Medicines Optimisation Update

Antibiotic items per STAR PU

Partners in improving local health

NHS North Cumbria Clinical Commissioning Group

What this includes:

Number of prescriptions for antibiotics, per STAR PU (Specific Therapeutic group Age-sex Related Prescribing Units) weighted patient.

Identifying the problem:

- Antimicrobial care bundle
- Recurrent UTI care bundle
- EMIS Population manager searches
- RCGP Target audit toolkit

Suggested actions – In the consultation:

- Assess the patient's clinical condition, ideally with the patient present. Use the telephone only in exceptional cases.
- **Only prescribe an antibiotic where there are clear signs of a bacterial infection and there is likely to be a clear clinical benefit.**
- **Ask about a patient's expectation for the consultation.** Many patients expect a prescription as part of the consultation; some are just seeking re-assurance or advice.
- **Refer to and follow prescribing guidelines unless clinically justified.** Share these with patients and counsel them about the potential for harm from antibiotics if not required:
    - common side effects include thrush, rashes, vomiting and diarrhoea.
    - risk of resistance is approximately doubled for a year after taking an antibiotic for a respiratory tract infection.
- **Use Delayed or Back up prescriptions**, evidence shows they are effective in reducing antibiotic use and future consultations for respiratory tract infections. Providing self-care advice linked to a delayed script may be helpful when patients want rapid improvement; learning how to self-care can reduce future attendances in practice.
- **Ask the patient if they would like a leaflet.** Have leaflets ready for patients: print paper copies, add to practice intranet or EMIS to print, personalise and discuss with patients.
- **Document clinical diagnosis, duration, dose and route in patient records**. If you prescribe outside of the guidelines, this should be added to the notes.
- **Check for hypersensitivity and allergy status** to determine if genuine and the severity of reaction. Document clearly if not documented already. True Penicillin allergy is uncommon.
- **Keep the course length within guidelines** to help reduce risk of Clostridium difficile, Methicillin Resistant Staphylococcus Aureus (MRSA), resistant urinary tract infections (UTIs) and antibiotic resistant gram negative infections. Do not extend a standard course of an unsuccessful treatment without good reason – consider other options.
- **Use topical antibiotics only for localised infections within guidelines**, especially those available for systemic use (e.g. fusidic acid) as this practice compromises their effectiveness and selects for resistance.
- **For severe infections, initiate antibiotics as soon as possible.**
- **Counsel patients about the importance of good hygiene to control and prevent spread of infections.**
- **Always safety net with advice on when to re-consult if symptoms worsen.**
- **Where 'best guess' or empirical therapy has failed (including any determined through culture and sensitivity) or special circumstances exist, microbiologist advice is available:** contact North Cumbria University or Morecambe Bay Hospitals and ask switchboard for the duty microbiologist.

Medicines optimisation website. Available at http://medicines.necsu.nhs.uk/guidelines/cumbria-guidelines/
Date updated: September 2017; Review: September 2018 Author: Melanie Graham

Medicines Optimisation Update

Antibiotic items per STAR PU

Partners in improving local health

NHS Cumbria Clinical Commissioning Group

Suggested Actions -as a Practice

- **TEAMWORK** Make sure all practice staff are involved in your antibiotic prescribing work and understand their part. Include: locums, GP trainees nurse prescribers, practice nurses and non-clinical staff.
- **Ensure everyone has easy access to the North East & Cumbria antimicrobial prescribing guideline.** Print and laminate the quick reference guide and key points from the NICE care pathway for respiratory tract infections (page 5) for clinic rooms.
- **Encourage everyone to download the Cumbria & NE Antimicrobial mobile APP**.
- **COMPLETE THE TARGET TOOLKIT SELF-ASSESSMENT CHECKLIST** and incorporate into an action plan.
- **DO REGULAR QUICK SNAPSHOT 'COMPUTER GENERATED' ANTIBIOTIC PRESCRIBING AUDIT** so you can compare individual clinician prescribing.
- **Why not compare your antibiotic prescribing with the rest of the team?** Audit your own or someone else's prescribing (be an " Antibiotic buddy"). Does it follow guidelines?
- **MEET AS A PRACTICE to share the audit results. Ensure ALL prescribers are aware of these results**. Use Protected Learning Time (PLT) and Continuing Professional Development (CPD) for training on antimicrobial resistance. Use the RCGP Target Toolkit and other resources e.g. presentations, audits, webinars, e-learning, case studies.
- **PRACTICE CASE STUDIES AS A TEAM.** Revise the 'few' indications for the use of the broad spectrum antibiotics and encourage all the team to ONLY prescribe these if they meet these criteria. Consider whether a discussion is needed with the microbiologist.
- **CREATE AN ANTIMICROBIAL STEWARDSHIP ACTION PLAN** using the results of the Target checklist and your audits Review and Update this at least annually.
- **Start reducing prescribing by focusing on the main antibiotic(s) that are being over-used in your practice.**
- **Review need and effectiveness for patients taking long term courses of antibiotics for UTI, COPD, acne, cellulitis.** Prioritise patients who have not had a recent review of their condition; take the opportunity to offer lifestyle and preventative treatments.
- **Chronic Obstructive Pulmonary Disease exacerbation rescue packs** are only recommended once patients have completed pulmonary rehabilitation. More than 3 rescue packs in 12 months should prompt a respiratory review.
- **Have consistency of approach from all prescribers** and agree criteria for prescribing. A varied approach confuses patients, they discover who prescribes antibiotics and seek appointments with these clinicians.
- **Find your Antibiotic Champion**-an individual responsible for antibiotic stewardship in the practice and to help deal with any issues peer to peer with outlying prescribers
- **Plan a Winter Antibiotic Campaign** using materials from Public Health England.
- **Encourage everyone to become an Antibiotic guardian** http://antibioticguardian.com/

Resources

- North East & Cumbria guideline for primary care http://medicines.necsu.nhs.uk/download/north-east-cumbria-antimicrobial-prescribing-guideline-for-primary-care/
- Quick reference guide to common infections in primary care http://medicines.necsu.nhs.uk/download/quick-reference-guide-to-common-infections-in-primary-care/
- Antibiotic management of Recurrent Urinary Tract Infections in Adults http://medicines.necsu.nhs.uk/download/antibiotic__management_of_recurrent_urinary_tract_infections_in_adults_dec_2014x1x-pdf/
- Diabetic foot infection guideline December2016: http://medicines.necsu.nhs.uk/guidelines/cumbria-guidelines/
- NECS Antibiotic e-learning: http://medicines.necsu.nhs.uk/education-training/antibiotics-toolkit/
- RCGP Target Antibiotics Toolkit : http://www.rcgp.org.uktoolkits/target-antibiotics-toolkit.aspx
- Sepsis Trust Toolkit: http://sepsistrust.org/wp-ontent/uploads/2015/08/1409322498GPtoolkit2014.pdf
- Target Webinars: http://target-webinars.com/
- RCGP e-learning: http://www.rcgp.org.uk/clinical-and-research/toolkits/training_resources

References

1. National Institute for Health and Care Excellence (NICE). Clinical Guidelines Respiratory tract infections (self-limiting): prescribing antibiotics NICE guidelines [CG69] Published date: July 2008 https://www.nice.org.uk/Guidance/cg69
2. Antibiotic prescribing – especially broad spectrum antibiotics Published: 15January https://www.nice.org.uk/guidance/ktt9
3. Antimicrobial stewardship: systems and Processes for effective antimicrobialmedicine use https://www.nice.org.uk/guidance/ng15
4. ESPAUR report 2016 https://www.gov.uk/ESPAUR_Report_2016.pdf
5. Drug allergy: diagnosis and management https://www.nice.org.uk/guidance/cg183
6. CKS NICE clinical summaries https://cks.nice.org.uk/

Medicines optimisation website. Available at http://medicines.necsu.nhs.uk/guidelines/cumbria-guidelines/

Date updated: September 2017; Review: September 2018 Author: Melanie Graham

Medicines Optimisation Update

Antibiotic items per STAR PU

Partners in improving local health

NHS Cumbria Clinical Commissioning Group

Acute -Sore Throat/ Pharyngitis/Tonsillitis https://cks.nice.org.uk/sore-throat-acute

- Most sore throats infections are caused by viruses and are self-limiting.
- Avoid antibiotics as 40% resolve in 3 days and 85% in 7 days & pain only reduced by 16 hours
- Always share self-care advice and safety net. Antibiotics to prevent Quinsy NNT>4000.
- Consider a delayed antibiotic or immediate antibiotics if symptoms present >7 days or recurrent, or if patient debilitated, immunosuppressed or with signs of systemic illness
- FeverPAIN or Centor criteria scores may help prescribing decision

Acute Rhinosinusitis https://cks.nice.org.uk/sinusitis

- Avoid antibiotics as 98% resolve in 2-3 weeks, and they only offer marginal benefit after 7 days (NNT15) Many are viral. Advice that adequate analgesia relieves pain.
- Always share self-care advice and safety net.
- Consider a delayed or immediate antibiotic when purulent nasal discharge (NNT8).
- Bacterial sinusitis is more likely in those presenting with severe facial pain (unilateral predominance), fever (>38°), discoloured or purulent discharge and marked deterioration after milder from of illness.

Acute Otitis Media (AOM) https://cks.nice.org.uk/otitis-media-acute

- AOM resolves in 60% in 24hrs without antibiotics, which only reduce pain at 2 days (NNT15) and do not prevent deafness. Antibiotics to prevent Mastoiditis NNT>4000
- Use either Paracetamol (NNT = 6) or ibuprofen (NNT 5) to help relieve earache
- Antibiotic Harms (NNH 17) vs benefits (NNT 15) closely match.
- Consider a delayed antibiotic strategy advise that antibiotics should be started if symptoms have not improved in 4 days of onset of symptoms. Always Safety net.
- Consider immediate antibiotics in children
  - under two years with bilateral infection(NNT 4)
  - Who are at high risk of serious complications because of co-morbidities
  - Whose symptoms have lasted for 4 days or more and are not improving.
  - With perforation and/or discharge. All ages with otorrhoea (NNT 3)
  - who are systemically unwell (fever NNT 5, vomiting NNT 3)
  - recurrent AOM.

Acute - Cough/Bronchitis https://cks.nice.org.uk/chest-infections-adult https://cks.nice.org.uk/cough

- Acute bronchitis is a self-limiting illness that can last for 3 weeks. Most infections are viral. Antibiotics are not needed in people who are otherwise well. Advise use of paracetamol or ibuprofen and plenty of fluids.
- Consider a delayed prescription when it is felt safe not to prescribe antibiotics immediately. Always safety net. Consider using a CRP test if antibiotics are being considered.
- Consider immediate antibiotics if the patient is
  - systemically very unwell. Is at high risk of serious complications because of a pre-existing comorbidities.
  - If the patient is older than 65 years of age with two or more of the following, or older than 80 years with one or more of the following: *Hospital admission in the previous year/has diabetes/congestive heart failure/is taking oral corticosteroids*.

Acne Vulgaris https://cks.nice.org.uk/acne-vulgaris

- Acne is one of the most common dermatological disorders. Up to 60% of affected people seek treatment and about 30% of teenagers have acne that ideally requires medical treatment.
- Provide reassurance and Share SELF-CARE advice http://www.bad.org.uk/for-the-public/patient-information-leaflets/acne
- In MILD to MODERATE ACNE
  - A single topical drug should be considered for people with limited acne which is unlikely to scar (benzoyl peroxide or a topical retinoid).Combined treatment should be considered. antibacterial resistance to *P.acnes* is increasing therefore to avoid development of resistance use antimicrobial preparations such as benzoyl peroxide or azelaic acid at the same time
  - Where possible, a topical antibiotic course should be limited to a maximum of 3 months.
- In MODERATE ACNE on the back or shoulders, or if significant risk of scarring or substantial pigment change.
  - An oral antibiotic (Oxytetracycline, doxycycline or lymecycline) in combination with a topical treatment (but not a topical antibiotic) should be considered. AVOID minocycline and Macrolides (concerns re -adverse effects and resistance)
  - Assess benefit after three months if improvement continue for up to 6 months. CHECK ADHERENCE. Once improvement to systemic treatment is sustained consider discontinuing and continue to manage with topical treatments

Consider early referral for specialist advice if patient has SEVERE ACNE or there has been no response despite good compliance with oral antibiotics and topical treatments and COCP.