NHS

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ASPIRE
Action to Support Practices Implementing Research Evidence

Can your practice make NSAID prescribing safer?

Dear Practice Manager and colleagues

Prescribing safety is a high priority for patients, practices, their CCGs, the CQC and NHS England. Local general practitioners, practice nurses and practice managers have selected improving the safety of NSAID prescribing as a priority.

As part of this initiative, supported by West Yorkshire CCGs, we plan to provide regular feedback on 'risky prescribing' involving NSAIDs and antiplatelet drugs. This is the first report for your practice. We will provide quarterly updates on your practice's achievement. In addition we will offer two outreach meetings (CPD accredited), computerised searches to identify patients and additional pharmacist support to review patient notes. In the outreach meetings we will work with you to create an action plan (see attached Word template) or you can use this independently.

Please distribute this report to your practice team. We will be in touch to arrange a convenient time at a practice meeting to discuss how we can support you to protect your patients.

We know that practices are currently under a great deal of pressure and there are increasing demands within consultations. However, NSAID use is a well-recognised indicator of prescribing safety in patients at higher risk of developing serious side effects. Reducing NSAID prescribing can prevent adverse events (e.g. gastro-intestinal bleeding, worsening of chronic renal impairment and precipitating heart failure) all of which increase demand on your practice.

Whilst all prescribing carries some unavoidable risk, **we invite you to review your practice's prescribing of NSAIDS and to consider whether you can do more to protect your patients**. We will offer your practice support to help make prescribing safer.

We will also send ten copies of this report for your team. If you require more please contact Dr Tom Willis on **aspire@leeds.ac.uk** or 0113 343 6731.

"We do our patients an injustice by accepting risks without giving them an opportunity to protect themselves from harm. Working together with patients to reduce the risk of serious harm is the way forward. The ASPIRE programme offers practices a unique and customised way to improve prescribing behaviours"

Tony Jamieson
Medicines Safety Lead, Leeds CCGs

Yours sincerely

Dr Robbie Foy
General Practitioner & Professor of Primary Care
on behalf of the ASPIRE team

For more information on ASPIRE, please see **http://medhealth.leeds.ac.uk/aspire**

Why review risky NSAID prescribing?

A third of all preventable drug related emergency admissions are due to NSAIDs or antiplatelet drugs[1]. Additionally, NSAIDs and antiplatelets cause up to 80% of all preventable drug related deaths.

We have analysed prescribing in 37,210 patients from a random sample of 89 general practices across West Yorkshire. We found a 7-fold difference in risky NSAID prescribing between the lowest and highest achieving practices. Risky NSAID prescribing was more likely if patients were male, aged 40–80, or had more than one long term condition. However, much variation cannot be explained away by patient (e.g. ethnicity) or practice factors (e.g. local deprivation or the number of practice partners) and is likely to be related to differences in clinician behaviour and how individual general practices organise their care.

What is the evidence base on NSAID prescribing?

A PPI should be co-prescribed with an NSAID if the patient: has a history of peptic ulceration, is over 75, prescribed aspirin and over 65, prescribed aspirin and clopidogrel and over 65; or prescribed warfarin. An NSAID should be stopped if the patient: has heart failure, is prescribed both a diuretic and an ACE-inhibiter, or is diagnosed with CKD[3,4,5].

Harms

The risk of NSAID associated renal failure and GI bleeds is highest in those with existing renal impairment, the elderly, and those with a history of peptic ulcer[2].

Co-prescription of other drugs that may cause renal impairment further increases the risk. A ‘triple whammy’ of all three of NSAIDs, diuretics and ACEIs/ARBs has a fatality rate as high as 10%[3].

Benefits

PPIs are both effective and safe. NICE[4] recommends that patients prescribed NSAIDs are offered PPI cover to reduce the risk of GI bleeds. Prescribing a PPI with NSAID prescription in those with a history of GI bleeding reduces the risk (NNT = 3)[5] thus reducing avoidable hospital admissions.

The key message is that reducing risk will prevent harm and will help to reduce unplanned admissions

References

1. Howard, R. L., Avery, A. J., Slavenburg, S., Royal, S., Pipe, G., Lucassen, P., & Pirmohamed, M. (2007). *Which drugs cause preventable admissions to hospital? A systematic review*. British journal of clinical pharmacology, 63(2), 136-147.
2. Huerta C, Castellsague J, Varas-Lorenzo C, Garcia Rodriguez LA. *Nonsteroidal anti-inflammatory drugs and risk of ARF in the general population*. American Journal of Kidney Diseases, 45(3), 531-539.
3. Loboz K, Shenfield G. *Drug combinations and impaired renal function – the ‘triple whammy’*. British Journal of Clinical Pharmacology 2004; 59(2), 239–243 DOI:10.1111/j.1365-2125.2004.02188.x
4. http://www.nice.org.uk/guidance/cg184/chapter/1-recommendations
5. http://www.medicine.ox.ac.uk/bandolier/booth/painpag/nsae/nsae.html

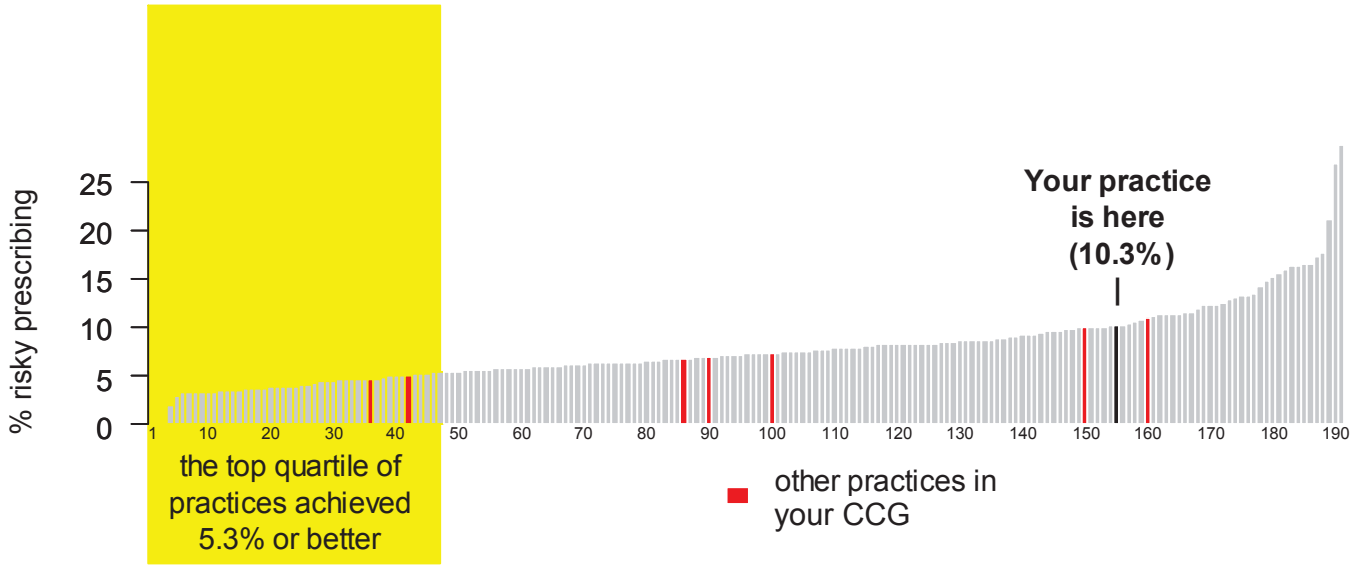
These notes are intended to provide practice specific information. They are not intended to replace other sources of information.

How well is your practice doing?

Achievement in participating practices across West Yorkshire 2014/15 QOF year

The graph below demonstrates:

- Your practice (black bar) and % risky prescribing (10.3%). A lower value indicates better clinical practice, i.e. fewer patients are prescribed in a risky manner (against guidelines)
- Achievement throughout West Yorkshire overall (range 0 to 28.8%)
- The top quartile of practices within West Yorkshire (yellow box – achieving 5.3% or below)
- Other practices within your CCG (red bars, n=7)



Indicators of risky prescribing for your practice

Indicator	Proportion of patients to be reviewed (%)	Number of patients to be reviewed
Prescribing of a traditional oral NSAID or low dose aspirin in patients with a history of peptic ulceration WITHOUT co-prescription of a gastro-protective drug	**60**	**3/5**
Prescribing of a traditional oral NSAID in patients aged 75 or over WITHOUT co-prescription of a gastro-protective drug	**55.2**	**16/29**
Prescribing of a traditional oral NSAID and aspirin in patients aged 65 or over WITHOUT co-prescription of a gastro-protective drug	**33.3**	**2/6**
Prescribing of aspirin and clopidogrel in patients aged 65 or over WITHOUT co-prescription of a gastro-protective drug	**47.1**	**8/17**
Prescribing of warfarin and a traditional oral NSAID WITHOUT co-prescription of a gastro-protective drug	**-**	**-/-**
Prescribing of warfarin and low-dose aspirin or clopidogrel, WITHOUT co-prescription of a gastro-protective drug	**66.7**	**8/12**
Prescribing an oral NSAID in patients with heart failure	**2.9**	**3/104**
Prescribing an oral NSAID in patients prescribed both a diuretic and an ACE-inhibitor / ARB	**6.1**	**17/278**
Prescribing an oral NSAID in patients with CKD	**4.2**	**10/236**
Combined indicators	**10.3**	**55/536**

Higher levels on these indicators generally suggest risky prescribing practice; lower levels generally suggest safer clinical practice.

What next?

Our team will be in touch to offer an outreach visit to support any changes your practice would like to make. Or you can use the attached template to guide a discussion about who will do what by when. It may involve one or more of the following:

1. Set up a system for opportunistic review of higher risk patients using the S1 prompt that we can provide. Consider whether to continue or stop drug, reduce dose or total exposure by prescribing PRN, trying an alternative and/or adding gastro-protection.
2. Run the audit template that we will provide to identify which patients might benefit. Conduct a record review and if necessary a telephone or face-to-face review of those at higher risk. Consider allocating records for review within the team to the patient's usual GP or to a pharmacist for review and follow-up (if necessary) by usual GP. Could administrative staff identify and code patients?
3. Set a target to increase the number of patients reviewed from the last feedback report.
4. Review your progress in light of further feedback we will send you later.

About ASPIRE

We are a multi-disciplinary group involving experienced researchers (from Leeds, Bradford and York), general practitioners, clinical leads from NICE, managers and patients. We also have panels of patients and international experts advising our programme. For further information see: **http://medhealth.leeds.ac.uk/aspire**.

Clinical research continually produces new evidence that can benefit patients. Despite the best efforts of many professionals, this evidence does not reliably find its way into everyday patient care. Much research suggests that we can do better for our patients – everyone knows this, and knows that achieving it is often easier said than done. We also understand the many competing demands that general practices face.

Our mission is to develop and test ways to support general practices in implementing evidence-based practice effectively and realistically within the constraints and challenges of real-life general practice.

ASPIRE is supported by all CCGs and by general practices across West Yorkshire