



TARGET

Keep Antibiotics Working

Reviewing antibiotic prescribing for patients with Acne and COPD exacerbations

TARGET Antibiotics Webinar
November 2023



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Introductions – TARGET and RCGP



Dr Donna Lecky



Emily Cooper



Catherine Hayes



Eirwen Sides



Julie Brooke



Liam Clayton



Joseph Besford



Camilla Stevenson



Dr Dharini Shanmugabavan



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Introductions – speakers and panellists



Shazia Patel
*Community Pharmacy
Clinical lead, Derbyshire ICB*



Alishah Lakha MPharmT
*Regional Pharmacy and
Medicines Project Manager,
NHS England*



Dr Elizabeth Beech MBE
*Regional Antimicrobial
Stewardship Lead, South
West, NHS England*



**Dr Julia Darko GP Registrar
and Former National Medical
Director Clinical Fellow**



Roxanne Mehmi
*Operations Manager/Clinical Pharmacy
Technician eQuality PCN*

Suprio Dhas
Senior Clinical Pharmacist eQuality PCN



Dr Naomi Fleming
*Regional Antimicrobial
Stewardship Lead, East of
England NHS England*



Topics to cover

Time	Talk	Speaker
6:40	Background and development of 'How to...' booklet resources	<i>Shazia Patel</i>
6:45	Acne worked examples and resource evaluation	<i>Alishah Lakha</i>
6:55	PrescQIPP Optimising antimicrobial duration dashboard	<i>Elizabeth Beech</i>
7:05	COPD how to resource and development of COPD-PET Pilot of COPD-PET in general practice	<i>Julia Darko</i> <i>Roxanne Mehmi and Suprio Dhas</i>
7:20	Q&A with panel	
7:30	Close	



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Introduction to TARGET 'How to...' resources for acne and COPD



Shazia Patel
*Community Pharmacy
Clinical lead, Derbyshire ICB*

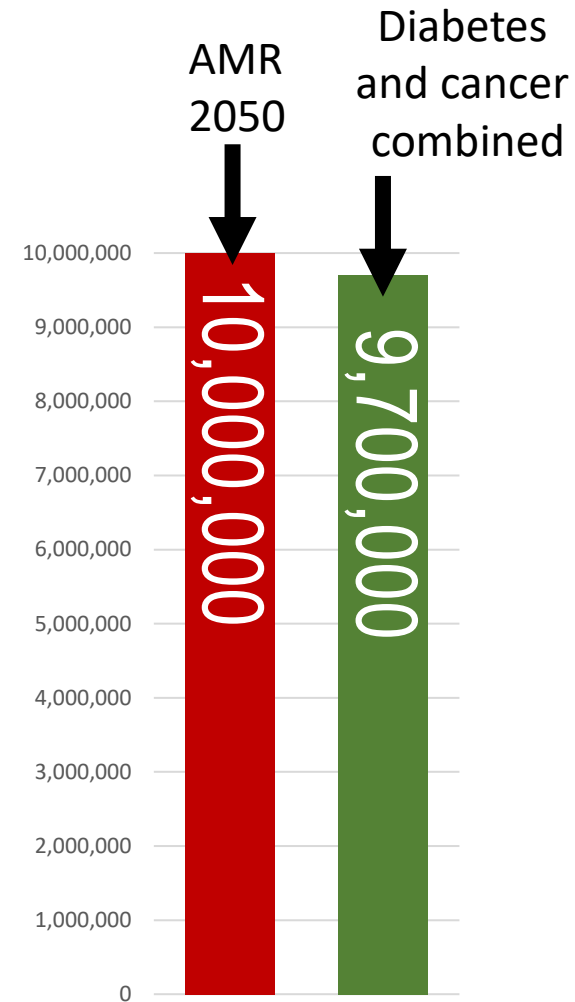
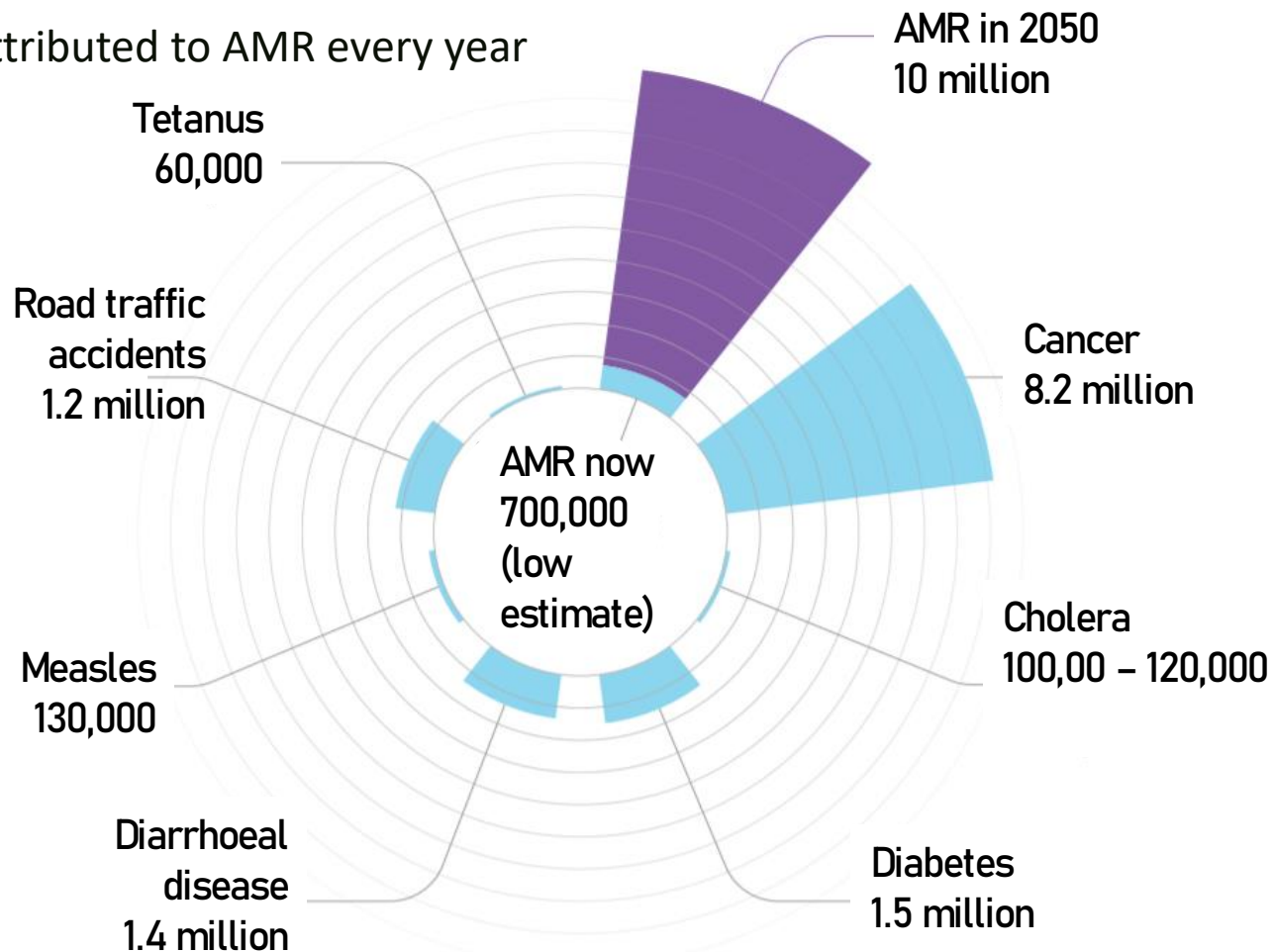


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Antimicrobial resistance a major issue

Deaths attributed to AMR every year



(O'Neill, 2016)

What prompted a focus on acne and COPD?

Acne and COPD exacerbations are one of the most common indications for long-term and/or repeated antibiotic use

In 2022, doxycycline and lymecycline were the second and third most long-term/repeat prescribed antibiotics in primary care

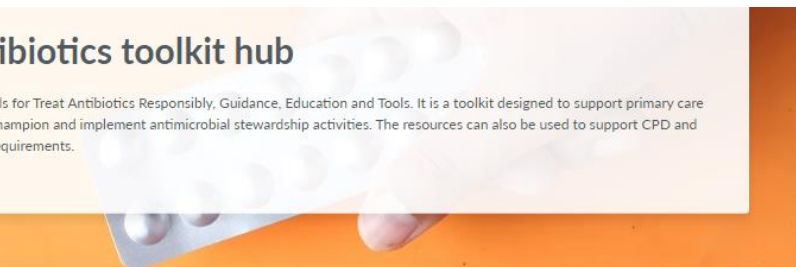
An audit of antibiotic prescribing for COPD during the COVID-19 pandemic across an English primary care network found that antibiotic prescribing was in line with the national and local guidelines in only 28.7% of cases

There is opportunity to target repeat prescribing as a priority for optimising antibiotic prescribing



Access the How To guides via TARGET toolkit

www.rcgp.org.uk/TARGETantibiotics



Grid of resource thumbnails:

- Discussing antibiotics with patients
- Urinary tract infection resource suite
- Leaflets to discuss with patients
- Antibiotic stewardship tools, audits and other resources (highlighted with a red border)

How to...? Resources (repeat and long term antibiotics)

The 'How to...?' series aims to support primary care teams to review the appropriateness of antimicrobials in the evidence-based treatment of Acne Vulgaris and Chronic obstructive pulmonary disease (COPD).

Use the how to resources to manage and review adults on long-term and repeated antibiotics for the treatment and prevention of Acne Vulgaris. The acne resource can also be used for children over the age of 12.

- [How to... ? resource for Acne Vulgaris V1.1 \(PDF file, 362 KB\)](#)
- [How to... ? resource for COPD V1.1 \(PDF file, 402 KB\)](#)



The TARGET acne 'How to...' worked examples are a resource designed to be used with the TARGET acne 'How to...' toolkit for the review of patients with acne in primary care.

- [How to... ? worked examples for Acne Vulgaris V1 \(PPT\)](#)



You can access the search strategy guides and documents for EMIS, SystemOne and Vision, as outlined in the How to guides by downloading the instruction guides.

Development of the acne and COPD “How to” resources



Time constraints of consultations in practice makes it difficult to provide a targeted review



Need for structured approach to medication review with relevant treatment guidelines, patient facing material, self-care and digital apps



Role play of ‘typical consultation’ with production of the resource

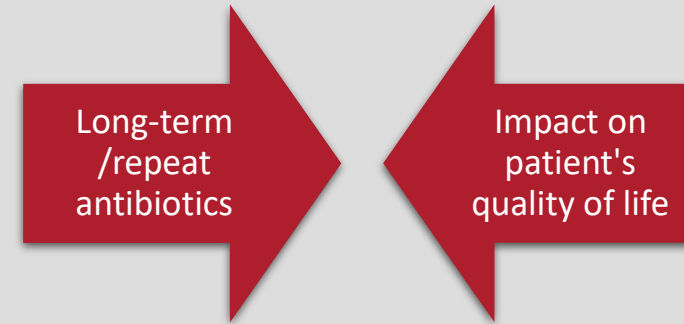


Sent to stakeholders from all regions including antimicrobial leads and comments included in final versions

Shared decision making



Personalised treatment



Safety

- Is the patient experiencing any side effects from their long-term/repeated antibiotic?
- Do the side effects outweigh the benefits?
- Is there any risk of harm due to co-morbidities?
- Is follow-up monitoring in place where applicable?

Effectiveness

- What is the antibiotic indication?
- Is the indication recorded in the patient's notes?
- Is the antibiotic appropriate?
- Is the antibiotic still indicated?
- Is the antibiotic working?
- Does the patient still take it or want it?
- Are long-term conditions well controlled?
- Should anything be changed?



TARGET 'How to...' acne worked examples and resource evaluation



Alishah Lakha MPharmT
*Regional Pharmacy and
Medicines Project Manager,
NHS England*

Why should you review patients on repeat and long term antibiotics for acne?

1

Research has highlighted growing concerns of antibiotic resistance in treatment of acne and prescribing patterns suggest an overuse of antibiotics in patients

2

44.5% of people with a new acne diagnosis received a prescription for long-term antibiotics

3

Conversations with patients about withdrawing acne antibiotic treatment have been deemed difficult and sensitive

“How to...” review - worked examples ?

The three worked examples can be used for your own learning or to deliver to your team and will cover how to review and manage patients with acne that;

- Are currently on antibiotic treatment
- Require referral
- Have dark skin and hyperpigmentation/acne scarring
- Require stepping down of treatment



Scenario 1


Review outcome: change of treatment

Consider the following details:

- 18-year-old female non pregnant
- Indication - Acne Vulgaris
- Lymecycline 408mg daily for 12 weeks
- No topical treatment has been issued

On examination

- Moderate to severe acne

Scenario 2


Review outcome: specialist referral

Consider the following details:

- 21-year-old female – non pregnant
- Current Indication – Acne Vulgaris
- Completed 3 months course lymecycline and has been prescribed topical treatments

On examination

- Moderate acne
- Post inflammatory hyperpigmentation



Patient centred review

	Item to consider
Condition and consultation history	Establish history of patients' condition
	Patient baseline habits
	Are they under a specialist consultant
Treatment History	Treatment/Prescription history
	Side effects to treatment
	Compliance to treatment
	Patient's perception of their treatment
Patient Impact and preference	Explore impact acne has had on self-esteem or mental health
	What are the patient's preferences and expectations from treatment?

Step wise approach in managing patients

Each worked example will go through how to manage a patient with acne using a step-wise approach that incorporates treatment and referral, patient education, self-care advice and follow-up reviews.





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Evaluation of the “How to...” acne resources with pharmacy professionals

- In GP practice, acne resources led to increased capability, opportunity and motivation of staff

“Good use of advice for different types of skin colour”

“These are exactly the sort of resources required for pharmacy technicians to be able to carry out reviews”

“Very informative”

- In Community pharmacy, potential future roles have been identified in managing acne (reviewing long-term and repeat prescribing) alongside additional needs to undertake these roles (training, PGDs, renumeration)
- Use of How to... resources supports the UK’s 5-year National Action Plan to ‘*enhance the role of pharmacists in primary care to review the dose and duration of antimicrobial prescriptions (especially long-term or repeat ones) and work with prescribers to review those that are inappropriate through evidence-based, system-wide interventions*’ (HM Government, 2019).



Managing acne in community pharmacy via the Pathfinder programme

- NHS England Independent Prescribing (IP) in community pharmacy pathfinder programme
- From 2026, all newly qualified pharmacists will be IPs
- 2 pathfinder sites are undertaking acne review as a clinical model
- Opportunity to see how acne can be managed in a community pharmacy setting
- Future – joint working between GP and community pharmacy through a joint system wide approach



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PrescQIPP Optimising antimicrobial duration dashboard



Dr Elizabeth Beech MBE
Regional Antimicrobial Stewardship Lead, South West, NHS England



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HM Government

Tackling antimicrobial resistance 2019–2024

The UK's five-year national action plan

Published 24 January 2019

Optimising duration
of antimicrobial use
in primary care

3.1. Optimal use of antimicrobials in humans

Ambition 4:
Provide safe and
effective care to
patients



Ambition 8:
Demonstrate
appropriate use of
antimicrobials



MEASURING SUCCESS

Target: to reduce UK antimicrobial use in humans by 15% by 2024, including:

- a 25% reduction in antibiotic use in the community from the 2013 baseline;
- a 10% reduction in use of 'reserve' and 'watch' antibiotics in hospitals from the 2017 baseline





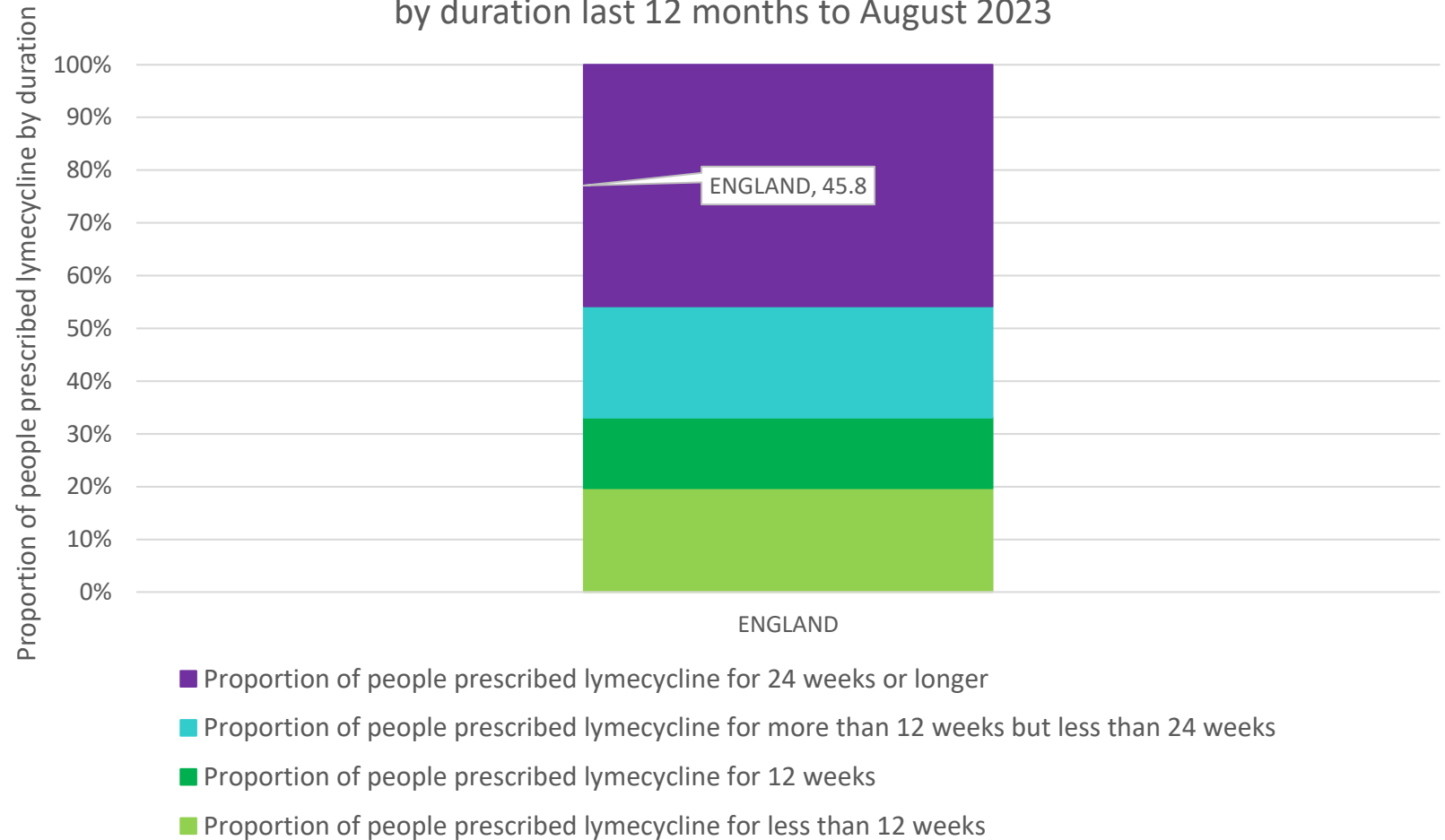
Optimising antimicrobial duration - Acne

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<p>Moderate to severe</p>	<p>Fixed combination of topical adapalene with topical benzoyl peroxide, applied once daily in the evening, plus either oral lymecycline or oral doxycycline taken once daily</p>	<ul style="list-style-type: none"> Oral component may be effective in treating affected areas that are difficult to reach with topical treatment (such as the back) Treatment with adequate courses of standard therapy with systemic antibiotics and topical therapy is a Medicines and Healthcare products Regulatory Agency (MHRA) requirement for subsequent oral isotretinoin, which is only recommended for severe acne (see recommendation 1.5.10 and the MHRA guidance on important risks and precautions for isotretinoin) 	<ul style="list-style-type: none"> Not for use in pregnancy, during breastfeeding (see recommendation 1.5.8), or under the age of 12 Topical adapalene and topical benzoyl peroxide can cause skin irritation (see recommendation 1.5.7), photosensitivity, and bleaching of hair and fabrics Oral antibiotics may cause systemic side effects and antimicrobial resistance Oral tetracyclines can cause photosensitivity
<p>Moderate to severe</p>	<p>Topical azelaic acid applied twice daily, plus either oral lymecycline or oral doxycycline taken once daily</p>	<ul style="list-style-type: none"> Oral component may be effective in treating affected areas that are difficult to reach with topical treatment (such as the back) Treatment with adequate courses of standard therapy with systemic antibiotics and topical therapy is an MHRA requirement for subsequent oral isotretinoin, which is only recommended for severe acne (see recommendation 1.5.10 and the MHRA guidance on important risks and precautions for isotretinoin) 	<ul style="list-style-type: none"> Not for use in pregnancy, during breastfeeding (see recommendation 1.5.8), or under the age of 12 Oral antibiotics may cause systemic side effects and resistance Oral tetracyclines can cause photosensitivity

Proportion of people (N= 65,027) prescribed Lymecycline 480mg capsules by duration last 12 months to August 2023



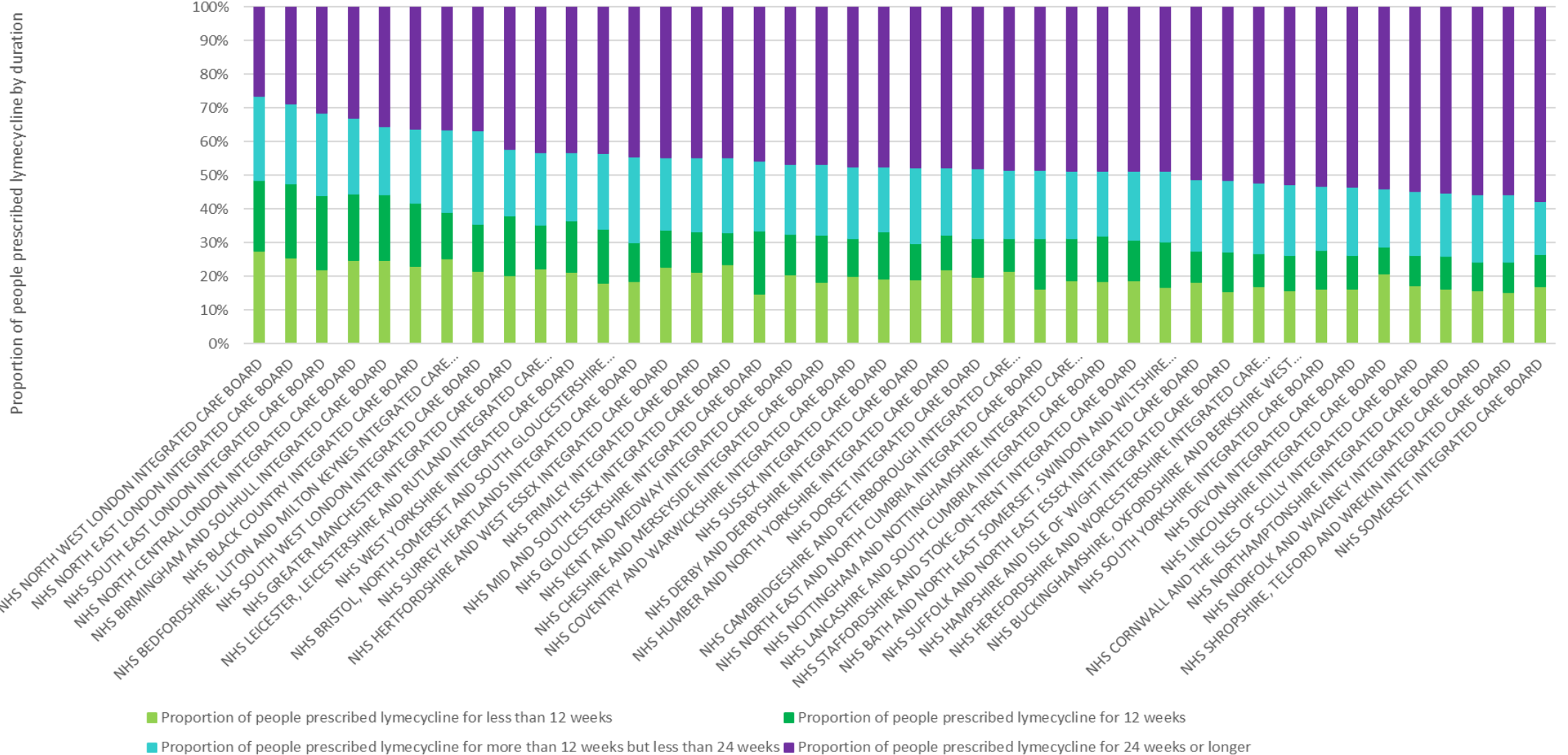


Optimising antimicrobial duration - Acne

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Proportion of people (N= 65,027) prescribed Lymecycline 480mg capsules by duration last 12 months to August 2023





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PrescQIPP Optimising antimicrobial duration dashboard

<https://www.prescqipp.info/our-resources/webkits/antimicrobial-stewardship/>

[Home](#) > [Our resources](#) > [Webkits](#) > Antimicrobial stewardship

Antimicrobial stewardship

[Safer care](#) [Polypharmacy and deprescribing](#) [Antimicrobial stewardship](#) [Webkits](#) [Infections](#)

Welcome to the Antimicrobial Stewardship (AMS) Hub hosted as part of a collaboration with NHS England. It aims to support Antimicrobial Stewardship activity within Integrated Care Systems, and delivery of the NHS Antimicrobial Resistance programme and associated ambitions within the UK 5-year action plan 2019 to 2024. Access to the AMS Hub content is open and registration is not required.

In addition to hosting the Hub, PrescQIPP collaborates with the NHS England Antimicrobial Resistance Programme workstreams by co-producing open data dashboards and hosting the Antimicrobial stewardship Virtual Professional Group.

Content for the Hub is co-ordinated by Elizabeth Beech, Regional Antimicrobial Stewardship Lead South West Region, NHS England.

- [The NHS England Antimicrobial Resistance Programme](#) ✓
- [Join the Antimicrobial Stewardship Virtual Professional Group](#) ✓
- [Optimising Antimicrobial Duration Dashboard](#) ✓
- [AMS Visual Analytics to support NHS antimicrobial stewardship activity during COVID-19 pandemic](#) ✓
- [AMS Visual Analytics to support Antimicrobial Stewardship activity](#) ✓

Optimising Antimicrobial Duration Dashboards

Tackling antimicrobial resistance – the UK five-year national action plan <https://www.gov.uk/government/publications/uk-5-year-action-plan-for-antimicrobial-resistance-2019-to-2024> promotes optimal use of antimicrobials in humans to ensure safe and effective patient care by strengthening antimicrobial stewardship programmes which should include the review of dose and duration of antimicrobial prescriptions.

There is also an ambition to reduce UK antimicrobial use in humans by 15% by 2024. Optimising the duration of antibiotic use supports delivery of both these key requirements, and NICE publish antimicrobial stewardship guidance <https://www.nice.org.uk/guidance/health-protection/communicable-diseases/antimicrobial-stewardship> that provides evidence based recommendations for duration of antibiotic use.

These dashboards uses routine primary care antimicrobial prescribing data accessed from NHSBSA ePACT2 analysis to report novel metrics that can be used to optimise duration of antibiotic use in primary care. Metrics have been developed by the NHS England AMR Programme using NICE antimicrobial stewardship guidance content for dose and duration of selected antibiotic formulations.

[Amoxicillin 500mg capsules](#)

[View >>](#)

[Doxycycline 100mg capsules](#)

[View >>](#)

[Flucloxacillin 500mg capsules](#)

[View >>](#)

[Phenoxymethylpenicillin 250mg tablets](#)

[View >>](#)



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Optimising duration of antimicrobial use

Optimising duration of antimicrobial use – metric development is based on:

- **High volume antibiotic**
amoxicillin
- **NICE guidance dose and duration**
500mg oral TDS 5 days
- **AMR programme priority workstream**
linked to E.coli resistance
- **Define SMART metrics**
AMOXICILLIN 500MG CAPSULE
5 DAY = quantity 15
7 DAY = quantity 21
- **Uses routinely reported data sets**

NICE Antimicrobial Prescribing Guidance recommendation
WHO DDD

[Pneumonia \(community-acquired\): antimicrobial prescribing](#)

[NG138](#)

[Otitis media \(acute\): antimicrobial prescribing](#)

[NG91](#)

[Cough \(acute\): antimicrobial prescribing](#)

[NG120](#)

[Bronchiectasis \(non-cystic fibrosis\), acute exacerbation: antimicrobial prescribing](#)

[NG117](#)

[Chronic obstructive pulmonary disease \(acute exacerbation\): antimicrobial prescribing](#)

[NG114](#)

[Urinary tract infection \(catheter-associated\): antimicrobial prescribing](#)

[NG113](#)

[Urinary tract infection \(lower\): antimicrobial prescribing](#)

[NG109](#)

[Urinary tract infection \(recurrent\): antimicrobial prescribing](#)

[NG112](#)

DURATION METRIC ADOPTED

AMOXICILLIN 500MG CAPSULES

1500MG

500MG three times a day for 5 days (higher doses can be used see BNF) 5Y+

500MG three times a day for 5 days to 7 days
Young people under 18Y

500MG three times a day for 5 days 5Y+

500MG three times a day for 7 days to 14 days 5Y+

500MG three times a day for 5 days 18Y+

500MG three times a day for 7 days only if culture results available and susceptible non-pregnant women and men

500MG three times a day for 7 days only if culture results available and susceptible **pregnant women**

500MG single dose or 250MG at night 16Y+
250MG at night 5Y+

AMOXICILLIN 500MG CAPSULES

WHO DDD 1500MG

5 DAY QUANTITY=15

7 DAY QUANTITY=21



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Optimising antimicrobial duration dashboard - Amoxicillin 500mg capsules

Select Benchmarking Level
this is the level at which you want ..

Integrated Care Board

Region Name
All

Integrated Care Board Name
All

Show Old Boundaries
No - current locations only

Location
All

PCN/Cluster
All

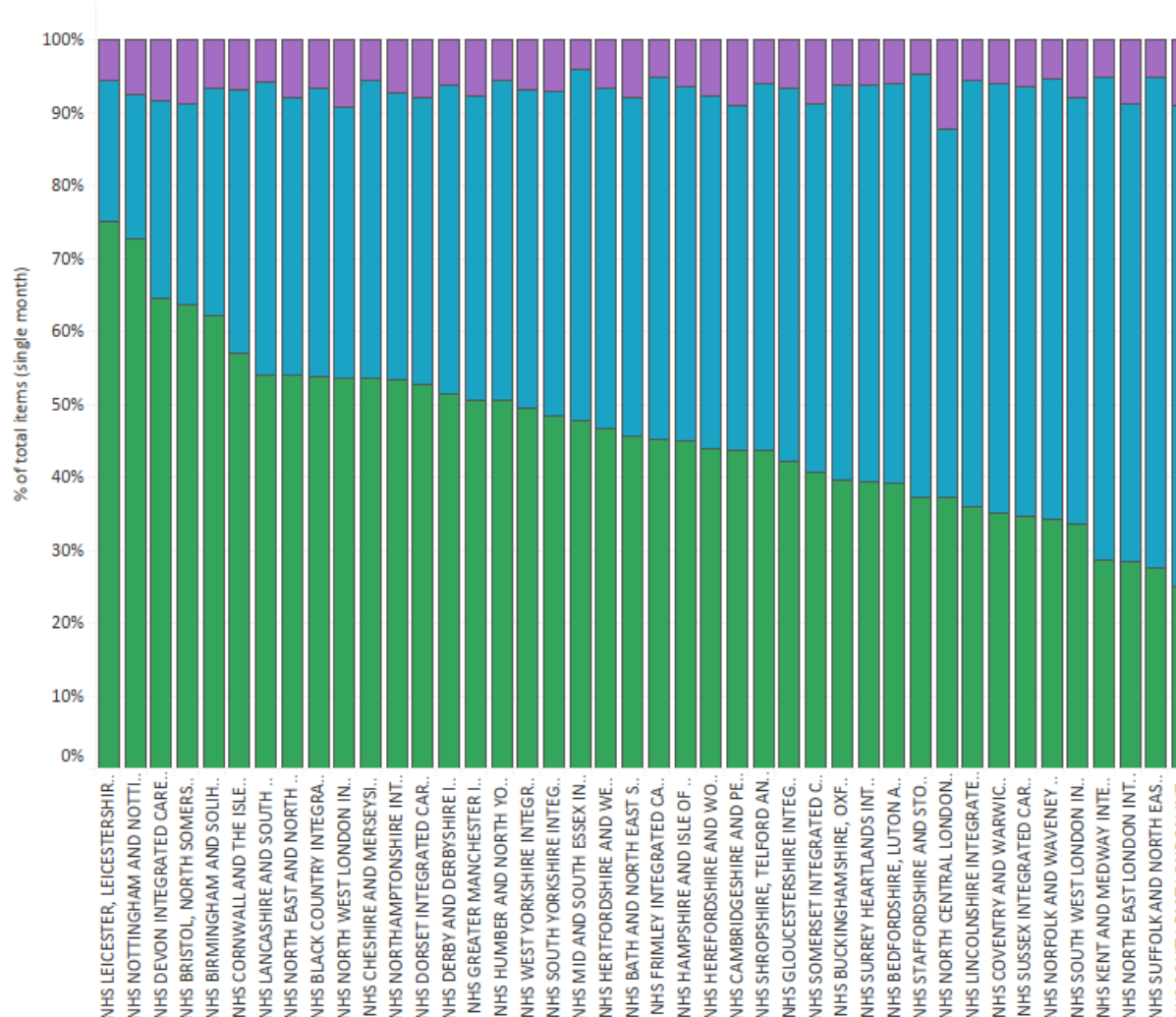
Practice
All

Select Sort Order (largest to smal..
5 days (Quantity=15)

Select Monthly Prescribing Type
single month

Age Band Years
All

Proportion of total Amoxicillin 500mg capsules items prescribed by duration September 2023 (single month)



Highlight Quantity

- All quantities excluding Q=15 ..
- 7 days (Quantity=21)
- 5 days (Quantity=15)

Highlight Benchmarking

- NHS LEICESTER, LEICESTERSHI..
- NHS NOTTINGHAM AND NOTT..
- NHS DEVON INTEGRATED CAR..
- NHS BRISTOL, NORTH SOMER..
- NHS BIRMINGHAM AND SOLI..
- NHS CORNWALL AND THE ISLE..
- NHS LANCASHIRE AND SOUTH..
- NHS NORTH EAST AND NORTH..
- NHS BLACK COUNTRY INTEG..
- NHS NORTH WEST LONDON I..
- NHS CHESHIRE AND MERSEYS..
- NHS NORTHAMPTONSHIRE IN..
- NHS DORSET INTEGRATED CA..
- NHS DERBY AND DERBYSHIRE ..
- NHS GREATER MANCHESTER I..
- NHS HUMBER AND NORTH YO..
- NHS WEST YORKSHIRE INTEG..
- NHS SOUTH YORKSHIRE INTEG..
- NHS MID AND SOUTH ESSEX I..
- NHS HERTFORDSHIRE AND WE..
- NHS BATH AND NORTH EAST S..
- NHS FRIMLEY INTEGRATED CA..
- NHS HAMPSHIRE AND ISLE OF ..
- NHS HEREFORDSHIRE AND W..
- NHS CAMBRIDGESHIRE AND P..
- NHS SHROPSHIRE, TELFORD A..
- NHS GLOUCESTERSHIRE INTEG..



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The 'How to..' guide for COPD and development of the COPD-Prevention of exacerbation Toolkit (COPD-PET)



Dr Julia Darko *GP Registrar and Former National Medical Director Clinical Fellow*

Why review patients with COPD that use antibiotics frequently?

1

Approx 1.2 million diagnosed, >30,000 deaths/year - disproportionately impacts deprived members of our population

2

Detrimental impact on quality of life and ability for patients, leading to significant economic burden for individuals and society

3

Significant reliance on urgent, primary and secondary care services – including over-exposure to antibiotics and steroids

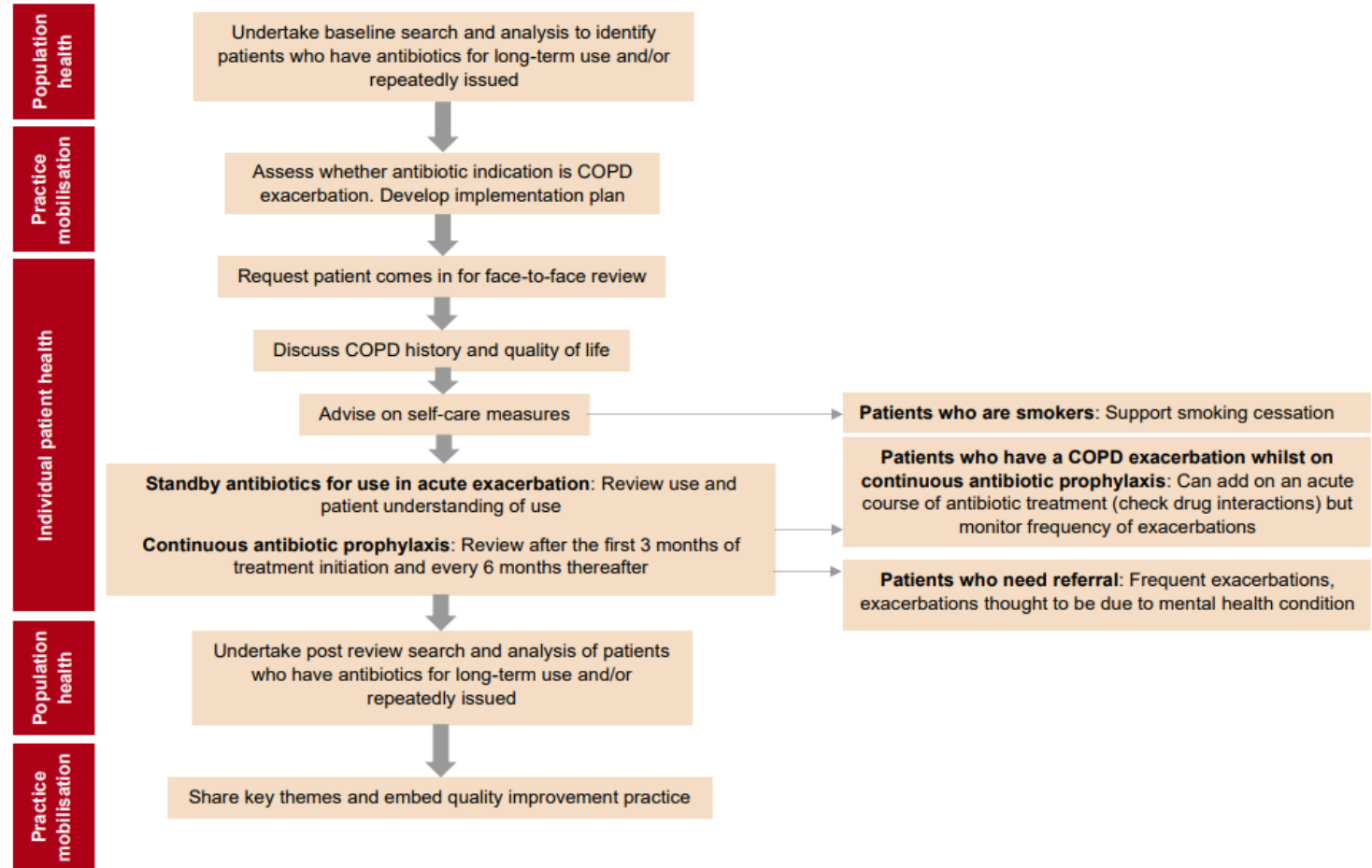


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'How to...' review COPD prescribing

3.3.5 Flowchart to review long-term and repeated antibiotic use in COPD exacerbations



The 'How to...?' Series

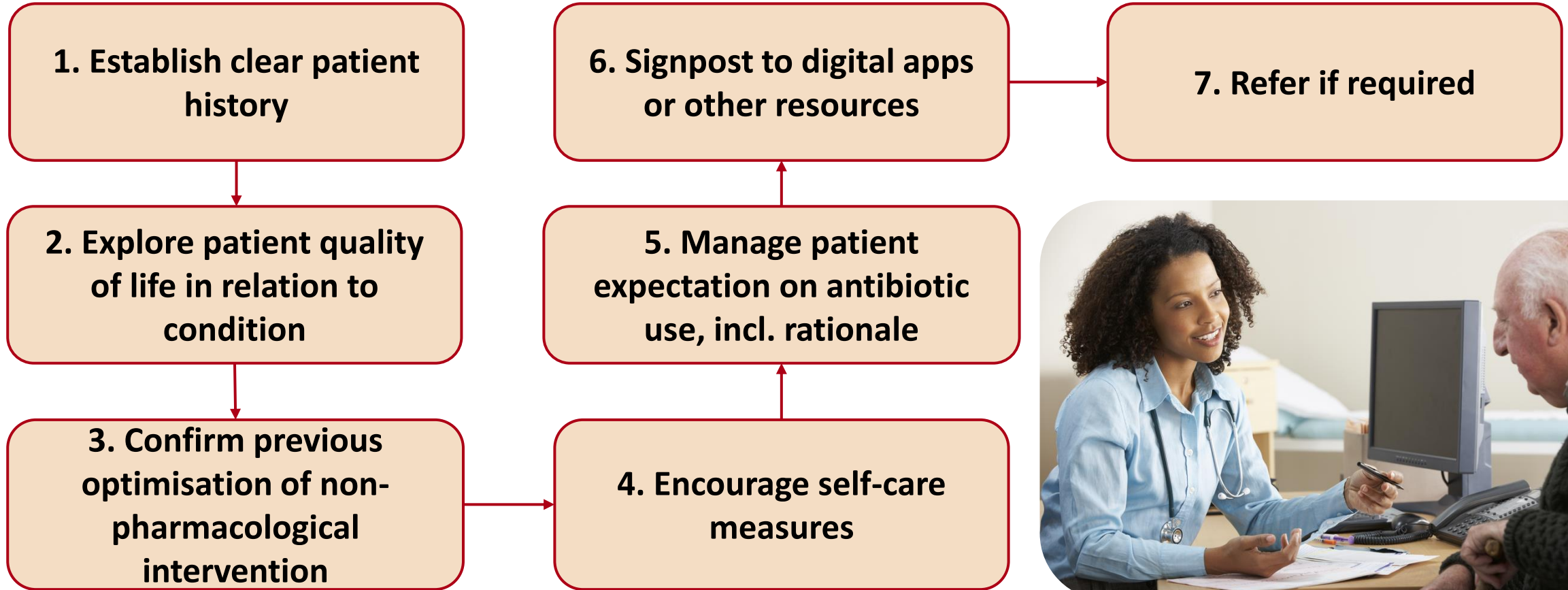
How to Manage and Review Adults on Long-term and Repeated Antibiotics for the Prevention and Treatment of

Chronic Obstructive Pulmonary Disease Exacerbations



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Patient consultation as part of the “How to ...” review



Why develop the COPD-Prevention of exacerbation Toolkit (PET)?



To be used alongside the COPD ‘How to’ guide, a checklist document for primary care teams:

- To work through with patients during consultation
- Act as a memory aid of steps that should be considered



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COPD- PET

THE 'COPD-PET' REVIEW – Preventing Exacerbations Toolkit

In this in-depth review you will be providing your patient with additional tools to manage their COPD by focusing on preventing exacerbations and minimising the need for antibiotic use.

Insert 'X' once completed

1	Has the patient previously had diagnostic spirometry that confirms COPD diagnosis? Y / N If not, please refer them for spirometry or request practice nurse or doctor to do so.	
2	Explore your patient's own account of the impact of the condition on their life, ask about activities of daily living, occupation, social history.	
3	Establish baseline of severity of symptoms using MRC dyspnoea scale MRC Scale Result today =	
4	Explore your patient's understanding of COPD diagnosis then use this patient leaflet to consolidate this information further. Offer a link or printed copy.	
5	Ask your patient what they think they can do themselves to manage their condition better. Then use this patient leaflet to inform this further. Offer a link or printed copy.	
6	Does your patient know what to do and where to go in case of a flare-up? Use this patient leaflet to discuss this in detail together. Offer a link or printed copy	
7	Discuss antibiotic usage: <ul style="list-style-type: none"> Ask your patient to think back to their COPD flare-ups over the last year and how many times they were prescribed a course of antibiotics Ask if they have a rescue pack and check if it includes oral antibiotics and steroids Ask how they self-manage exacerbations, including how they use steroids or antibiotics in their rescue pack Establish whether patient is prescribed prophylactic antibiotics for COPD and if so, confirm they are a non-smoker or ex-smoker (due to the lack of effect in smokers) 	
8	Explain that there are both benefits and risks associated with antibiotic exposure: <ul style="list-style-type: none"> 1 in 14 patients treated with an antibiotic is expected to benefit Short-term side effects: GI symptoms, disturbance of normal gut flora Long-term risks of bacteria developing resistance, lack of effective treatment Only around 50% of COPD exacerbations are thought to be bacterial and antibiotics should be added to oral steroids if their sputum changes colour and increases in volume or thickness beyond their normal day-to-day variation COPD exacerbations can be triggered by a range of factors including viral infections and smoking, so not all exacerbations will respond to antibiotic therapy Medication to break down mucus can be very helpful for chronic cough with sputum 	
9	Explore additional self-management approaches: <ul style="list-style-type: none"> Invite the patient to think about precautions they could take to avoid exposure to triggers for flare-ups (e.g. smoking, air pollutants, dust, respiratory virus) Discuss benefits of healthier diet and exercise 	
10	Review vaccination status – check which/when, recommend and offer any outstanding It is recommended that COPD patients have: <ul style="list-style-type: none"> SARS-Cov-2 (COVID-19): reduces serious illness and death in COPD patient Influenza vaccination: reduces serious illness and death in COPD patient Pneumococcal vaccination: reduces incidence of lower respiratory tract infections Tdap (dTAP/dTpa): protects against pertussis if not vaccinated during adolescence Zoster: protects against shingles in ≥50-year-old COPD patients 	

11	Review smoking status – if your patient is a current smoker offer cessation : <ul style="list-style-type: none"> Pharmacotherapy options combined with behavioural support are more likely to result in smoking cessation The effectiveness and safety of e-cigarettes is uncertain at present Refer to local pharmacy for smoking cessation service Recommend NHS Quit Smoking app – provide instructions/help with installing app 	
12	Check inhaler technique to ensure inhaled pharmacotherapy is optimised: <ul style="list-style-type: none"> Ask the patient to demonstrate this on their own inhaler(s) Check patient's understanding of instructions for their inhaler use Provide spacer to be used for all metered dose inhalers 	
13	Offer and refer to local pulmonary rehabilitation (PR) service after detailing its benefits: <ul style="list-style-type: none"> PR is an exercise and education programme designed for people with lung disease who experience symptoms of breathlessness. A PR course typically lasts six to eight weeks, with two sessions of around two hours each week, and includes an individually prescribed exercise and education programme including aerobic exercise, resistance training and lifestyle support. Evidence shows that accessing PR improves people's ability to walk further, helps them feel less tired and breathless when carrying out day-to-day activities. 90% of patients who complete a PR programme have higher activity and exercise levels and report an improved quality of life. 	
14	Now, work together on a clear plan of action for the patient. Under each heading, list some actions they feel able to focus on in order to: <ul style="list-style-type: none"> Alleviate symptoms and minimise impact on quality of life: Prevent exacerbations (think about specific triggers e.g. smoking): Prevent infection (think about basic hygiene/vaccination/protective measures): Prevent overuse of antibiotics: Optimise efficacy of current medication (e.g. use of inhalers, rescue pack, need for mucolytic?): 	
15	Provide your patient with a printed or electronic copy of above agreed action plan	
16	Finally, inform them to expect to be contacted for a short progress review in 6 and 12 months' time	
17	Complete, if required, a referral for: <ul style="list-style-type: none"> Pulmonary rehabilitation Smoking cessation service Vaccination(s) Diagnostic spirometry Medication optimisation by their COPD specialist or practice team if this is needed sooner than their next scheduled specialist review 	

Identifying and referring a patient for a COPD review

Confirm the diagnosis of an acute infective exacerbation and treat in line with NICE guidance

(first line treatment; amoxicillin 500mg TDS 5 days)



Assess if your patient requires a COPD review

- *Frequency and severity of exacerbations?*
- *How many antibiotic courses/rescue packs issued?*
- *Date of last COPD review?*
- *Any COPD related hospital admissions?*
- *Does the patient use a spacer device?*
- *Do current preventative medications seem optimal?*



Refer to the appropriate clinical team to conduct a COPD review



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Pilot of the COPD- Prevention of Exacerbation Toolkit (COPD-PET)



Roxanne Mehmi *Operations Manager/Clinical Pharmacy Technician eQuality PCN*

Suprio Dhas *Senior Clinical Pharmacist eQuality PCN*



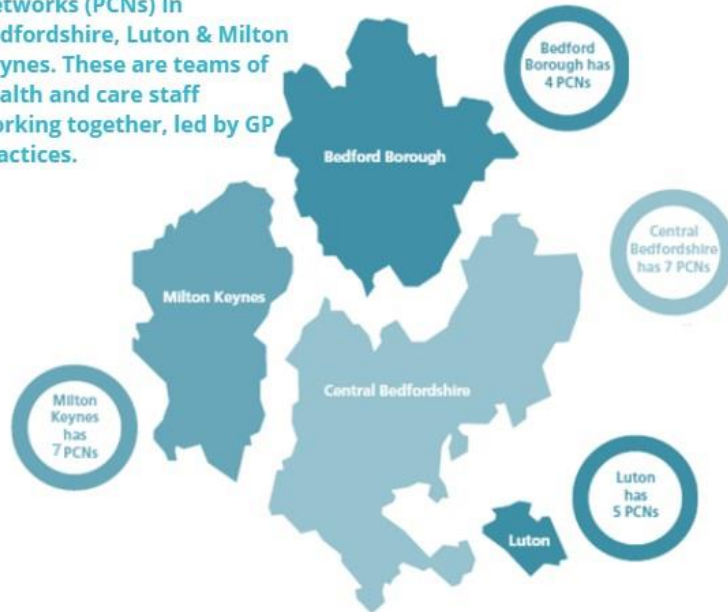
Pilot site – eQuality Primary Care Network (PCN) in Luton part of the Bedfordshire, Luton and Milton Keynes ICS in East of England

Bedfordshire, Luton and Milton Keynes
Health and Care Partnership

The project is a collaboration between NHS England, eQuality PCN and the MLCSU.



There are 23 Primary Care Networks (PCNs) in Bedfordshire, Luton & Milton Keynes. These are teams of health and care staff working together, led by GP Practices.



- 1 of 5 PCNs in Luton
- A multidisciplinary clinical team including GPs, nurses, pharmacists, pharmacy technicians and social prescribers
- Serves a patient population of approximately 40,000

Luton
A diverse, densely populated town with over 150 languages and dialects spoken. It has a younger than average population and above average levels of unemployment and deprivation, with high levels of child poverty.



Project preparation

1. **Identify patients** with COPD coded diagnosis and 3 or more antibiotic prescriptions within the last 12 months (aim ≥ 100)
2. **Patient engagement** to promote clinic attendance. Consider barriers specific to the COPD cohort, localities, logistics etc
3. **Peer discussion** making the patient consultation as comprehensive as possible, fully utilising the opportunity of having the patient present face to face and the clinician skill set
4. **Education & Training requirements** familiarisation with NICE Guidelines, local COPD formulary and other sources such as the RightBreathe website. Refresh knowledge and identify gaps in learning.
5. **IT support** to develop a COPD-PET template on System1.
6. **Referral pathways** established:
 - Spirometry
 - Pulmonary Rehabilitation
 - Social prescribing-wellbeing
 - Stop smoking service

Outcomes from practice peer discussions

- 1. Decision to include additional factors-** CVD Des- AF screening tool, BP monitoring, Sats-Oximetry.
- 2. Inhaler technique** with in check tool for accuracy.
- 3. Optimisation of COPD medication** at the time of review.
- 4. Follow up appointments** at 4 weeks after change of meds for continuity of care, (although NMS could have been utilised).
- 5. Agreement on how to phrase the introduction** and various parts of the consultation to improve patient understanding.
- 6. Educational literature** and a copy of the care plan for the patient to take home.

Practice Team and Roles



We quickly established a flow for the delivery of the patient consultation, breaking it down into 3 parts;

1. Introduction and COPD PET Tool
2. Clinical examinations
3. Inhaler technique and meds optimisation.

Post consultation referrals sent as per in house pathway.

Clinical example - COPD with frequent antibiotic prescribing

- ✓ White Irish 77year old male,
- ✓ Ex- Smoker
- ✓ Weight 90kg
- ✓ Vaccination status – Influenza declined, pneumococcal vaccine received 2004
- ✓ Current prescribed inhaled therapies; Carbocisteine, Anoro Ellipta (LAMA/LABA), Ventolin

- ⚠ Last COPD review 2019
- ⚠ 1 hospital admission for COPD in last 12 months
- ⚠ 4 COPD exacerbations and 4 rescue packs issued within last 12 months
- ✗ No results of spirometry test to confirm COPD diagnosis

Next steps...



Invite patient for a review

Carrying out the COPD-PET Review



MRC score = 3



Inhaler technique check and therapy optimisation Ventolin changed to Salbutamol Easyhaler, LABA/LAMA changed to Trelegy (triple therapy)



Patient education and support Triggers for breathlessness identified, COPD care plan provided and information on when to use rescue pack and the risks of antibiotic overuse provided.



Vaccination hesitancy addressed- patient agreed to have influenza vaccine.



Referrals to social prescriber, pulmonary rehab and spirometry testing

Practice learning

- 1. Spirometry diagnosis** We Identified many patients lost to follow up for spirometry, some with questionable COPD diagnoses.
- 2. Impact of COVID** restricted face to face, annual reviews and spirometry.
- 3. Tricky cohort to get in for annual reviews** therefore we made sure that the patient review and consultation covered all areas of their management and thus providing a good patient experience. This service should lead to better patient attendance for future reviews.
- 4. Reflection** on our own assumption of patient knowledge of their condition when under secondary care.

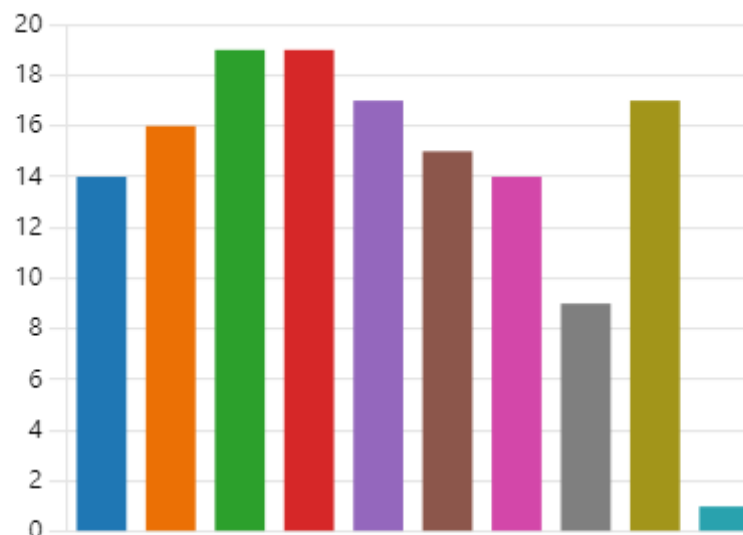


Patient survey

What aspects of managing your COPD, if any, do you feel will most benefit from the review?

[More Details](#)

Knowledge about your condition	14
How and when to use your inhal...	16
How and when to use your resc.	19
The role of antibiotics	19
The role of steroid tablets	17
Avoiding triggers for flare ups	15
The role of vaccinations	14
The role of stopping smoking	9
What to do when you have a fla...	17
Other	1



79 patients reviewed by pharmacist and pharmacy technician

24 patient responses post review (30%)

100% respondents felt 'very involved' to 'extremely involved' in their care

90% of respondents would recommend service to friends and family if they needed similar care

"Staff were very professional, knowledgeable and friendly. Made you feel at ease. First time I have been informed fully of COPD and of how to help manage it. I fully recommend this service."



Next steps for COPD resources



- ✓ Pilot results will be shared with key teams and inform policy initiatives
- ✓ Once pilot complete, the COPD-PET will be published in the TARGET toolkit
- ✓ Further resources to support staff training on COPD will be developed:
 - ✓ A slide set with patient worked examples
 - ✓ A consultation video

 **If your practice is interested in piloting the COPD-PET please contact:**
Dr Naomi Fleming: naomifleming@nhs.net

 **Are you interested in joining a community of practice for antimicrobial stewardship?**
Please contact england.amrprescribingworkstream@nhs.net with email address & job role



Acknowledgements

Naomi Fleming – NHS England

Alishah Lakha - NHS England

Elizabeth Beech - NHS England

Roxanne Mehmi - eQuality PCN

Suprio Dhas - eQuality PCN

Shazia Patel - Derbyshire ICB

Julia Darko - GP Registrar

Daron Gunner - eQuality PCN

Elaine O’Sullivan - eQuality PCN

Simon Petty – eQuality PCN

Jasdeep Sidhu - Midlands and Lancashire CSU

Gurjinder Samra - Midlands and Lancashire CSU

Paula Wilson - Midlands and Lancashire CSU

Dharini Shanmugabavan – RCGP

Joseph Besford – RCGP

Camilla Stevenson - RCGP

Ming Lee – UKHSA

Fionna Pursey

Eleanor Harvey

Kieran Hand – NHS England

Diane Ashiru-Oredope – UKHSA



Thank you

Please complete feedback survey and let us know what topic you would like next!

Sign up for our next two webinars:

- **Improving antibiotic management of respiratory tract infections: cough and sore throat**
Tuesday 23 January 2024 | 18:30 - 19:30 | Online
- **Urinary tract infections: Applying diagnostic and prescribing guidance in practice**
Thursday 21 March 2024 | 18:30 - 19:30 | Online

Visit www.rcgp.org.uk/TARGETantibiotics to find out more



TARGET

Keep Antibiotics Working

Panel Q&A discussion



Shazia Patel
*Community Pharmacy
Clinical lead, Derbyshire ICB*



Alishah Lakha MPharmT
*Regional Pharmacy and
Medicines Project Manager,
NHS England*



Dr Elizabeth Beech MBE
*Regional Antimicrobial
Stewardship Lead, South
West, NHS England*



**Dr Julia Darko GP Registrar
and Former National Medical
Director Clinical Fellow**



Roxanne Mehmi
*Operations Manager/Clinical Pharmacy
Technician eQuality PCN*

Suprio Dhas
Senior Clinical Pharmacist eQuality PCN



Dr Naomi Fleming
*Regional Antimicrobial
Stewardship Lead, East of
England NHS England*