

# Optimising medicines use, value and funding

Dr Keith Ridge, Chief Pharmaceutical Officer

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# Medicines are an important part of NHS care and help many people to get well



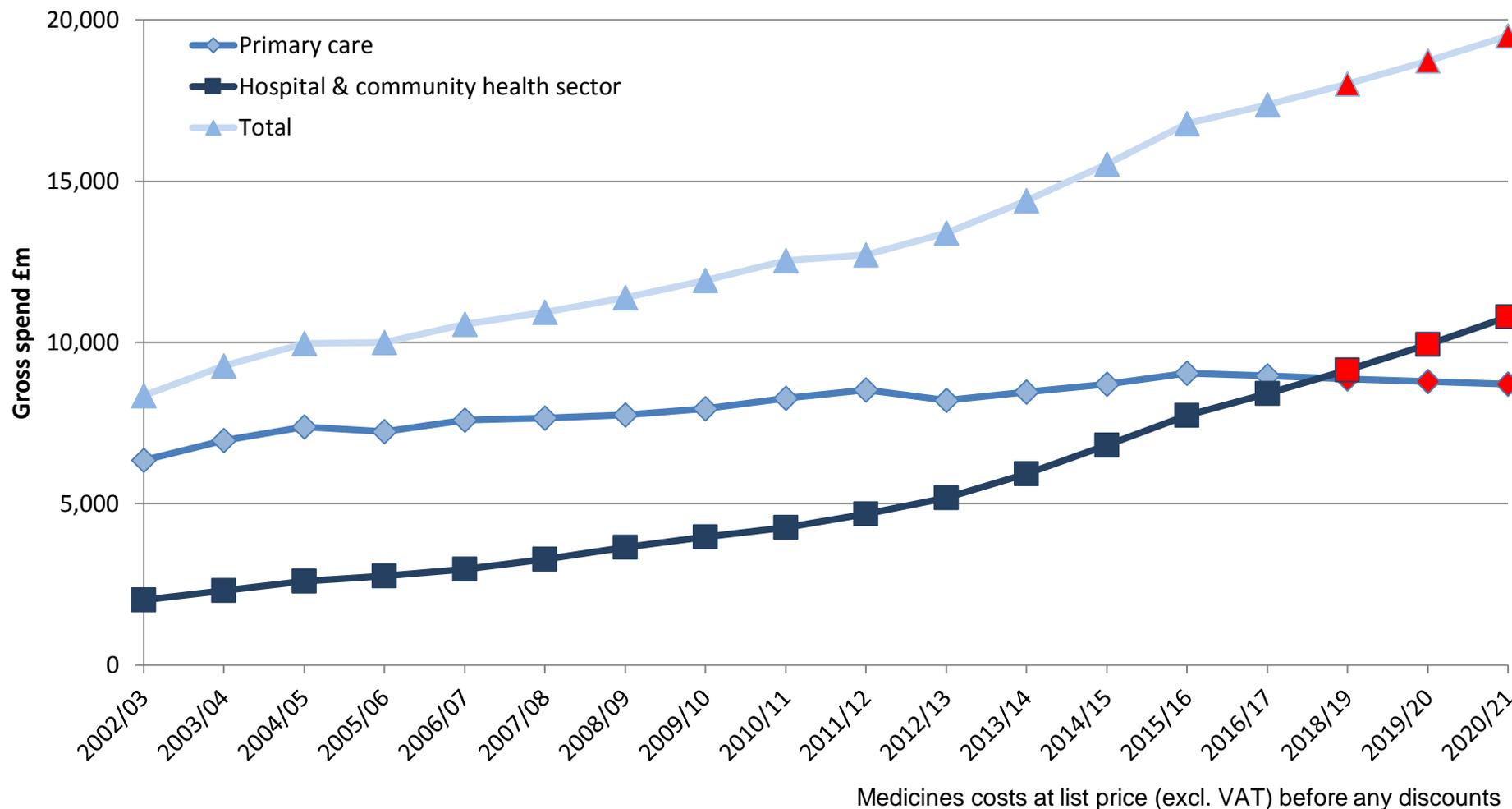
However, quality, safety and increasing costs continue to be issues...

- Around 5-8% of hospital admissions are medicines related, many preventable
- Bacteria are becoming resistant to antibiotics through overuse which is a global issue
- Up to 50% of patients don't take their medicines as intended, meaning their health is affected
- Use of multiple medicines is increasing – over 1 million people now take 8 or more medicines a day, many of whom are older people

**We spend £17.4 billion a year on medicines (£1 in every £7 that the NHS spends) and they are a major part of the UK economy**

# There is growing pressure on the NHS drugs bill

Due to people living longer, more complex and innovative medicines being developed, and more specialist medicines being used



- Overall medicines spend 2016/17 was £17.4bn, an increase of 33.7% from £13bn in 2010/11
- Cost of medicines prescribed and dispensed in primary care rose from £8.6bn in 2010/11 to £9.0bn in 2016/17, a rise of 3.6%
- Cost of medicines used in hospitals increased from £4.2bn in 2010/11 to £8.3bn in 2016/17, a rise of 98.3%

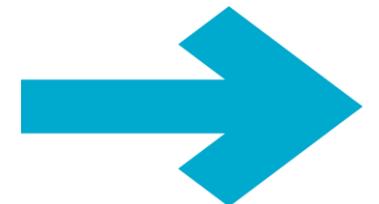
# How to get maximum value from the spend on medicines

Value is... measurable improvement in patient outcomes while maintaining an affordable medicines bill

Making sure **patients get access to and choice of** the most effective treatments, and the outcomes that matter to them

**Improving the quality** (safety, clinical effectiveness, patient experience) **of prescribing and medicines use**

Making how we **purchase and supply medicines more efficient**, while ensuring the NHS retains its position at a world-leader in medicines



# The Medicines Value Programme has been set up to respond to these challenges

Following the Next Steps on the NHS Five Year Forward View and Carter Report

## The NHS wants to help people to get the best results from their medicines – while achieving best value for the taxpayer

Savings will be reinvested in improving patient care and providing new treatments to grow the NHS for the future

### A whole system approach....

- NHS England, NHS Improvement, NHS Digital, Health Education England
- Regional offices link with STPs, ACSs, CCGs, and providers
- Nationally coordinated with AHSNs, Getting It Right First Time, NHS Right Care and NHSCC

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The NHS policy framework that governs access to and pricing of medicines

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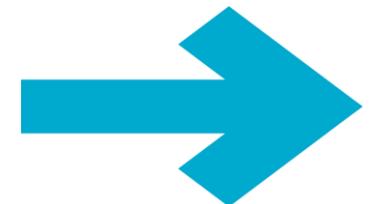
Optimising the use of medicines

2

The commercial arrangements that influence price

4

Developing the infrastructure to support an efficient supply chain

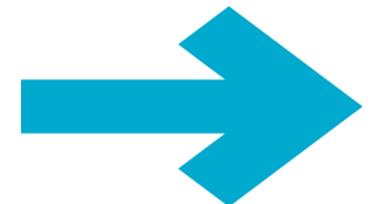


# Four levers to obtain value:

## 1. The NHS policy framework that governs access to and pricing of medicines

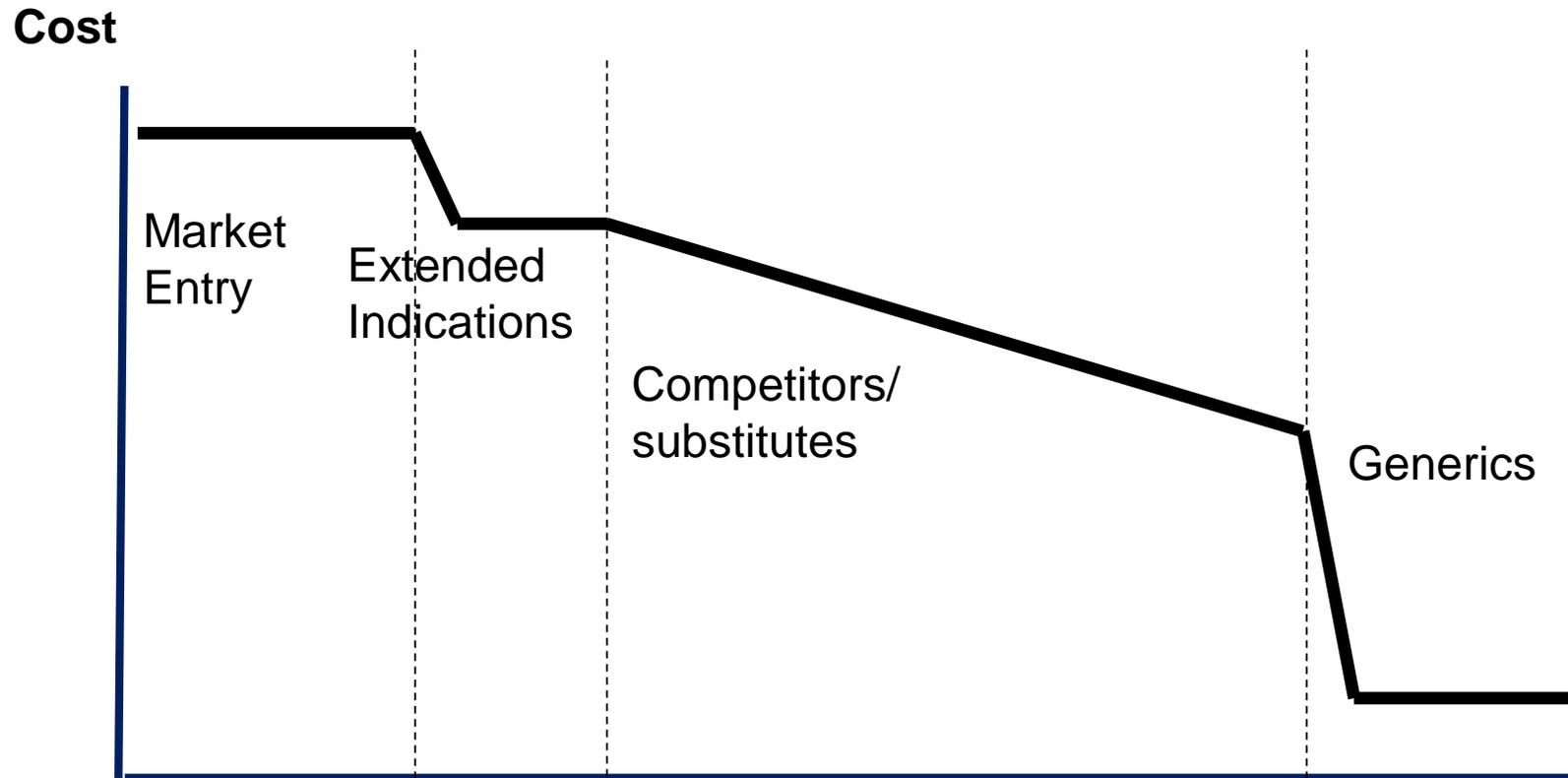
**Working closely with the DH, OLS, NICE and MHRA, this workstream aims to:**

- Ensure that patients have fair and equitable access to medicines, within the NHS' fixed budget
- Support use of a clear approach for assessing clinical- and cost-effectiveness of products/medicines used in the NHS
- Develop an overarching pricing and reimbursement framework which helps the NHS to manage the affordability challenge of introducing new medicines, while also supporting innovation



## 2. The commercial arrangements that influence price

### The 'value cycle' of medicines:



### This workstream aims to:

- Maximise value for the NHS at each stage in the 'value cycle'
- Use national buying power to negotiate and procure the best possible deals
- Tackle irresponsible pricing from some pharmaceutical companies

### It will focus on:

- Building commercial capability
- Improving the planning for what is coming next
- Aligning processes with NICE
- Innovative deals for the most transformative products
- Continuing to drive best value from medicines spend
- Creating new partnerships with industry, and a 'single front door'

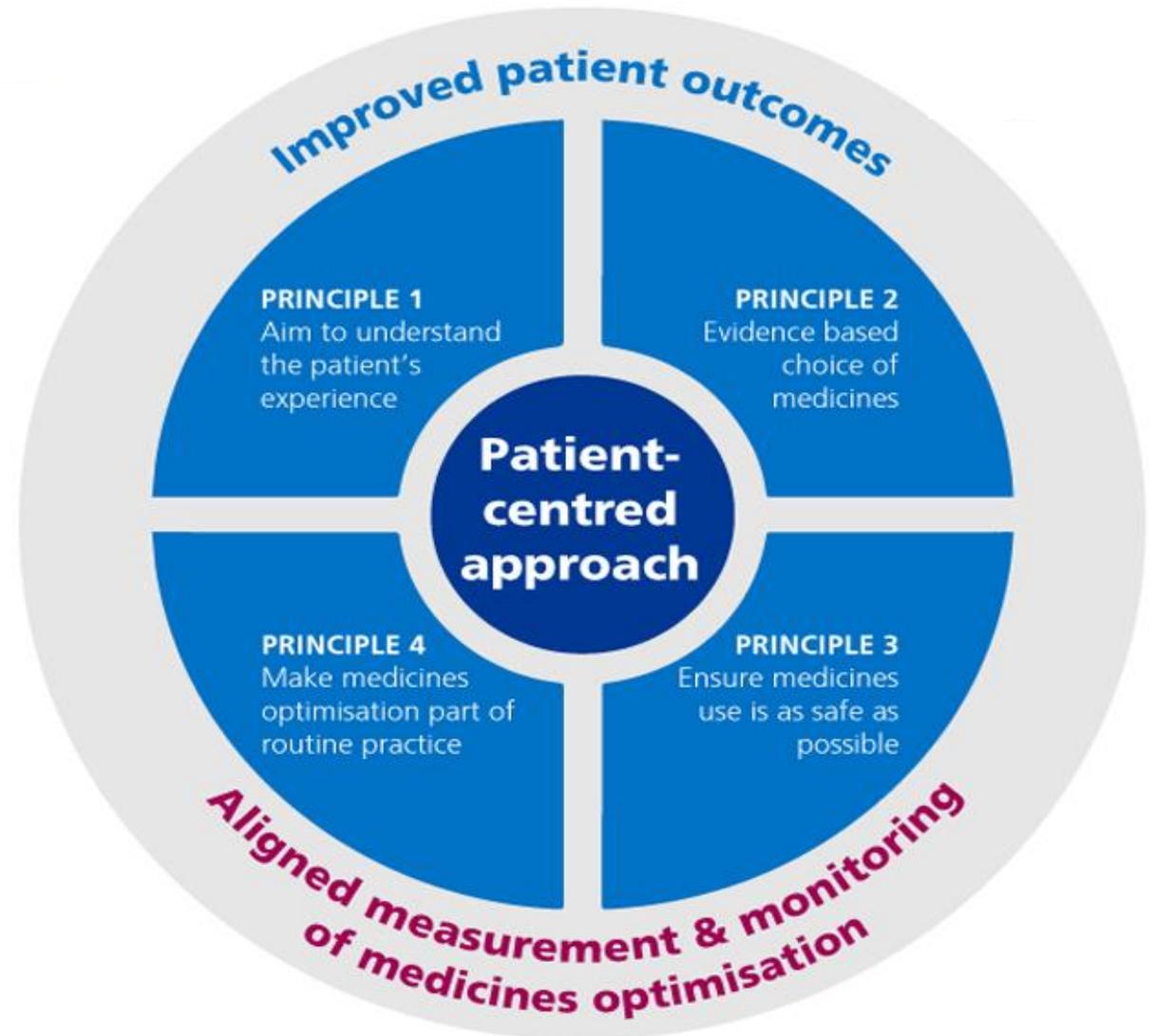
# 3. Optimising the use of medicines

## This workstream aims to:

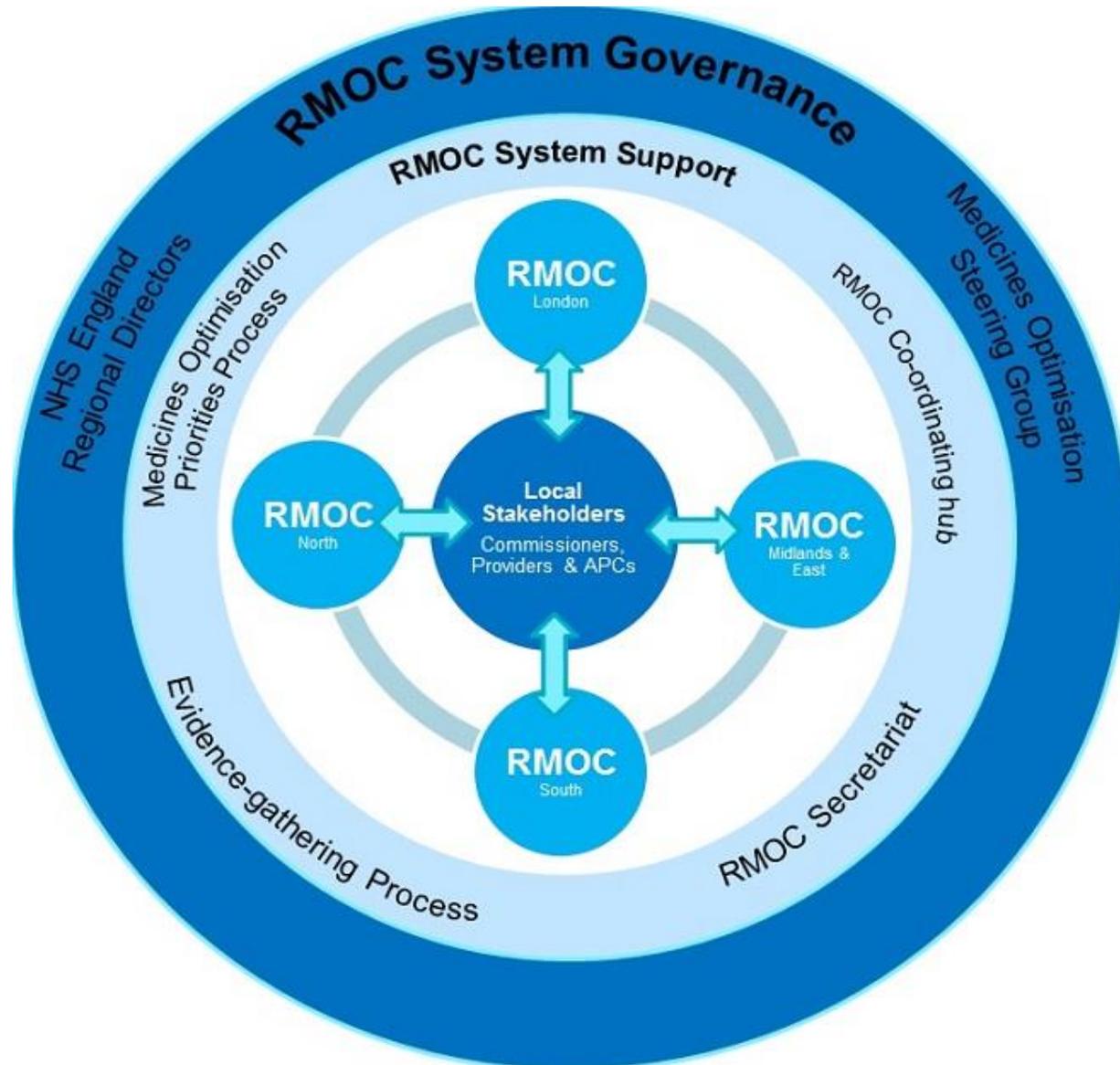
- Make sure the NHS commissions the right products for patients
- Improve prescribing and dispensing practice
- Support patients to take their medicines as intended and to promote self care

## It will focus on:

- Improving patient safety
- Switching to the best value biological medicines (including biosimilars) and generic medicines
- Dose-banding – starting with chemotherapy
- Reducing waste
- Reducing polypharmacy – especially in care homes
- Reducing the use of clinically- or cost-ineffective drugs
- Reducing the prescription of over-the-counter medicines
- Reducing anti-microbial resistance



# Regional Medicines Optimisation Committees

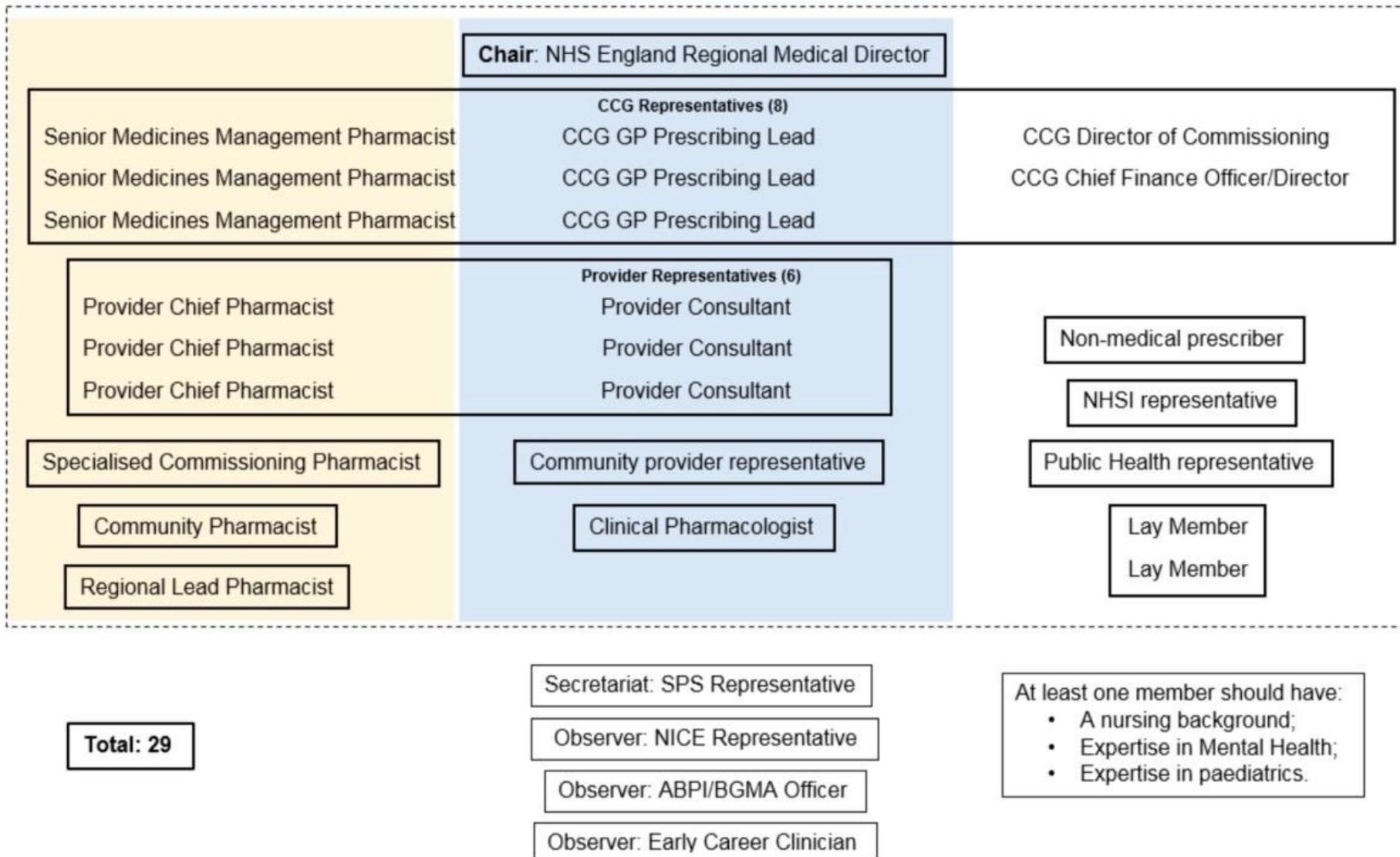


4 RMOCs set up to lead, chaired by regional medical directors

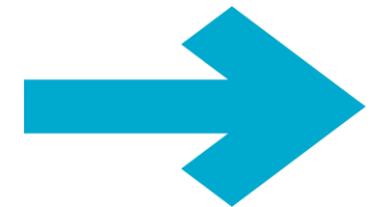
## Purpose and scope:

- Monitor and support implementation of national advice and guidance
- Provide and disseminate resources to support and accelerate implementation
- Consider the implications of new ways of working and technological innovations
- Provide consistent advice on medicines optimisation
- Reduce duplication
- Horizon scan to identify challenges / issues to benefit from a system-wide approach
- Supported by the Specialist Pharmacy Service: [www.sps.nhs.uk](http://www.sps.nhs.uk)

# RMOC membership



- Each RMOC is supported by an NHSE/NHSI Regional Pharmacy Lead
- Aligned to 4 HEE Regional Pharmacy Deans
- Linking into CCG Area Prescribing Committees and Trust Drug and Therapeutics Committees

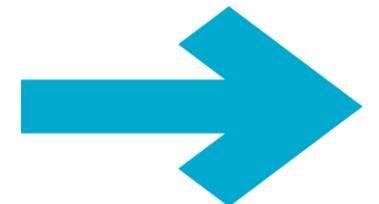


# Raising the bar on quality and safety

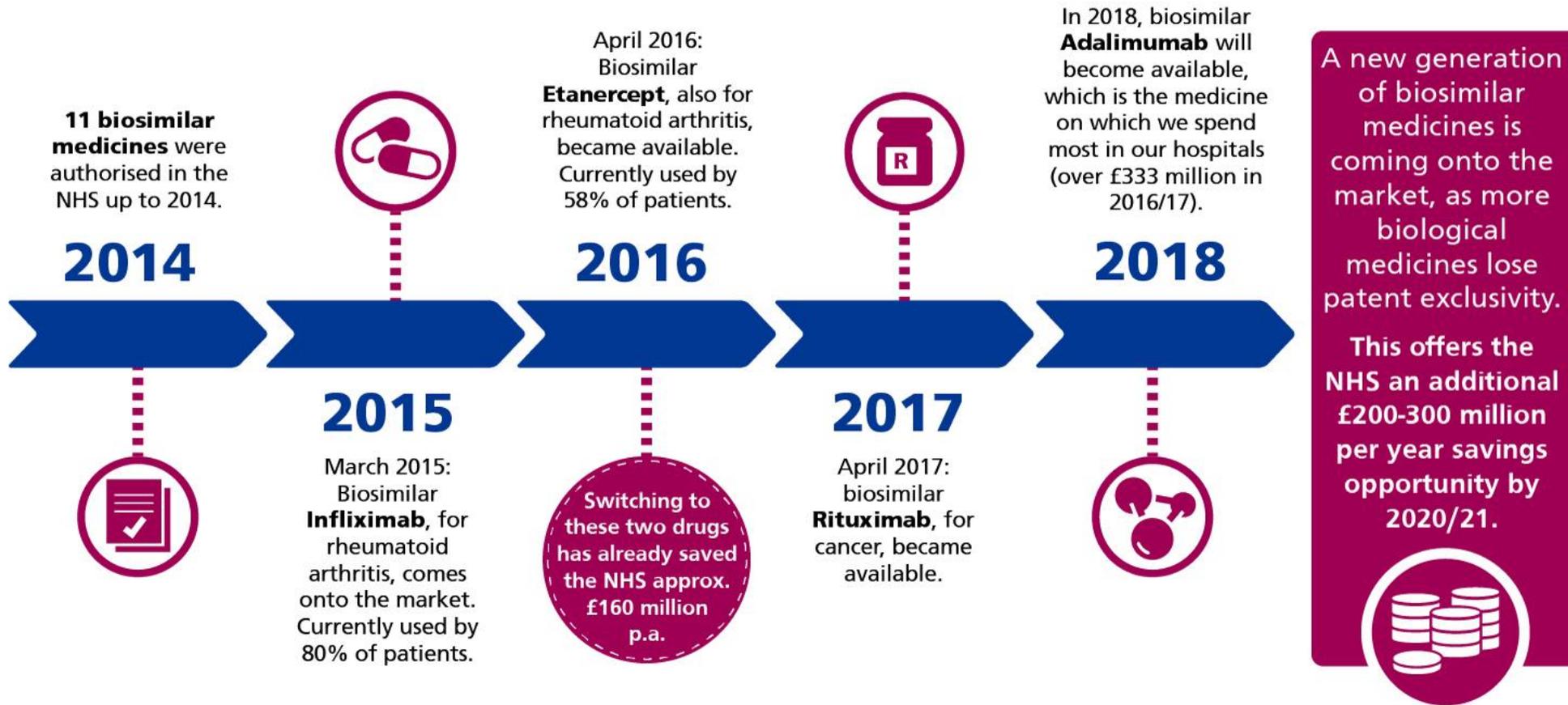
**New Department of Health initiative launched in September 2017, focused on reducing prescribing and medication errors to create a more safety-centred culture around medicines:**

- Medication error is “a leading cause of injury and avoidable harm in healthcare systems across the world” (World Health Organisation)
- The impact on patients can be significant -- between 5 and 8 per cent of hospital admissions are medicines-related, amounting to four per cent of total NHS acute bed capacity

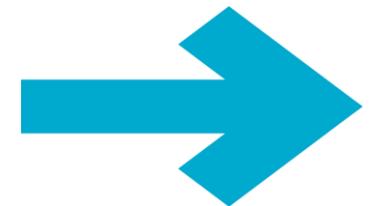
Initially developing an evidence base to understand the scale of the problem



# The importance of biosimilars



- Biosimilars are biological medicines, highly similar to another biological medicine already licensed for use
- To be licensed, a biosimilar must have no clinically meaningful differences from the originator medicine in terms of quality, safety and efficacy
- Where NICE has recommended the originator biological medicine, the same guidance will normally apply to a biosimilar

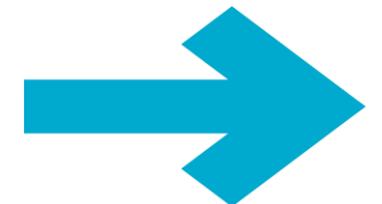
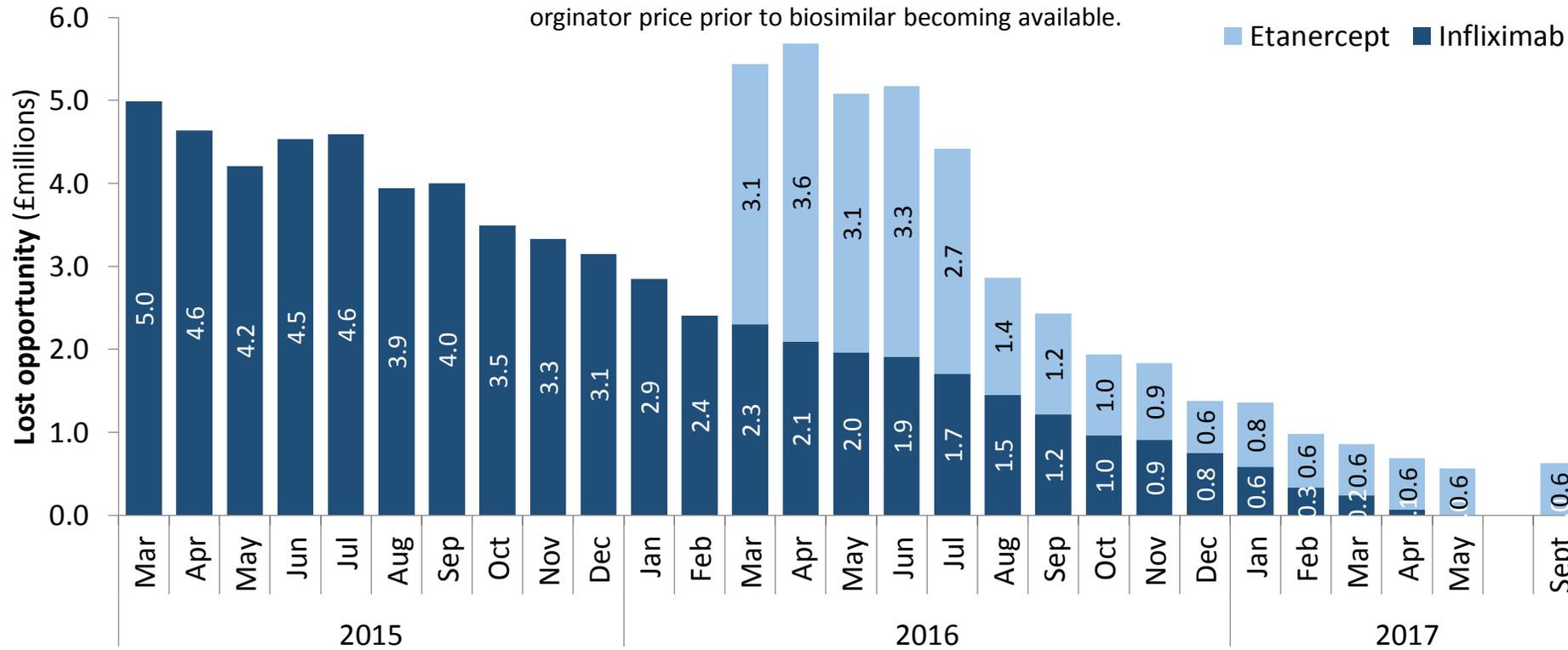


# Huge savings are possible

	Since biosimilar launch up to and including May 2017	2016/17	Sept 2017
<b>Infliximab</b>	£62.6m	£14.10m	£0
<b>Etanercept</b>	£24.2m	£19.8m	£0.6m

## Lost cost avoidance opportunity for Infliximab and Etanercept, nationally by month since launch

Lost opportunity = Difference in savings accrued by actual uptake of biosimilars each month and those that could have been made had uptake been 80% in each month. Savings are calculated comparing prevailing biosimilar price to the originator price prior to biosimilar becoming available.

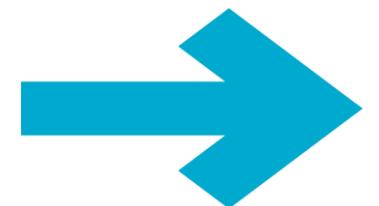
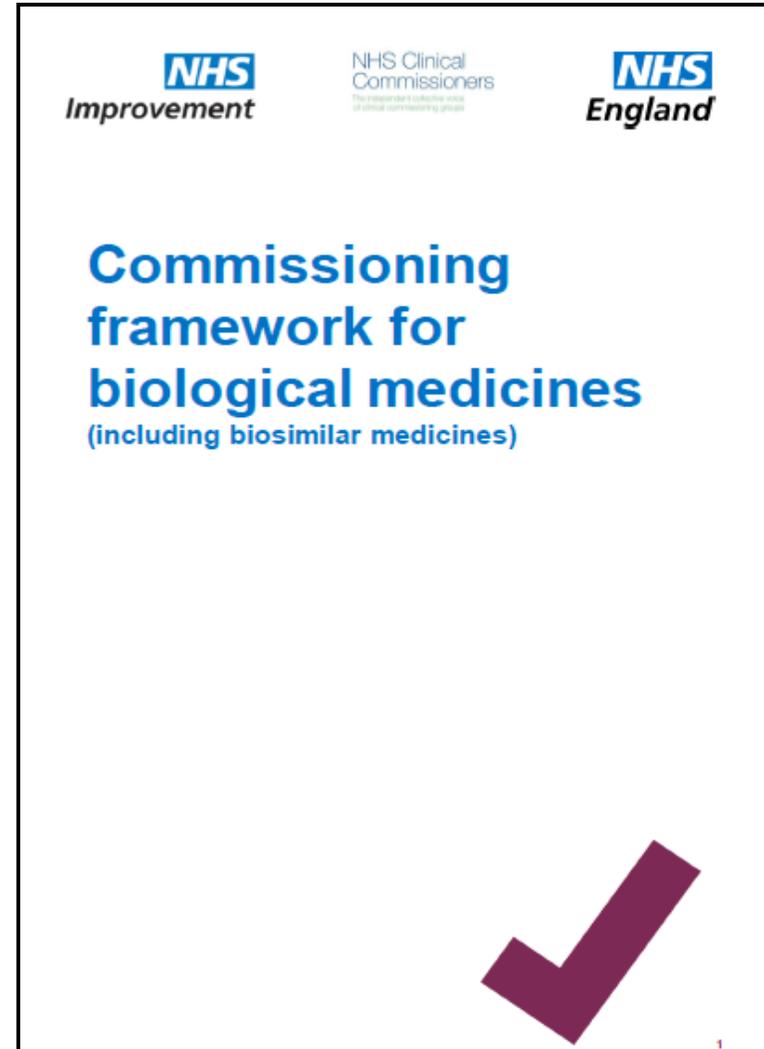


# Commissioning Framework for Biological Medicines

Published September 2017

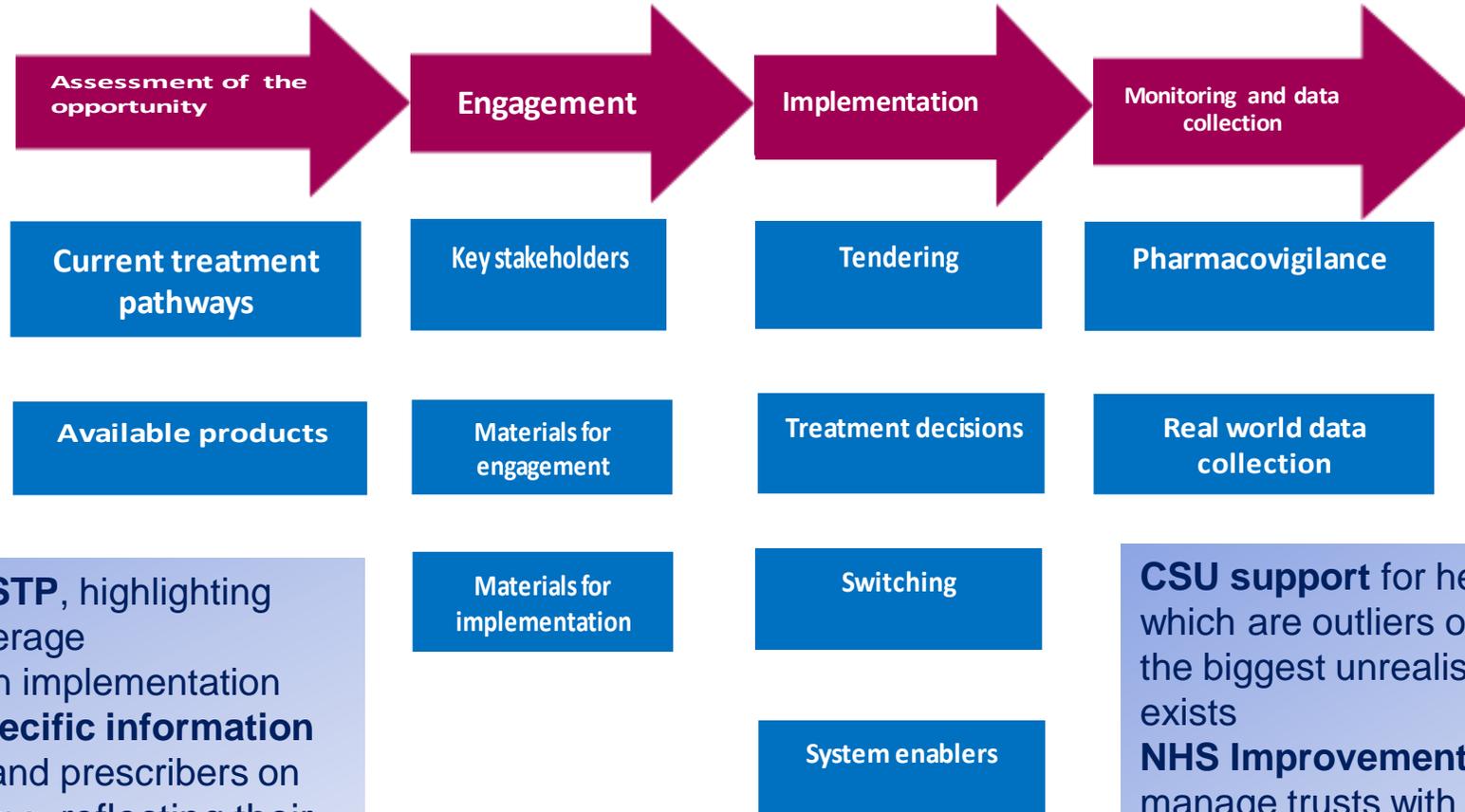
**In partnership with industry, patients, clinicians, NICE and regulators**

- To support commissioners to make the most of the opportunity presented by increased competition in biological medicines, including biosimilar medicines
- Sets out actions for patients, prescribing clinicians, care providers and commissioners to realise the therapeutic and economic opportunities of biological and biosimilar medicines
- In particular, seeks to set out the importance of a collaborative approach



# What can commissioners do and what support is available?

NHS England and NHS Improvement are working alongside RMOCs to **support the development of plans** to achieve our ambition...

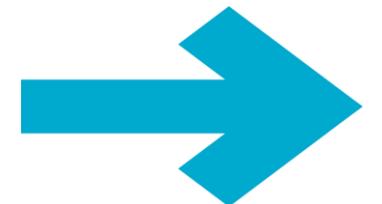


**Data packs by CCG/STP**, highlighting variation from best/average  
**Regional webinars** on implementation  
**RMOCs providing specific information and advice** to CCGs and prescribers on each biological medicine, reflecting their unique use

**CSU support** for health economies which are outliers or those where the biggest unrealised opportunity exists  
**NHS Improvement** to performance manage trusts with regard to uptake of biosimilars, reporting monthly through the Model Hospital

# Biosimilars case study: University Hospital **Southampton NHS FT**

- Gathering information from patients, as well as clinical results before and after the switch
  - Robust data collection allowed the team to monitor any changes and also provided a longitudinal dataset
- 
- Clinicians at Southampton identified a potential cost-saving opportunity with the introduction of Infliximab biosimilars
  - The consultant clinical lead for the inflammatory bowel disease (IBD) service suggested a managed switching programme for the 150 IBD patients on Remicade and arranged an investment scheme agreement with the two local CCGs to support the switch
  - An extra IBD nurse specialist, additional administration support and additional pharmacy support were made available
  - At two infusions before the planned switch date, all patients were asked to complete a questionnaire covering patient-recorded outcome measures for IBD control, disease activity scoring and side effects
  - Drug trough levels and anti-drug antibodies were also measured before and after the switch to show any changes between the biological originator and biosimilar



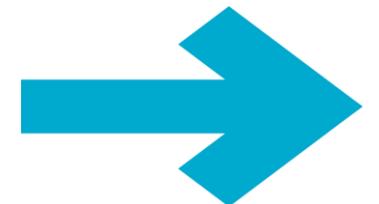
# Specialised commissioning: Medicines Optimisation CQUIN

**To support the faster uptake of best value medicines in specialised commissioning:**

- Aligns with Carter Review recommendation: Trusts should also seek to reduce their medicines bill through best choices and from actively monitoring market developments, such as the launch of biosimilar products

Trigger 1 targets:

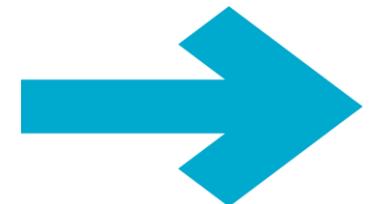
- Adoption of best value generic/biologic products in 90% new patients within one quarter of guidance being made available
- Adoption of best value generic/biologic products in 80% of applicable existing patients within one year of being made available (except if standard treatment course is < 6 months)



# Dose banding in chemotherapy – consistent safe care of patients and reduced waste

**Dose banding is a system where doses of intravenous cytotoxic drugs, calculated on an individualised basis, that are within defined ranges, or bands, are rounded up or down to predetermined standard doses**

- Joint work developed with the Chemotherapy Clinical Reference Group in Specialised Commissioning and Programme of Care Board, and aligned with the Carter Report
- Implementation via commissioners and providers
- Dose banding commissioning for quality and innovation goal (CQUIN): Implementation of nationally standardised doses of Systemic Anti-Cancer Therapy across England using the dose-banding principles and dosage tables published by NHS England



# Switching to generics

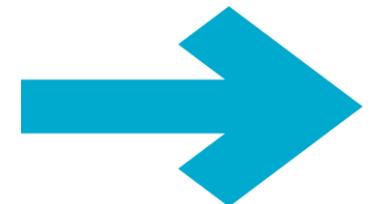
- NHS BSA has published a dashboard (via ePACT2) to help organisations realise and monitor savings from switching to generics
- They have established a list of 20 medicines that nationally represent the largest potential savings and are the least controversial switches
- Based on three months data, extrapolated to get an annual figure for 2017/18, there is around £18.25m of savings, assuming all patients are switched

## Potential generic savings in 2017/18 from top 20 medicines

*Source: NHS BSA ePACT2 Dashboard*

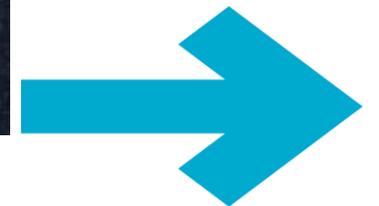
<b>Region</b>	<b>Potential Savings</b> <i>(£ms)</i>
London	£2.23
Midlands & East	£6.06
North	£5.23
South	£4.73
<b>National</b>	<b>£18.25</b>

Notes: Annual figure extrapolated from Q1 2017/18 potential savings. Savings based on all patients being switched from proprietary medicines to generic equivalents. Top 20 medicines identified as nationally having greatest potential to release additional resource.



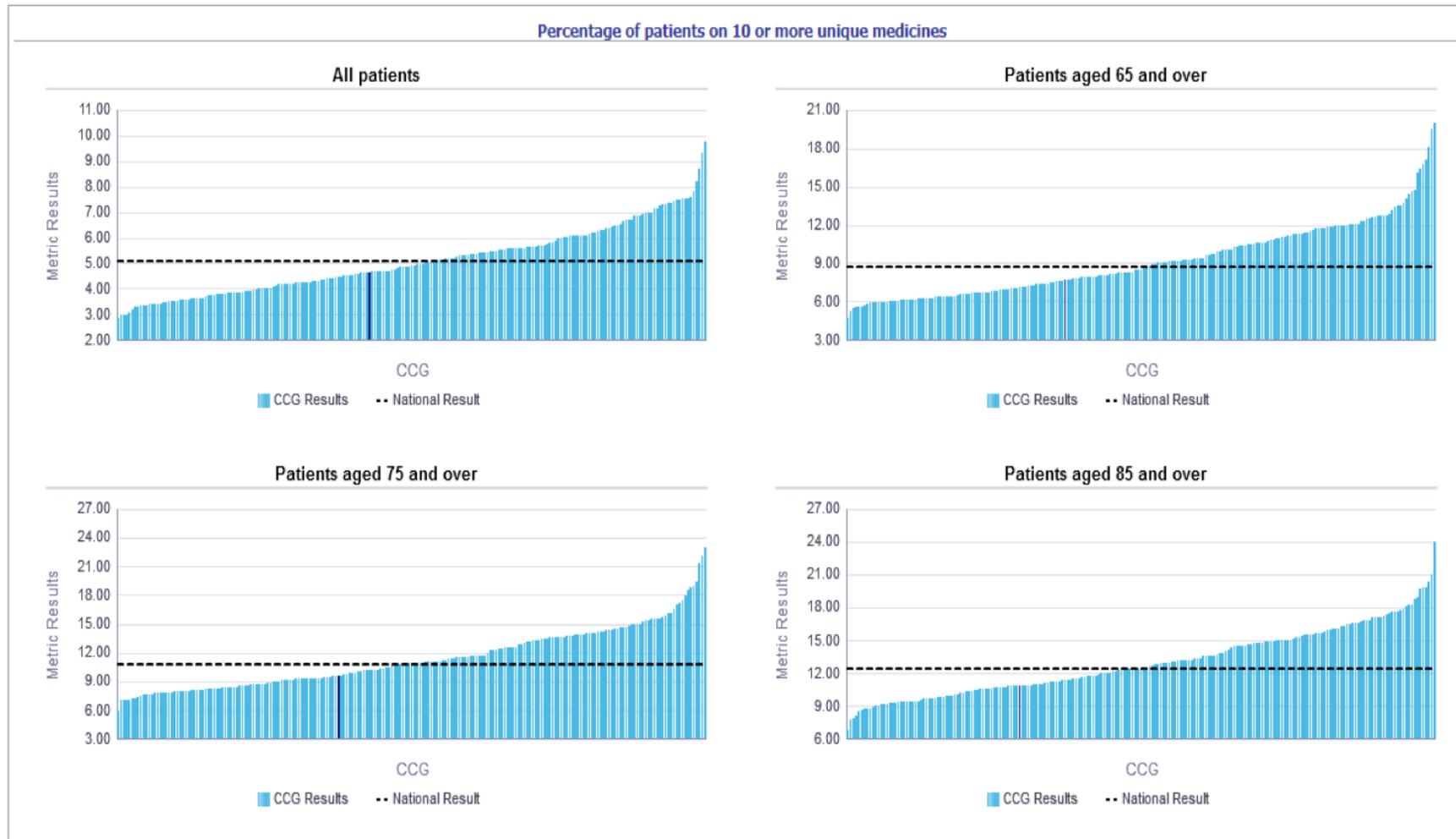
# Reducing medicines waste

- In 2016, 1.1bn prescription items were dispensed in the community in England. An average of 2.7m items a day
- The 2010 report Evaluation of the Scale, Causes and Costs of Waste Medicines, produced by York Health Economics Consortium and School of Pharmacy University of London, estimated the national figure of pharmaceutical waste to be £300m
- Much of this waste will be tackled through implementing the principles of medicines optimisation, particularly through the NHS RightCare programme, and through the deployment of pharmacists and pharmacy technicians in general practice and care homes, working with patients to review their medicines



# Polypharmacy

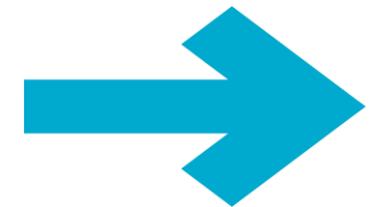
**‘Problematic polypharmacy’ is the prescribing of multiple medicines inappropriately, or where the intended benefit of the medicine is not realised**



- In 2016, 1,104.1m prescription items dispensed, increase of 46.8% on 2006
- Average no. of prescription items per head in 2016 was 20, compared to 14.8 in 2006
- De-prescribing medicines in a controlled way reduces the risk of medicines related complications and this requires clinical medicines reviews
- NHS England’s care home vanguards have reduced these risks and the NHS is rolling out the Enhanced Health in Care Homes Framework and developing a medicines optimisation in care homes scheme

# Polypharmacy case study: **NHS Ealing CCG**

## MDT - Argyle Care Home Service

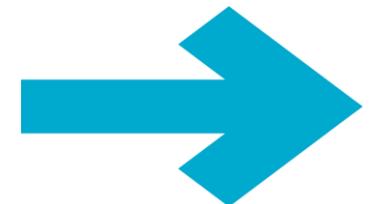


# Effective prescribing in primary care

- Co-proxamol
- Dosulepin
- Prolonged-release Doxazosin
- Immediate Release Fentanyl
- Glucosamine and Chondroitin
- Herbal Treatments
- Homeopathy
- Lidocaine Plasters
- Liothyronine
- Lutein and Antioxidants
- Omega-3 Fatty Acid Compounds
- Oxycodone and Naloxone Combination Product
- Paracetamol and Tramadol Combination Product
- Perindopril Arginine
- Rubefacients (excluding topical NSAIDs)
- Tadalafil (Once daily)
- Travel Vaccines
- Trimipramine

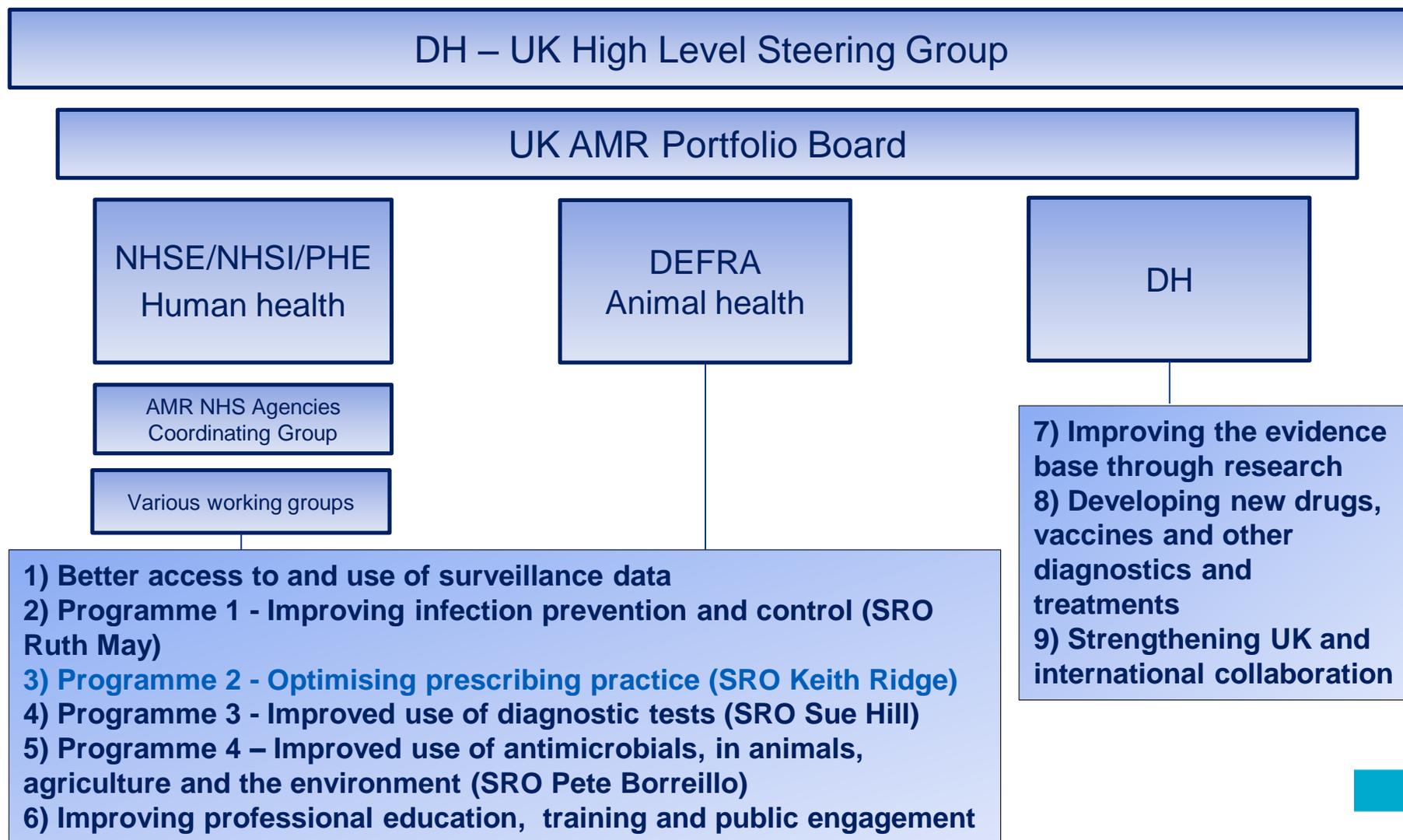
**Objective is to support CCGs to remove unwarranted variation, and to provide consistent national clinical commissioning advice to inform local decisions**

- Joint clinical working group set up in partnership with NHS Clinical Commissioners.
- Initial consultation on 18 medicines which should not be routinely prescribed in primary care – which have been proven to be ineffective or for which there are other equally effective but cheaper alternatives
- National public consultation July-Oct 2017
- Final guidance on 18 medicines published 30 November 2017 – plus recommendations to Department of Health to ban 7 of them
- Further public consultation on over-the-counter medicines for 34 minor, acute conditions planned for early 2018



# UK 5-year AMR Strategy 2013-18: Seven key areas for action

2016 target: 50% reduction in  
the number of inappropriate  
antibiotic prescriptions by 2020

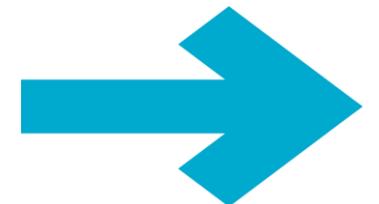
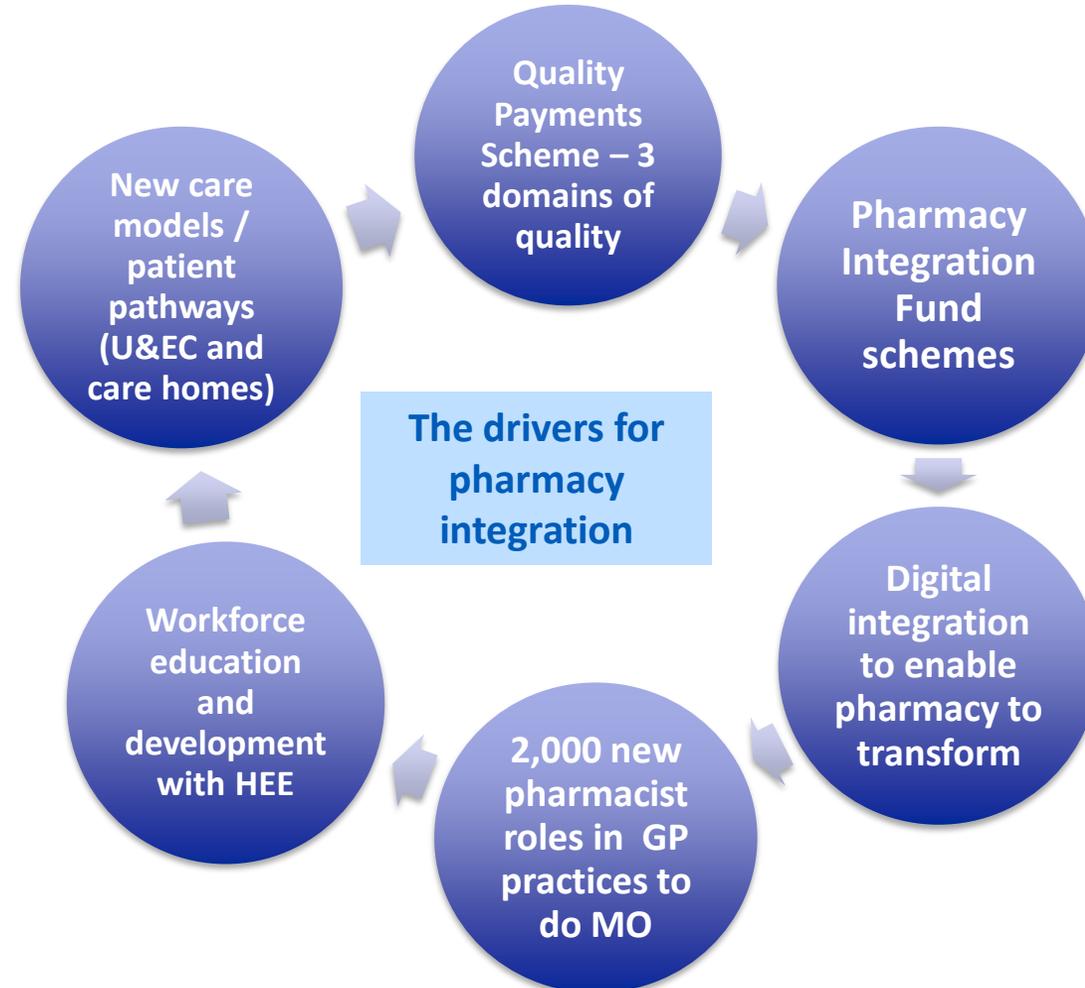


# Pharmacy integration to support medicines optimisation

To support system wide medicines optimisation, NHS England is enabling the transformation of pharmacy practice to improve the quality and efficiency of services for the public

Pharmacy Integration Fund set up to enable pharmacist and pharmacy technician integration in primary care as part of new multi-disciplinary healthcare teams, making the most of their clinical skills, particularly for the benefit of people with long-term conditions

Up to 5% of fund used to evaluate each project  
Evaluation looks at scalability and sustainability and informs future commissioning plans



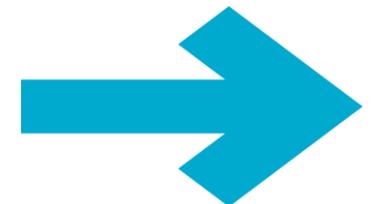
## 4. Developing the infrastructure to support an efficient supply chain

### **This workstream aims to:**

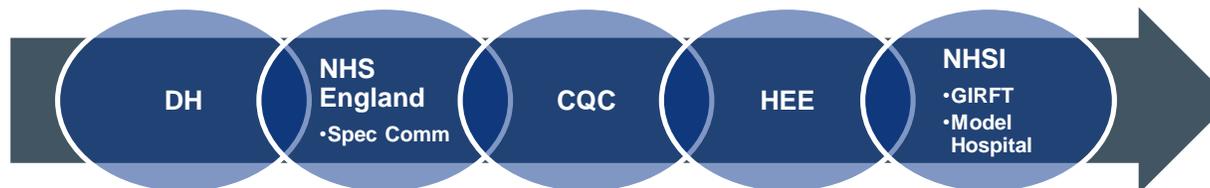
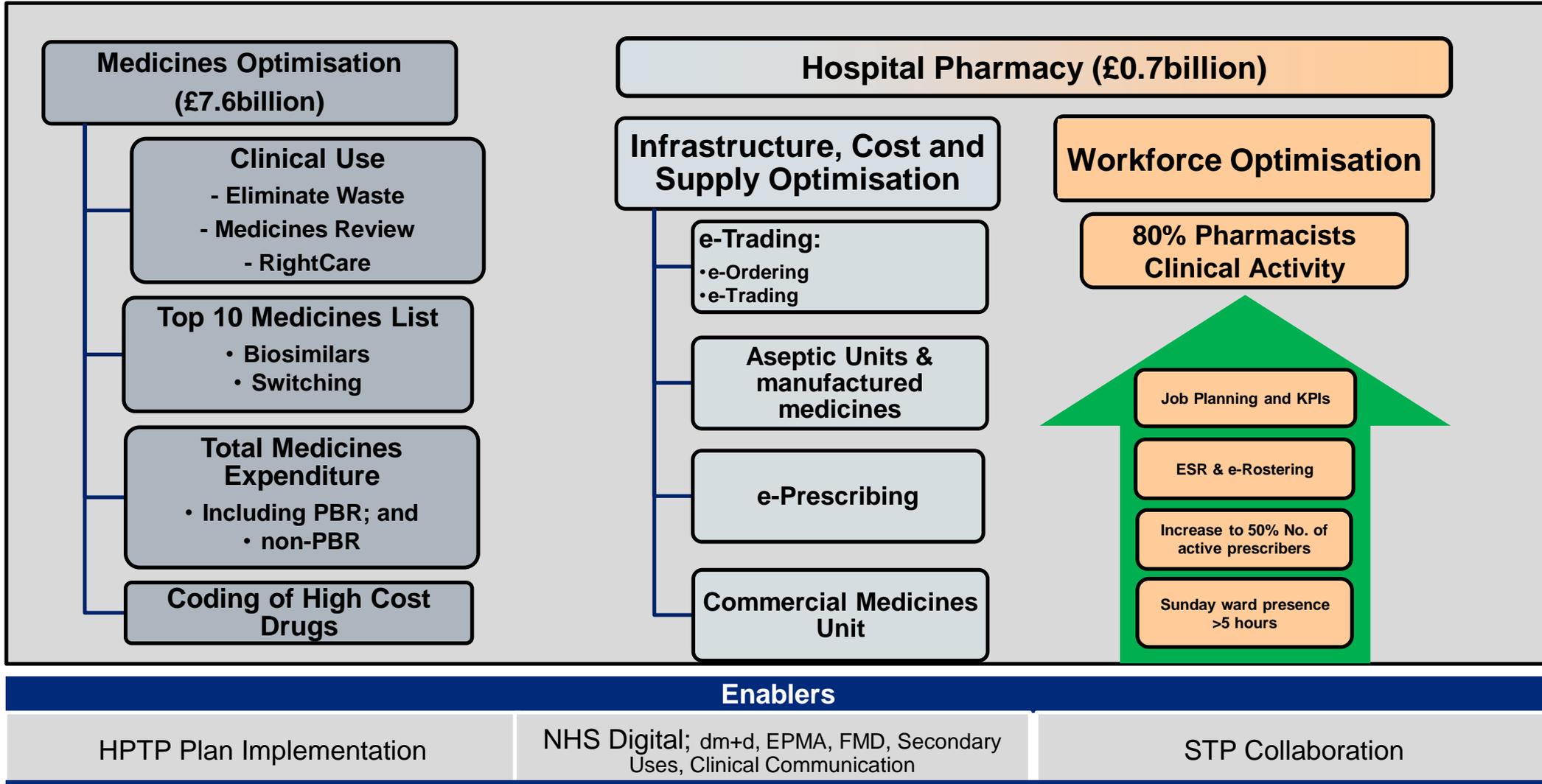
- Maximise value from medicines by putting the right infrastructure in place

### **It will focus on:**

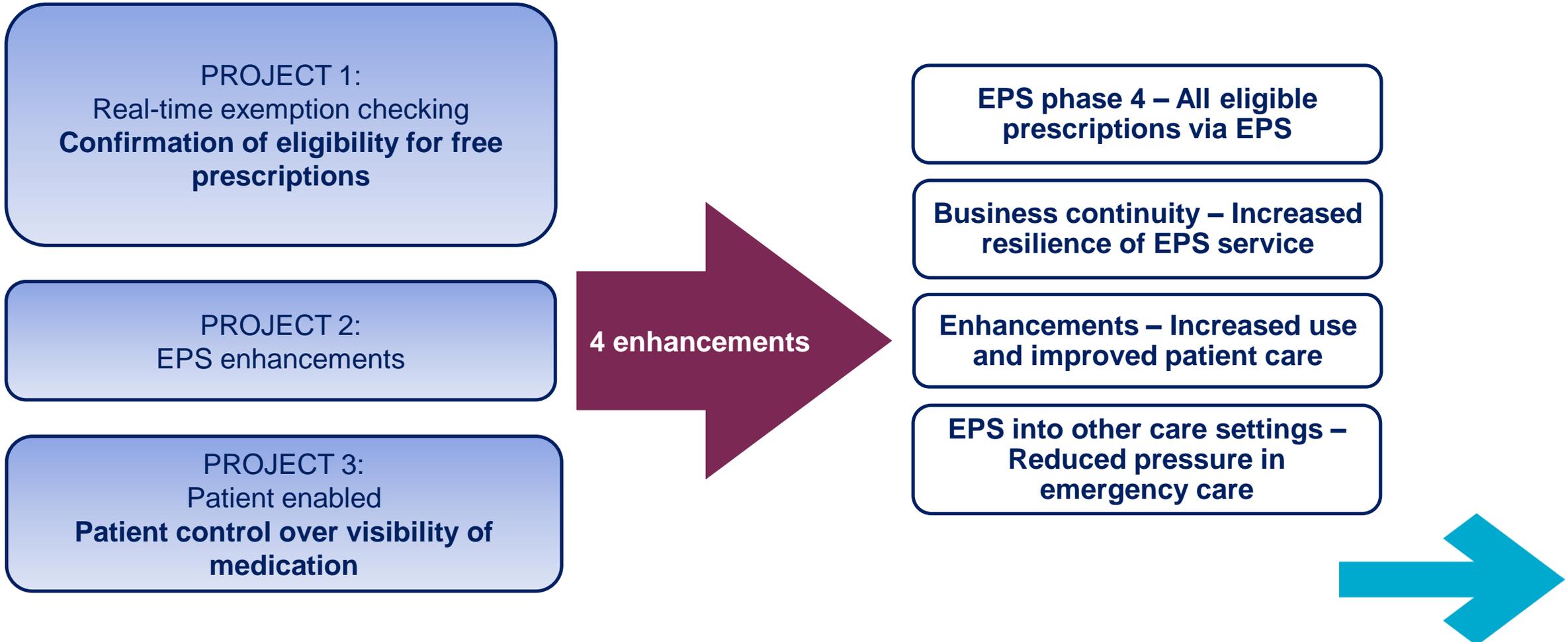
- Provision of the right data to those who need it
- Hospital pharmacy (networks/mutual support)
- Supply chain (from manufacturer to hospital/pharmacy to patient)
- Workforce development
- Domain E: Digital Medicines, led by NHS Digital



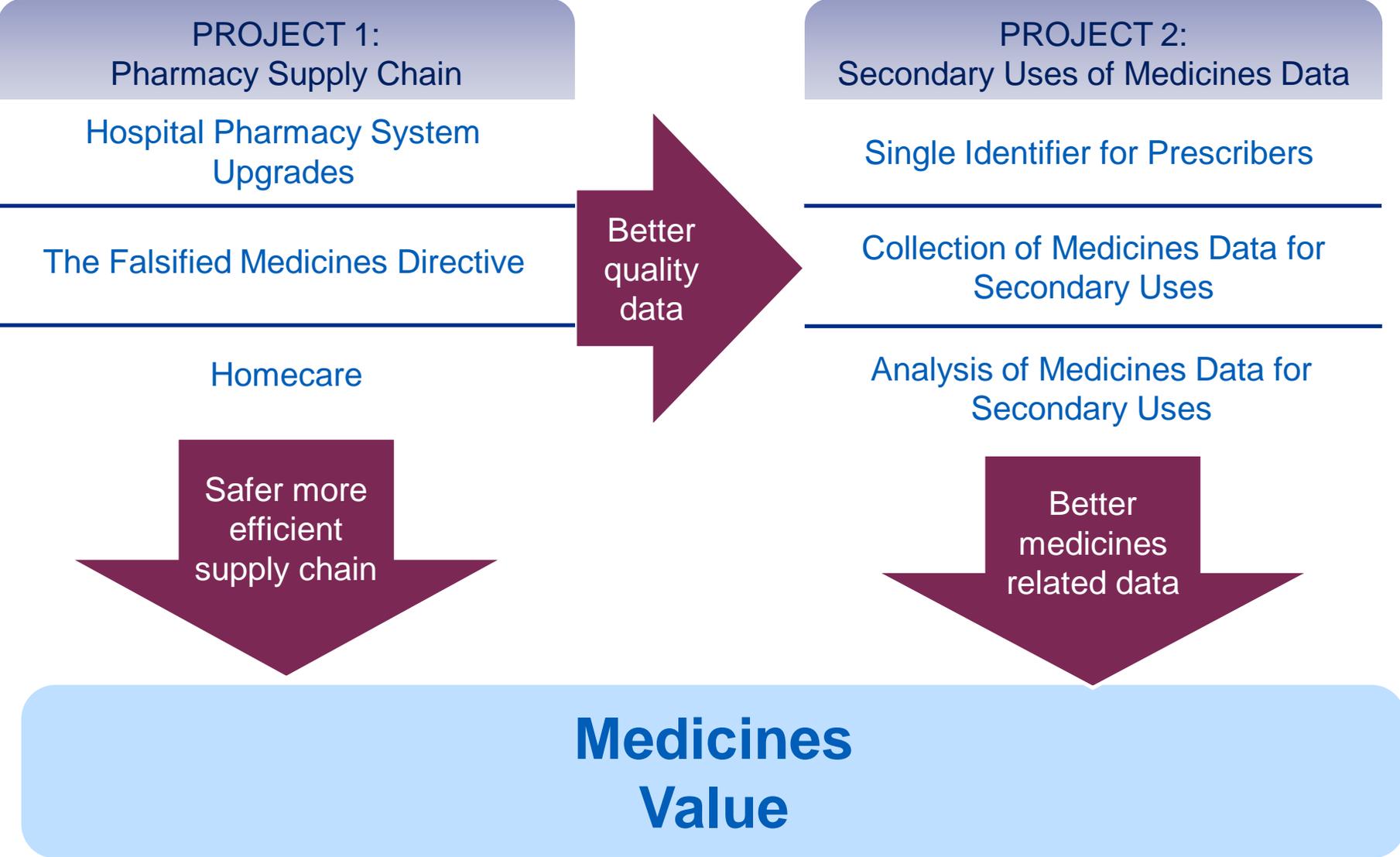
# Hospital pharmacy transformation



# Digital Medicines 1: Digitising community pharmacy and medicines



# Digital Medicines 2: Pharmacy supply chain and secondary uses



PROJECT 1:  
Pharmacy Supply Chain

Hospital Pharmacy System  
Upgrades

The Falsified Medicines Directive

Homecare

Safer more  
efficient  
supply chain

PROJECT 2:  
Secondary Uses of Medicines Data

Single Identifier for Prescribers

Collection of Medicines Data for  
Secondary Uses

Analysis of Medicines Data for  
Secondary Uses

Better  
medicines  
related data

Medicines  
Value



# Digital Medicines 3: Integrating pharmacy across care settings

Digital infrastructure upgraded and more data to improve patient safety, access and outcomes

**PROJECT 1:**  
Improving access to information

**NHSmail roll-out: 95% complete by Nov 2017 and Skype for Business pilots scheduled for 2018**

**SCR: One-click integration into dispensing/pharmacy systems and increased records with additional information viewable**

**PROJECT 2:**  
Integrating pharmacy with U&EC

**Single source of pharmacy services data to support current and future service provision**

**Prescription Tracker: Access for clinicians allowing re-direct of available prescriptions and visibility of medication details out of hours (Phase 2)**

**Community pharmacy integration with care pathways via NHS111 to increase % of calls referred as part of consult and complete model**

**PROJECT 3:**  
Transfer of information from pharmacy services

**Capture, transfer and contribute clinical information and activity data to support increased use of pharmacy services and future models of care**

**PROJECT 4:**  
Referrals to pharmacy services

**Capability for community pharmacies to receive appropriate referrals from secondary care following patient discharge**

