

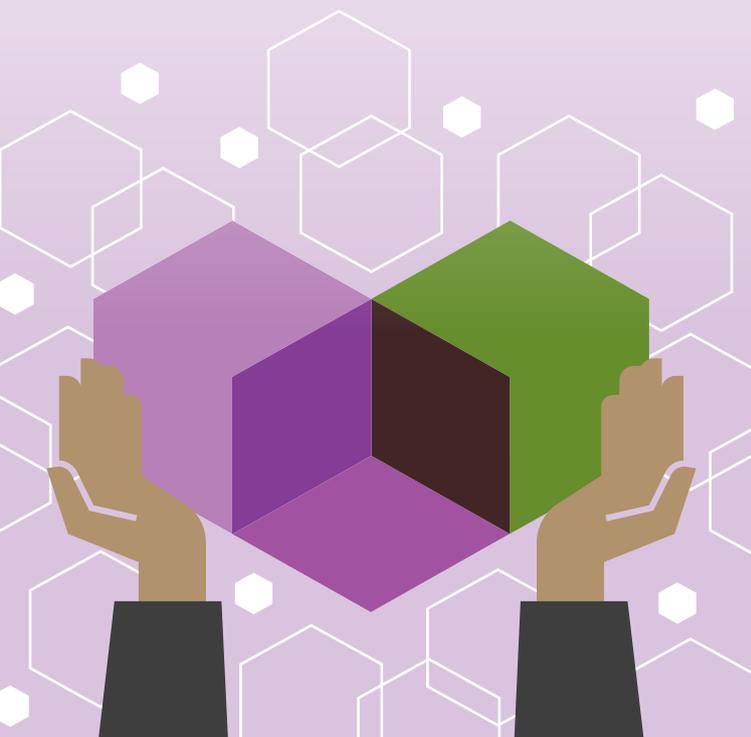
Polypharmacy is defined as the routine use of four or more over-the-counter, prescription and/or traditional medications at the same time by a patient. Polypharmacy has increased dramatically with greater life expectancy and as older people live with several chronic diseases. Polypharmacy increases the likelihood of side effects, as well as the risk of interactions between medications, and may make adherence more difficult.

The World Health Organisation (WHO) describes polypharmacy as a major global problem, estimating that more than half of all medicines are prescribed, dispensed or sold inappropriately, and that half of all patients fail to take them correctly.

The Academic Health Science Network (AHSN) and the Patient Safety Collaborative (PSC) for the North East & North Cumbria (NENC) support a number of programmes around medicines, particularly approaches to addressing problematic polypharmacy and improving medicines safety.

At the outset of this programme, across the AHSN NENC region, eight of the twelve (66%) CCGs had above the national percentage of patients currently receiving 10 or more unique medicines. Recognising that there are lots of opportunities to improve patient care around polypharmacy, the AHSN invited proposals from clinicians and teams across the region, which could deliver innovative approaches to address problematic polypharmacy and associated medicines safety. This brochure outlines the successful projects.

Sue Hart, Programme Manager
sue.hart@ahsn-nenc.org.uk



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Reducing inappropriate prescribing in primary care; getting started



Organisations: Sunderland & South Tyneside CCGs and Hospital Trusts

Aim

An initiative to reduce inappropriate prescribing which encourages both patients and clinicians to question the ongoing appropriateness of long-term medicine use.

Background

The initiative aims to get people to ask themselves: are these medicines working? This could be about therapeutic objectives, experience of side effects, or motivation to engage in medicines taking. The team believe that by having open and honest conversations about whether medicines are working, the focus can be shifted from continuing medicines by default, to thinking about stopping medicines where appropriate. The toolkit centres around two checklists, one for patients and one for healthcare professionals reviewing medicines. Both checklists contain three questions which each party should ask themselves when reviewing medication. There is then a range of materials which support the use of these checklists.

Action

The project used a Human Centre Design approach and was effective in supporting constructive and focussed conversation about how reducing inappropriate prescribing in primary care can develop. Combining this with other structured tools and approaches such as Nominal Group Technique, the AGREE II framework and the Behaviour Change Wheel allowed clear ideas and themes to emerge which supported the design process and led to the final idea concept.

The project, which included input from secondary care clinicians, GPs, practice nurses, pharmacists and patients explored the importance of reducing inappropriate prescribing, barriers which may exist within the primary care setting and potential solutions. This work found that a multi-faceted approach was needed; one that would incorporate guidelines to support deprescribing decisions, a change in language around how the duration of treatment with medicines is discussed with patients, and promoting open conversations about the ongoing need of medicines and the potential benefits

of reducing inappropriate prescribing. To bring these concepts together, it was decided to create a brand which could be used in guidelines, training materials, and communications with healthcare professionals and patients. This brand and toolkit have now been developed by NHS Sunderland CCG in collaboration with Magpie, a communications and marketing company and with input from the original project participants.

The clear theme of the brand and toolkit is “Are your medicines working for you?”

Next steps

This initiative will initially be tested with practice pharmacists working in NHS Sunderland CCG from the 1st October 2020. From this, the team hopes to gather examples of how the tools can be used in practice to support potential adoption by other NHS organisations.

“Support from the AHSN gave us the time and resources to thoroughly explore the barriers to reducing inappropriate prescribing in primary care and work with our clinicians and patients to identify the potential opportunities and solutions which ultimately became our initiative.” Gemma Donovan, Pharmacist Academic Practitioner

“The deprescribing materials developed as a result of this piece of work are simple, yet very effective. They aim to promote detailed, two-way conversations between patients and healthcare professionals about health and medication and I’m sure will prove to be extremely valuable resources.” Sue Hart

Read the full report: <https://www.ahsn-nenc.org.uk/wp-content/uploads/2020/03/Deprescribing-in-Primary-Care-Getting-Started.pdf>

For more information contact:
Gemma Donovan,
gemmadonovan@nhs.net



The development of an educational programme for primary care prescribers and community pharmacists on reducing inappropriate prescribing

Organisations: North Durham & DDES Joint Medicines Optimisation Team

Aim

The Joint Medicines Optimisation (MO) Team aimed to develop and deliver a programme of education to up skill primary care prescribers and practice-based pharmacists around reducing inappropriate prescribing in key therapeutic areas.

Background

Over a 13-month period from 1 April 2019 the project, led by DDES and North Durham joint MO team as well as the Local Pharmaceutical Committee and County Durham and Darlington Foundation Trust, embarked upon planning and delivering a series of educational sessions on reducing inappropriate prescribing.

Action

At the outset, the plan was to deliver webinars and face to face workshops to respective audiences. However, after issues with securing dates and interest it was decided to hold 4 webinars and only one workshop.

The content was created with input from GP prescribing leads within the CCG, the good working relationships with CDDFT and the LPC enabled involvement from all parties. This was invaluable as they advised on content of the education sessions and assisted with delivery of the community pharmacist session.

A resource pack of 4 educational webinars discussing de-prescribing in key therapeutic areas, including national and local guidance, hints and tips to support practices and discussion of key aspects of de-prescribing was developed. The resources are branded "Are your medicines working for you?"

Unfortunately, the community pharmacy engagement element of the project was more challenging. It was difficult to agree appropriate dates and eventually it was decided to concentrate on one main event. This had limited sign up from community pharmacists, so an invitation was expanded to all pharmacists working within primary care. Only 11 pharmacists attended the session (6 of whom were community pharmacists). The feedback was less positive than for the educational webinars.

The sessions resulted in an increased awareness of the varying roles of pharmacists in different sectors and raised awareness of de-prescribing and polypharmacy amongst the MDT including community pharmacists.

Success

The four educational webinars were each attended by more than 30 delegates and the recorded webinars have been accessed 493 times (up to 31st March 2020). The webinars achieved their initial aims and were successful in increasing the understanding and knowledge of pharmacists and other healthcare professionals working in primary care around reducing inappropriate prescribing, thereby leading to increased patient safety, an improved holistic approach to patient care and an increase in appropriate reviews of polypharmacy. Feedback was also positive, and this method of online education delivery is one that the CCG plans to use going forward. The ability to playback the sessions was also deemed to be useful and will be incorporated into future training plans.

The polypharmacy education project in County Durham won a PrescQIPP award for the addressing problematic polypharmacy category.

Next steps

Nationally the landscape around medication reviews has changed significantly since the project began, to include increased use of PCN and practice-based pharmacists, and the requirement for Structured Medication Reviews. Funding has been agreed through the PCN DES and the Primary Care funding scheme within County Durham to support reductions in persistent pain medication.

The team plan to apply for a PrescQIPP award for their work and the resources are available to share. A link to the webinar content can be found on the link below.

View our training resources: <https://www.ahsn-nenc.org.uk/what-we-do/improving-population-health/medicines-optimisation/>

For more information contact:
Rachel Berry, r.berry1@nhs.net



Closing the evidence-practice gap: Smarter sleep interventions in hypnotic prescribing

Organisations: Cumbria, Northumberland, Tyne & Wear NHS Foundation Trust

Aims

To (1) develop educational interventions applicable to both primary and secondary care to support clinical staff in the discontinuation process of hypnotics, and (2) test these interventions in inpatient psychiatric wards.

Background

Unfortunately, the inappropriate prescribing of hypnotics is common in the NHS. These drugs are often started without a full understanding of the nature of the sleep disorder and are continued indefinitely without review. Hypnotics only treat the symptoms of poor sleep, and do not address the underlying cause.

Hypnotic drugs are not without side effects; long-term use is associated with depression, increased risk of falls and cognitive and psychomotor impairment. These medicines induce a sedated state, which poorly resembles naturalistic sleep, and long-term use of hypnotics can conversely worsen sleep. Sleep deprivation costs the UK economy £40 billion a year.

This study aimed to improve the awareness and treatment of sleep disorders by delivery of 'Smarter Sleep' educational interventions to staff on seven inpatient wards.

Action

This intervention-based project aimed to reduce the inappropriate use of hypnotics by educating practitioners about:

- sleep as a physiological process
- sleep disorders and their diagnosis
- treatment options (both pharmacological and otherwise)

Educational interventions consisted of a short video - 'Nine Minutes to a Natural Night's Sleep', a checklist poster, designed for practitioners to run through before considering hypnotics, as well as a Sleep Handbook reference guide. Resources were designed to be applicable across all care settings and professional groups following the evaluation process.

Watch the educational interventions video at:

<https://bit.ly/smartersleepstudy>

Success

The educational interventions were linked to a change in practice that enabled patients to receive better treatment of sleep disorders and improve their awareness of 'good sleep'. A reduction in the administration of sleeping tablets (41%), greater understanding of poor sleep behaviours, and empowerment to 'self-treat' through education, rather than relying on medication was also seen. Staff reported feeling more confident about being able to help improve sleep for patients.

Alastair Paterson said: *"In an increasingly 24-hour society, it is crucially important to reinforce the vital nature of sleep, an essential process. Everyone is familiar with worsened mood and slowed thinking caused by even just one poor night's sleep. Continued poor sleep can worsen both physical and mental health. There are a lot of myths about sleep. Educating people about why we sleep, how we sleep and tips to improve sleep has huge benefits for patients, staff and the public regardless of whether they have a sleep disorder or not."*

Next steps

The study was completed in December 2019 and now plans to be scaled-up with the support of the AHSN NENC. Sleep education sessions are looking to be held with the Newcastle United Foundation with the aim of sharing resources through the charity's 12th Man Project.

The educational resources can be found on the Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust website, making them available to patients and professionals across the NHS.

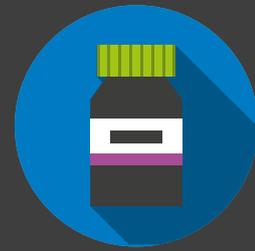
<http://www.cntw.nhs.uk/smartersleep>

View the handbook and poster: <https://www.ahsn-nenc.org.uk/what-we-do/improving-population-health/medicines-optimisation/>

For more information contact:
Alastair Paterson,
alastairpaterson1@icloud.com



Reducing antibiotic prescribing using community pharmacy provision



Organisation: CNE Local Professional Network

Aim

Testing the feasibility of reducing antibiotic prescribing in general practice using the community pharmacies. Practice receptionists will refer patients who request antibiotics by telephone to community pharmacists for CRP testing, the results of which will inform the consideration of treatment.

Background

The Reducing Antibiotic Prescribing (RAP) Project aims to influence a reduction in the levels of antibiotic prescribing and to test whether patients, who do not need to see a GP can be safely channel-shifted to a more effective pathway, which in turn would reduce workload and increase time-capacity for General Practices, overall creating a better patient experience.

Action

The RAP Project was funded by the Academic Health Science Network for the North East and North Cumbria (AHSN NENC), and its innovative approach through a 'C Reactive Protein (CRP) Point-of-Care' test, delivered in private consultation with a Pharmacist, seeks to address Antimicrobial Resistance (AMR), which could result in an estimated 10 million deaths worldwide every year by 2050.

Led by Mike Maguire, Chair of NHS England Local Professional Network for North East and North Cumbria, the RAP Project has been tested through two GP surgeries and three pharmacies in Middlesbrough. Patients with a chesty cough, who phone the GP for an appointment and potentially antibiotics, were referred to the pharmacy, where a three-minute CRP finger-prick blood test shows levels of inflammation through markers and determines whether antibiotics are appropriate.

The patient was then managed by the pharmacist, who may liaise with the GP to take the necessary course of action.

Success

Of the 105 patients referred through the project, only three required antibiotics. A further five required shared decision-making between pharmacist and GP, while the remaining 97 patients were all successfully managed in a community pharmacy.

This patient pathway has received excellent patient feedback, and although the sample size is too small to draw a valid conclusion, the project indicates the potential for reducing antibiotic prescribing while increasing capacity for GPs.

Mike Maguire said: *"I've been delighted that the hard work of the General Practice Teams and the Community Pharmacists involved in this service has led to such great patient feedback. The results of this Project speak for themselves and there is potential for this service to become a game-changer in terms of Antibiotic Prescribing and ensuring patients receive the most appropriate treatment for their condition."*

Next steps

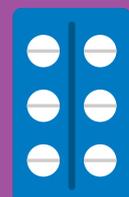
A proposal bid has now been submitted to expand the RAP project to four Primary Care Network areas across the region, in response to the Antimicrobial Resistance Call from NHS England, launched through the AHSN NENC. The outcome of this bid has been delayed by the COVID-19 pandemic.

At the time of writing CRP testing has been suspended due to the COVID-19 pandemic. Once pharmacies are moving back to a new normal, they will become an even more vital partner in the community healthcare system. There are likely to be many possibilities around how they could support and offer for example a combination of a CRP Test and a COVID-19 Test.

The project was entered into the Independent Pharmacy Awards where it is one of 3 finalists in the Pharmacy Innovation Category, result pending at the time of writing.

View the full case study: <https://www.ahsn-nenc.org.uk/reducing-antibiotic-prescribing-rap-project/>

For more information contact:
Mike Maguire,
mike.maguire@nhs.net



Use of the 'World Cafe' approach to address the inappropriate prescribing of intravenous antibiotics in futile clinical scenarios

Organisations: Northumbria Healthcare NHS Foundation Trust & Newcastle University

Aim

To develop a learning event for staff to raise awareness of antimicrobial resistance using the world café model, a freely accessible model for running a sharing café. The focus was on using antimicrobials in end of life or 'clinically futile' situations.

Background

Appropriate and safe antibiotic prescribing is an international priority and challenging the prescribing of intravenous antibiotics in inappropriate circumstances, such as end of life situations, is a key feature of antimicrobial stewardship. Inappropriate use can add to medication burden, increase risk of side effects and prolong hospital stay, further contributing to antimicrobial resistance and increased NHS expenditure.

Action

Five Antibiotic Cafes were hosted; they were well attended by trust-wide staff and feedback was gathered after each session. Patient representatives were also included, highlighting valuable issues which healthcare professionals may have overlooked.

Materials compiled for the cafes included fact sheets, question cards and merchandise. A relaxed, informal atmosphere was created for participants and focused on sharing experiences through peer-to-peer discussion. The café was opened and closed with a short plenary but the main discussion element was intentionally left with loose structure - if discussion flowed participants were left to converse; if it slowed down, tables were rotated to reinvigorate discussion.

Success

The five cafes were well attended, with 123 healthcare professionals representing a wide range of skills and levels of seniority participating. Patient representatives also attended.

The project firstly raised awareness of the importance of antibiotic stewardship in a difficult to address context (end of life) but also provided a platform which could be used for a wide variety of learning events, virtual events. Due to the COVID-19 pandemic and the necessity

of social distancing, the team has produced a new model of virtual café using Microsoft Teams to ensure longevity.

Next steps

The team has created a learning model package with resources and guides; this has been advertised across the UK and further through conferences, universities and other NHS trusts. Many are keen to adopt this model and a resource pack is being produced to help facilitate this, it will be advertised through social media and at conferences for distribution.

The antibiotic café will continue within Northumbria as a regular feature at learning events and is being integrated into learning events for clinical teams e.g. Nurse Preceptorship Programme.

Due to COVID-19 it has not been possible to quantify pre and post intervention antibiotic prescribing rates yet, however it is intended to run these searches retrospectively using electronic prescribing systems.

"This project would not have been possible without support from the AHSN NENC. We are pleased with the outcomes and hope the success can be replicated in other Trusts" Senior Clinical Pharmacist

"The Antibiotic Café made me think differently recently while having a difficult conversation with the parents of a patient. They were keen to have maximum interventions for their child but I highlighted antibiotics might not be the benign intervention they think they are and might have some negative effects. We were able to reach a joint decision on a management plan. I think I would have just agreed with them if it wasn't for the cafe" Consultant Paediatrician.

For more information contact: Joseph Brayson,
joseph.brayson@northumbria-healthcare.nhs.uk

Please visit: <https://www.ahsn-nenc.org.uk/what-we-do/improving-population-health/medicines-optimisation/> for a list of free resources



Optimising the management of COPD exacerbations in primary care

Organisations: NHS North Tyneside CCG, Northumbria Healthcare NHS Foundation Trust & Newcastle upon Tyne Hospitals NHS Foundation Trust



Aims

This project aimed to:

1. Investigate current processes for the management of COPD exacerbations across a variety of practices in the North-East of England
2. Compare currently available local and national guidelines

Background

There is known diversity in current practice associated with the management of acute exacerbation of COPD. The project sought to explore this within primary care, specifically the prescribing of 'rescue packs' aiming to develop a region specific 'best practice' guide. Steps taken include:

- Identifying current local and national guidance on the management of exacerbations.
- Consulting with local experts.
- Comparing current prescribing processes within GP practices.
- Identifying current prescribing rates of COPD rescue packs via the NHS Business Services Authority respiratory prescribing dashboard.

Analysis confirms that prescribing levels for rescue packs is significant and potentially concerning; for example from a combined practice list of over 19,000 patients, 124 patients with COPD received a rescue pack prescription over the 12-month period. Of these, 100 patients received more than 3 acute prescriptions for prednisolone over a 12-month period, and 15 received more than 10 prescriptions. The total number of rescue packs issued represented over 700 exacerbations of COPD in 12 months.

Action

The priority was for the local experts to establish which criteria should be included in a COPD self-management plan; the following was agreed as essential:

1. Advice to practitioners on which medication should be in the rescue pack.
2. Patient education on the definition and severity of an exacerbation.
3. Accurate recording of an exacerbation.
4. Clear guidance on medical review post exacerbation.
5. Clear guidance on referral to a specialist.
6. Clear guidance on prescribing processes for rescue packs.

"A key factor was the initial introductions by Sue Hart - I'm not sure how much engagement we would have had without Sue's networking skills!"

Success

The project brought together a team of local specialists to produce a regional 'best practice' guideline for the management of COPD exacerbations. A key finding was the lack of consistent, practical guidance (as recommended by the specialist team) contained within published guidelines.

Comparison of national and local guidelines against the identified essential criteria:			
Guideline criteria	NICE COPD Clinical Guideline	World Health Organisation GOLD	North of Tyne Area Prescribing Committee
Advice to practitioners on which medication should be in the rescue pack	Y	Y	Y
Patient education on the definition and severity of an exacerbation	N	N	N
Accurate recording of an exacerbation.	N	N	N
Clear guidance regarding a medical review after exacerbation	N	N	N
Clear guidance on referral to a specialist.	N	N	N
Clear guidance on the correct prescribing process for rescue packs	N	N	N

What are the key achievements of the project?

Production of best practice guidance for the management of COPD exacerbations. Identification of a variety of methods involved in managing requests for 'rescue packs.'

Discussion

Current available guidelines do not meet the criteria established by our expert group so how might best practice in the management of COPD exacerbation be encouraged? The current system of locally produced guidelines should be standardised and further education developed to reinforce good prescribing behaviour.

Next steps

Proposals for next steps involve the following research questions: Is there variation in prescribing levels between practices when practice size and demographics are considered? What are the common themes amongst the outliers? What are the benefits and harms from the current prescribing levels of both steroids and antibiotics?

View the report: <https://www.ahsn-nenc.org.uk/wp-content/uploads/2020/09/Reportfv.pdf>

For more information please contact Paul Davies
paul.davies40@nhs.net



**Academic Health
Science Network**
North East and North Cumbria

Biomedical Research Building, The Campus for Ageing and
Vitality, Nuns Moor Road, Newcastle upon Tyne NE4 5PL

T. 0191 208 1326 E. enquiries@ahsn-nenc.org.uk

🐦 @AHSN_NENC www.ahsn-nenc.org.uk

