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Medicines Optimisation

Adults Prescribed Proton Pump Inhibitors (PPIs) on repeat prescription

Care Bundle

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1. Introduction

1.1. What is a care bundle?

A care bundle is a set of interventions that, when used together, significantly improve patient outcomes. The measures chosen reflect best practice and are based on NICE quality standards or other national guidance. Care bundles have been used extensively and successfully in Secondary Care, their use in Primary Care is more recent. This care bundle is based on the work of Healthcare Improvement Scotland and the Scottish Patient Safety Programme in Primary Care.

Reliability in health care is a failure-free operation over time. This equates to ensuring patients receive all the evidence-based care they are entitled to receive.

A care bundle is a structured way of improving processes of care to deliver enhanced patient safety and clinical outcomes. In relation to care bundles, this means ensuring that patients receive optimum care at every contact. The process for achieving reliability is to implement this set of measures (a care bundle). The key measure in a care bundle is the score which measures the level of compliance with all measures for all patients.

The care bundle data collection tool is a way of sampling whether optimum care is being delivered by applying the bundle to a sample of patients. This approach is therefore very different from traditional auditing approaches that are designed to identify whether individual measures are being implemented.

1.2. What makes up a care bundle?

- 4-5 measures
- All or nothing compliance
- Measurement done by a non-clinician if possible
- Spread over patient's journey
- Evidence based
- Creates teamwork and communication
- Multiple functions of care essential for desired outcome

1.2.1. How should a care bundle be used in practice?

A care bundle is a quality improvement tool which can be used in general practice to identify both where care is in line with best practice and where improvements are needed. Some are disease specific and some are medication specific. The latter are also be known as patient safety bundles as they relate to high risk medication.

Bringing about changes in practice is not easy. To be an effective tool the results of the care bundle measurements must be discussed by ALL members of the team involved in the care of the patient. The practice team then need to take ownership of the issues identified and commit to changing the way care is provided, using tools such as the 'Plan, Do, Study, Act (PDSA) cycle.

Principles of successful measurement:

- The support of all members of the practice team should be obtained
- Data should be collected anonymously
- The results should be discussed by every member of the team
- The results should be used to plan and implement improvement initiatives
- Clinician support may be needed initially by the data collector until they are familiar with the measures.

1.3. Records

The care bundle is not a performance tool and so there is no requirement to report the measures achieved. The practice should keep a reflective log of improvements.

1.4. Resources

This care bundle has the following supporting resources:

- A word document data collection form
- An excel spreadsheet data collection form with a graphing function
- A PowerPoint presentation for use in educational sessions
- A reflective log template

Further information on Care Bundles and Improvement Models can be found at www.healthcareimprovementscotland.org/pspc.aspx

Further advice can be obtained from the Medicines Optimisation team, and specific queries about this care bundle can be directed to the author (details are on the front page).

2. Adults Prescribed Proton Pump Inhibitors (PPIs) on repeat prescription

2.1. Search Criteria

Please identify a random sample of up to 20 adult patients a month in your practice taking a proton pump inhibitor (PPI) Use the data collection form to record the answer to each measure and transfer this to the spreadsheet. This should be repeated over a period of time and the results discussed by the clinical team at regular intervals. Use of the spreadsheet will enable changes in practice to be monitored and compliance with the care bundle to be measured.

2.2. Measures

01

Measure	Have medicines that exacerbate dyspepsia have been reviewed?
Rationale	Dyspepsia-related symptoms may be caused by certain medications. The main medicines which can cause dyspepsia are shown below (list not exhaustive): Non-steroidal anti-inflammatory drugs (NSAIDs) Aspirin (including 75 mg) Corticosteroids Calcium antagonists Antibiotics Bisphosphonates Nitrates (e.g. isosorbide mononitrate) Theophyllines Iron Slow-release potassium Anticholinergic drugs (e.g. tricyclic antidepressants, antipsychotics, oxybutynin) Where possible these medicines should be reviewed and either discontinued or, if it is not clinically appropriate to discontinue and dyspepsia remains a problem, continued with gastric protection in the form of a PPI.
Source	NICE Clinical Guideline 184. Dyspepsia and gastro-oesophageal reflux disease. September 2014. https://www.nice.org.uk/Guidance/CG184 All Wales Proton Pump Inhibitor and Dyspepsia Resource Pack http://www.awmsg.org/docs/awmsg/medman/All%20Wales%20Proton%20Pump%20Inhibitor%20and%20Dyspepsia%20Resource%20Pack.pdf Map of Medicine –Cumbria Local Pathways

02

Measure	Has lifestyle advice has been provided?

Rationale	• **Advise people with dyspepsia that symptoms may improve if they:**
	  ○ Lose weight (if they are overweight).
	  ○ Stop or reduce smoking (if they are a smoker).
	  ○ Stop or reduce alcohol consumption.
	  ○ Stop or reduce intake of any food or drink associated with worsening symptoms.
	• **Advise people with reflux symptoms contributing to dyspepsia to:**
	  ○ Avoid having meals within 3–4 hours of going to bed.
	  ○ Raise the height of the head of their bed by a few inches.

Source	NICE Clinical Guideline 184. Dyspepsia and gastro-oesophageal reflux disease. September 2014. https://www.nice.org.uk/Guidance/CG184 Map of Medicine – Cumbria Local Pathways

03

Measure	Has the indication for PPI use been clearly documented?
Rationale	It remains good practice to ensure that there is a clear indication for treatment recorded. This ensures appropriate duration of treatment is given for that condition and that it is shared with all healthcare professionals involved in the patient's treatment. PPIs should only be started or continued where there is a valid documented indication.
Source	PrescQIPP Bulletin 92 (May 15) Safety of long term proton pump inhibitors (PPIs). All Wales Proton Pump Inhibitor and Dyspepsia Resource Pack http://www.awmsg.org/docs/awmsg/medman/All%20Wales%20Proton%20Pump%20Inhibitor%20and%20Dyspepsia%20Resource%20Pack.pdf

04

Measure	Have patients been advised to stop taking their PPI 2 weeks before a test for Helicobacter pylori?
Rationale	To improve the accuracy of Helicobacter pylori (H pylori) testing it is important to have a 2-week washout period after using a proton pump inhibitor (PPI). Improving the accuracy of the test will ensure that treatment for H pylori infection is given only if needed. Treatment for H pylori infection is complex and there is concern that treatment without an accurate diagnosis may lead to increasing antimicrobial resistance. In addition, treatment for H pylori can be unpleasant for the patient and has an increased risk of antibiotic-associated diarrhoea and enteric infections such as Clostridium difficile.
Source	NICE QS96: Dyspepsia and gastro-oesophageal reflux disease in adults. July

	2015 https://www.nice.org.uk/guidance/qs96 Map of Medicine –Cumbria Local Pathways BNF (Oct 16)

05

Measure	Has the patient been offered an annual review where the potential risks associated with continuing the PPI AND stepping down/stopping the PPI and have been discussed?
Rationale	Patients who require long term management of dyspepsia should be offered an annual review to reduce potential risk of adverse effects (i.e. Clostridium difficile, bone fractures, higher mortality in older patients, acute interstitial nephritis, community acquired pneumonia, hypomagnesaemia, vitamin B12 deficiency and rebound acid hypersecretion). They should be encouraged to try stepping down to the lowest effective dose needed to control symptoms, or 'as needed'/'on demand' to manage their own symptoms, or stopping treatment completely where appropriate. (There may be indications where the benefits of long term PPI use outweigh the risks e.g. Barrett's Oesophagus, oesophageal stricture dilation, and gastro protection for NSAID treatment – assess on an individual basis and review regularly). Advise patient to return to self-treatment with antacid and/or alginate therapy where required, either prescribed or purchased over-the-counter (OTC), especially if rebound symptoms occur. (Antacids should be used for at least 2 weeks when withdrawing PPI treatment to help with rebound secretions). Avoid long term, frequent dose, continuous antacid therapy in functional dyspepsia (it only relieves symptoms in the short term rather than preventing them).
Source	NICE Clinical Guideline 184. Dyspepsia and gastro-oesophageal reflux disease. September 2014 . https://www.nice.org.uk/Guidance/CG184 PrescQIPP Bulletin 92 (May 15) Safety of long term proton pump inhibitors (PPIs).

Appendix One: Abbreviations

Abbreviation	Definitions
PPI	Proton Pump Inhibitor
NSAID	Non-Steroidal Anti Inflammatory Drug