medical Council (GMC) guidance or other professional body guidance. Considerations will include clinical effectiveness, cost-effectiveness, side effect profile, monitoring requirements, competency to prescribe and the current commissioning position.

If a prescriber has a specific patient-related medicines information query, these emails can be forwarded to the local Regional Drug and Therapeutics Medicines Information Centre.<sup>84</sup>

This service supports prescribers to ensure their prescribing is appropriate, safe, high quality and cost-effective.

### Patients, carers and public

CCG MO teams regularly provide support to the CCG patient relations team regarding queries, comments and complaints

regarding medicines commissioning positions. This often involves explaining the rationale regarding how the CCG concluded on a commissioning position for specific medication but also includes investigating anomalies in processes within the healthcare system that may be preventing patients from receiving medication in a timely manner. CCG MO teams also receive and respond to queries from local MPs and freedom of information requests.

## Shortages and supply

At times there are local or national medicines supply issues and dispensing contractors are unable to acquire specific medicines. MO teams provide advice regarding suitable alternatives when a medicine is not available, advice of the expected duration of the supply issue and liaise with the CCG regarding any financial impact of the medicine shortage if material.

# Viewpoint

Medicines are the most widely used intervention in health and hence medicines optimisation – getting the right medicine to the right person at the right time – is key to optimising the health of our population.

Medicines optimisation has a significant role in supporting CCGs' commitment to ensuring the services we commission are both safe and effective in meeting the needs of patients and providing a good patient experience. They contribute to delivering and improving the health, safety and wellbeing of patients and the public. Professionalism and safe and effective practice are central to that role.

They are involved in a wide range of workstreams. This document details the majority, but they are ever-expanding and evolving. All this work has the person at the centre, whether that be a service user or a patient. CCG MO team workstreams also aim to support partners and providers to deliver medicines optimisation in a way that is high quality, efficient, safe, well-led, timely and responsive, effective and equitable.

While they might have accrued considerable insight into many of the professions and disciplines which contribute to an effective health and social care system, the pharmacists and pharmacy technicians who make up CCG MO teams are, first and foremost, professional experts in medicines. Therefore, it is ever more important that medicines optimisation becomes everybody's business, not just something for the pharmacy profession to do.

To this end, CCG medicines optimisation teams collaborate with other healthcare professionals to gain their input and expertise on medicines optimisation. This collective multidisciplinary approach to medicines optimisation is needed to ensure we get the best possible outcomes for our patients from the huge investment of professional and financial resource into the prescribing and use of medicines, and any other product that is prescribed.

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