**Practice Based Audit Template: Antimicrobial resistance stewardship 2016/17**

**Compliance with prescribing of antibiotics against Stockport CCG Community Antibiotic Guidelines 2016 and national guidance**

**Background information and aims**

Antibiotic prescribing in primary care has been shown to directly affect antimicrobial resistance and has been increasing, highlighting the need to preserve our current antibiotic portfolio and to safeguard against developing resistance patterns. NICE has produced quality standards, we have local guidance and numerous other resources including the TARGET antibiotic toolkit to support better use of antibiotics (see references).

Part A of this audit aims to reduce overall prescribing volume of antibiotics i.e. was an antibiotic necessary and within guidance, could an alternative strategy such as issuing a delayed prescription or providing information be employed instead?

Part B looks at the broad spectrum antibiotics co-amoxiclav, cephalosporins and quinolones. These need to be reserved to treat resistant disease, and should generally be used only when standard and less expensive antibioitics are ineffective. High prescribing of cephalosporins and quinolones is also associated with an increased risk of C. difficile and MRSA.

Part A and/or B will only be carried out in those practices identified as being outliers i.e. amber/red on the qipp comparators data.

By feeding back to GPs the results of the audit(s) it is hoped they will reflect on their prescribing habits and improve on current practice to support the Stockport CCG Antimicrobial resistance (AMR) strategy.

**Audit Criteria and standards**

**Part A**

* People prescribed an antimicrobial have the clinical indication, dose and duration of treatment documented in their clinical record.
* Antibiotics prescribed follow the Stockport community Antibiotic guidelines and are appropriate

**Method:**

Search the practice computer system for all patients who have received one of the following antibiotics in the last 12 months remembering to search on acute items only:

* Amoxicillin: 500mg capsules and/or 125mg/5ml and 250mg/5ml suspension
* Flucloxacillin 500mg capsules
* Trimethoprim 200mg tablets
* Doxycycline 100mg capsules
* Phenoxymethylpenicillin 250mg tablets

***You can decide, depending on your practices top 5 volume antibiotics, and following discussions with the GP prescribing lead which of these drugs you wish to audit. You will also need access to the current Stockport Community Antibiotic Guidelines***

Next randomly select 30 patients or 1 in 3 patients and search the past drug records for each patient to find the date the antibiotic was prescribed. Once you have that date you can find the relevant consultation and document whether an indication was recorded on that date and, if so, what it was and confirm if the chosen antibiotic appears in the formulary and if indication and length of treatment matches those listed in the guidance. Use audit sheet A attached. PBMCs or technicians can carry out the initial searches and data collection. The shaded areas are to be completed by the practice pharmacists.

**Part B (only carry this out if your practice is red)**

* Use of co-amoxiclav, cephalosporins or quinolones is restricted to indications within the Stockport community Antibiotic guidelines or on specific recommendations of microbiology

**Method**

Search the practice computer system for all patients who have received one of the following antibiotics in the last 12 months remembering to search on acute items only:

* Co-amoxiclav 250/125 and 500/125 tablets
* Cefalexin 250mg and 500mg capsules and tablets
* Ciprofloxacin 250 and 500mg tablets

Next randomly select 20 patients or 1 in 3 patients and search the past drug records for each patient to find the date the antibiotic was prescribed. Once you have that date you can find the relevant consultation and document whether an indication was recorded on that date and, if so, what it was and confirm if the chosen antibiotic appears in the formulary and if the indication and length of treatment matches those listed. Record the information on audit sheet B attached. . PBMCs or technicians can carry out the initial searches and data collection. The shaded areas are to be completed by the practice pharmacists.

**Results**

Share and discuss the results of your baseline auditwith the prescribing lead. Consider these questions:

* Are the results what we expected, are there any patterns i.e. a particular GP using an incorrect antibiotic first line
* Can we make any improvements?
* What might be stopping us getting better?

Identify areas for improvement and formulate an action plan to optimise prescribing:

* + Was an antibiotic necessary, particularly in acute respiratory tract infections?
  + What alternative strategies could be used instead of prescribing?
  + Why was a non-formulary drug chosen or a non-formulary indication?
  + Why was the length of treatment chosen not in line with formulary guidance?
  + Was the reason for prescribing an antibiotic well documented in the consultation record?

Overall generate ideas for the things that you could do differently. Start with small changes to begin with and test out your ideas e.g. delayed antibiotic prescribing, provision of the patient leaflet on how to treat your infection at home (see appendix), GP training & education update, waiting room posters and videos. These resources are all available on the TARGET toolkit website. You may also wish to discuss the results at a practice meeting, recirculate the local antibiotics guidelines or conduct further audits, is there a nominated GP practice antibiotic lead?

**References**

TARGET toolkit: <http://www.rcgp.org.uk/targetantibiotics>: Useful for patient letters, GP education materials and self-assessment checklist

Stockport Community Antibiotic guidelines available on the CCG website: [CCG antibiotic formulary](http://www.stockportccg.nhs.uk/practicehub/medicines-optimisation/formulary/)

NICE guidelines and quality standards available at the following link: [NICE antibiotic information](https://www.nice.org.uk/guidance/conditions-and-diseases/infections/antibiotic-use)

**DATA COLLECTION SHEET PART A Name of Antibiotic: Date of audit:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Patient ID and gender** | **Age** | **No. of days treatment** | **Indication recorded? Y/N and date** | **Formulary indication? Y/N and list indication** | **Other: list here any other relevant information such as appropriateness** | **Recommendations/suggestions** |
| *Fred Smith* | *73* | *5* | *Y* | *Y lower respiratory tract infection* | *No other risks. Patient demand* | *Could have issued delayed Rx with advice* |
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Shaded areas to be completed by the practice pharmacist

**DATA COLLECTION SHEET B: Co-amoxiclav, quinolones and cephlasporins Date of audit:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Patient ID and gender** | **Age** | **Name of antibiotic and no. of days treatment** | **Indication recorded? Y/N** | **Formulary indication? Y/N and list indication** | **Other: list here any other relevant information such as recommended by microbiology** | **Recommendations/suggestions** |
| *Fred Smith* | *60* | *Ciprofloxacin 500 mg* | *Y* | *N lower respiratory tract infection* | *No other risks, Friday afternoon, going on hols* | *Should have tried Amoxicillin 500mg or Doxycycline 1st* |
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Shaded areas to be completed by the practice pharmacist

**Patient Name Your doctor or nurse recommends that you self-care**



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Your infection** | | **Usually lasts** | **How to treat yourself better for these infections, now and next time** | **When should you get help:**  Contact your GP practice or contact NHS 111 (England), NHS 24 (Scotland dial 111), or NHS Direct (Wales dial 0845 4647) |
|  | Middle-ear infection | 4 days | * Have plenty of rest. * Drink enough fluids to avoid feeling thirsty. * Ask your local pharmacist to recommend medicines to help your symptoms or pain (or both). * Fever is a sign the body is fighting the infection and usually gets better by itself in most cases. You can use paracetamol if you or your child are uncomfortable as a result of a fever. * Use a tissue and wash your hands well to help prevent spread of your infection to your family, friends and others you meet. * Other things you can do suggested by GP or nurse:   .....................................................  ..................................................... | **1. to 8. are possible signs of serious illness and should be assessed urgently.**  **Phone for advice if you are not sure how urgent the symptoms are.**   1. If you develop a severe headache and are sick. 2. If your skin is very cold or has a strange colour, or you develop an unusual rash. 3. If you feel confused or have slurred speech or are very drowsy. 4. If you have difficulty breathing. Signs that suggest breathing problems can include:    * breathing quickly    * turning blue around the lips and the skin below the mouth    * skin between or above the ribs getting sucked or pulled in with every breath. 5. If you develop chest pain. 6. If you have difficulty swallowing or are drooling. 7. If you cough up blood. 8. If you are feeling a lot worse.   **Less serious signs that can usually wait until the next available GP appointment:**   1. If you are not starting to improve a little by the time given in the ‘Usually lasts’ column. 2. In children with middle-ear infection: if fluid is coming out of their ears for more than 10 days or if they have new deafness. 3. Other ………………………………………………………………………………………………………………… |
|  | Sore throat | 7 days |
|  | Common cold | 10 days |
|  | Sinusitis | 18 days |
|  | Cough or bronchitis | 3 weeks |
|  | Other infection:  ............................. | ....... days |

* **Back-up antibiotic prescription to be collected after days only if you are not starting to feel a little better or you feel worse.**
* **Collect from: GP reception GP or nurse Pharmacy**
* Colds, most coughs, sinusitis, ear infections, sore throats, and other infections often get better without antibiotics, as your body can usually fight these infections on its own.
* If you take antibiotics when you don’t need them, it allows bacteria to build up resistance. This means, they’re less likely to work in the future, when you really might need them.
* Antibiotics can cause side effects such as rashes, thrush, stomach pains, diarrhoea, reactions to sunlight, other symptoms, or being sick if you drink alcohol with metronidazole.
* Find out more about how you can make better use of antibiotics and help keep this vital treatment effective by visiting and pledging at [**www.** **antibioticguardian.com**](http://www.antibioticguardian.com)

**Never share antibiotics and always return any unused antibiotics to a pharmacy for safe disposal**

**Leaflet developed in collaboration with these professional societies.**

