Practice Plus Webinar

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Lead Clinical Pharmacist
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OXFORD

Barriers and facilitators of implementing proactive deprescribing within primary care: a systematic review

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Abstract

Objective Proactive deprescribing – identifying and discontinuing medicines where harms outweigh benefits – can minimise problematic polypharmacy, but has yet to be implemented into routine practice. Normalisation process theory (NPT) can provide a theory-informed understanding of the evidence base on what impedes or facilitates the normalisation of routine and safe deprescribing in primary care. This study systematically reviews the literature to identify barriers and facilitators to implementing routine safe deprescribing in primary care and their effect on normalisation potential using NPT.

PubMed, MEDLINE, Embase, Web of Science, International Pharmaceutical Abstracts, CINAHL, PsycINFO and The Cochrane Library were searched (1996–2022). Studies of any design investigating the implementation of deprescribing in primary care were included. The Mixed Methods Appraisal Tool and the Quality Improvement Minimum Quality Criteria Set were used to appraise quality. Barriers and facilitators from included studies were extracted and mapped to the constructs of NPT.

Key findings A total of 12,027 articles were identified, 56 articles included. In total, 178 barriers and 178 facilitators were extracted and condensed into 14 barriers and 16 facilitators. Common barriers were negative deprescribing perceptions and suboptimal deprescribing environments, while common facilitators were structured education and training on proactive deprescribing and utilising patient-centred approaches. Very few barriers and facilitators were associated with reflexive monitoring, highlighting a paucity of evidence on how deprescribing interventions are appraised.

Summary Through NPT, multiple barriers and facilitators were identified that impede or facilitate the implementation and normalisation of deprescribing in primary care. However, more research is needed into the appraisal of deprescribing post-implementation.

Keywords: Inappropriate prescribing; adverse drug reactions; primary care; medicines management; medication review

Table 5 Main barriers and facilitators to implementing proactive deprescribing in primary care

Construct of NPT	Barriers of implementation	Facilitators of implementation
Coherence	• Negative deprescribing perceptions • Patient and HCP strong belief in continuation of medicines • Limited understanding of HCP roles in deprescribing • Uncertainty and lack of information about how to deprescribe • Lack of interest in deprescribing	• Patients receiving deprescribing education • Structured education and training for HCPs on proactive deprescribing • Belief in the consequences of PIMs and ADRs • Deprescribing accepted as scope of practice • Prior agreement on deprescribing clinical decision rules
Cognitive participation	• HCPs apprehensive to discontinue medicines • Patient resistance to deprescribing recommendations • Lack of internal and external collaboration • Lack of proactively identifying patient needs	• Engagement of HCPs and patients • Positive relationships between HCPs and patients • MDT Involvement • Patient-centred approach
Collective action	• Sub-optimal deprescribing environment • Strong prescribing culture • Poor communication and information sharing • Lack of confidence to deprescribe	• Availability of deprescribing resources and support for HCPs • Supportive guidance for patients • Collaborative MDT sharing workload • Presence of predefined deprescribing process • Confidence in deprescribing • Requiring medicines to have an associated indication for use
Reflexive Monitoring	• Deprescribing tools not used as initially intended	• Individualised feedback on prescribing for GPs

HCP, healthcare professional; PIMs, potentially inappropriate medicines; ADRs, adverse drug reactions; MDT, multidisciplinary team

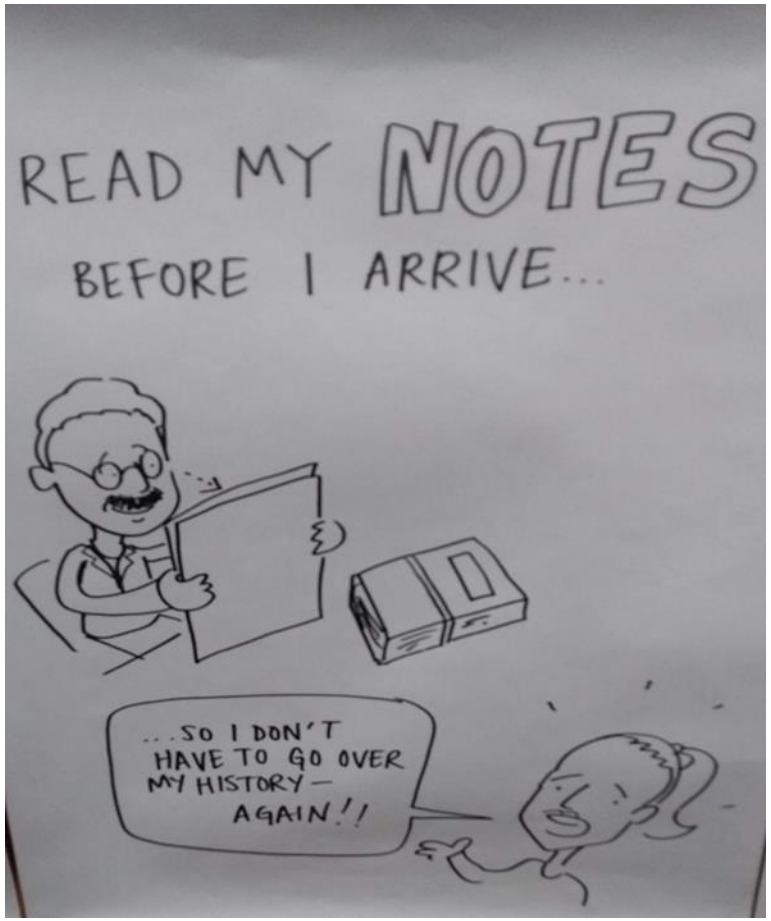
Get an SMR **PLAN !**

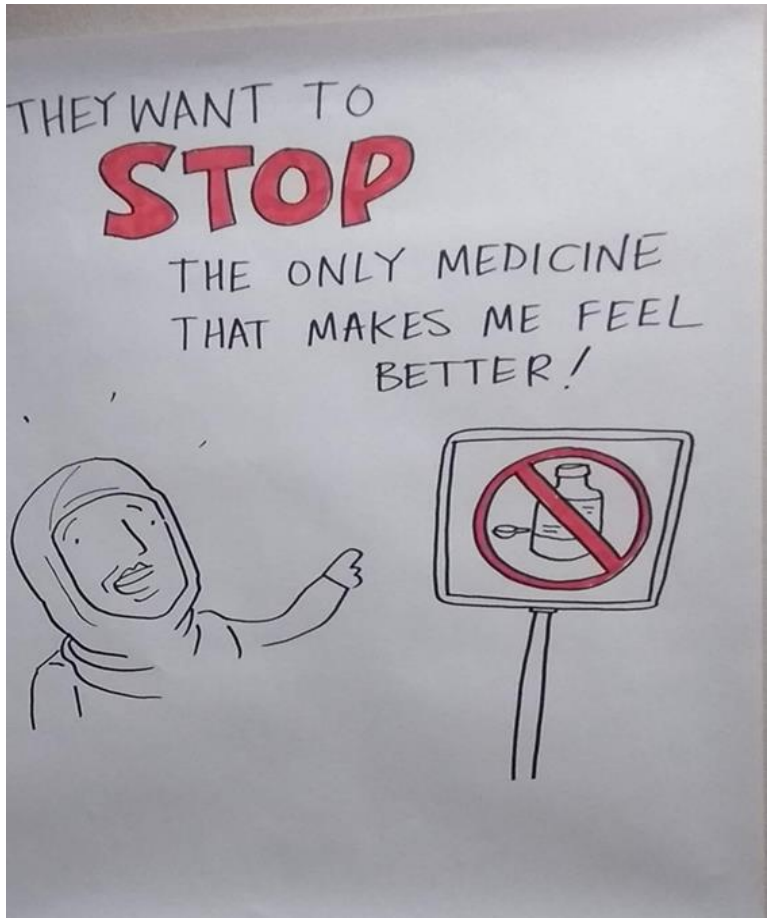
Prepare

Listen

Agree

Notes





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Preparing for a medication review – how IMPACT can help you

Katie Smith, Director of Clinical Quality

July 2023

PrescQIPP

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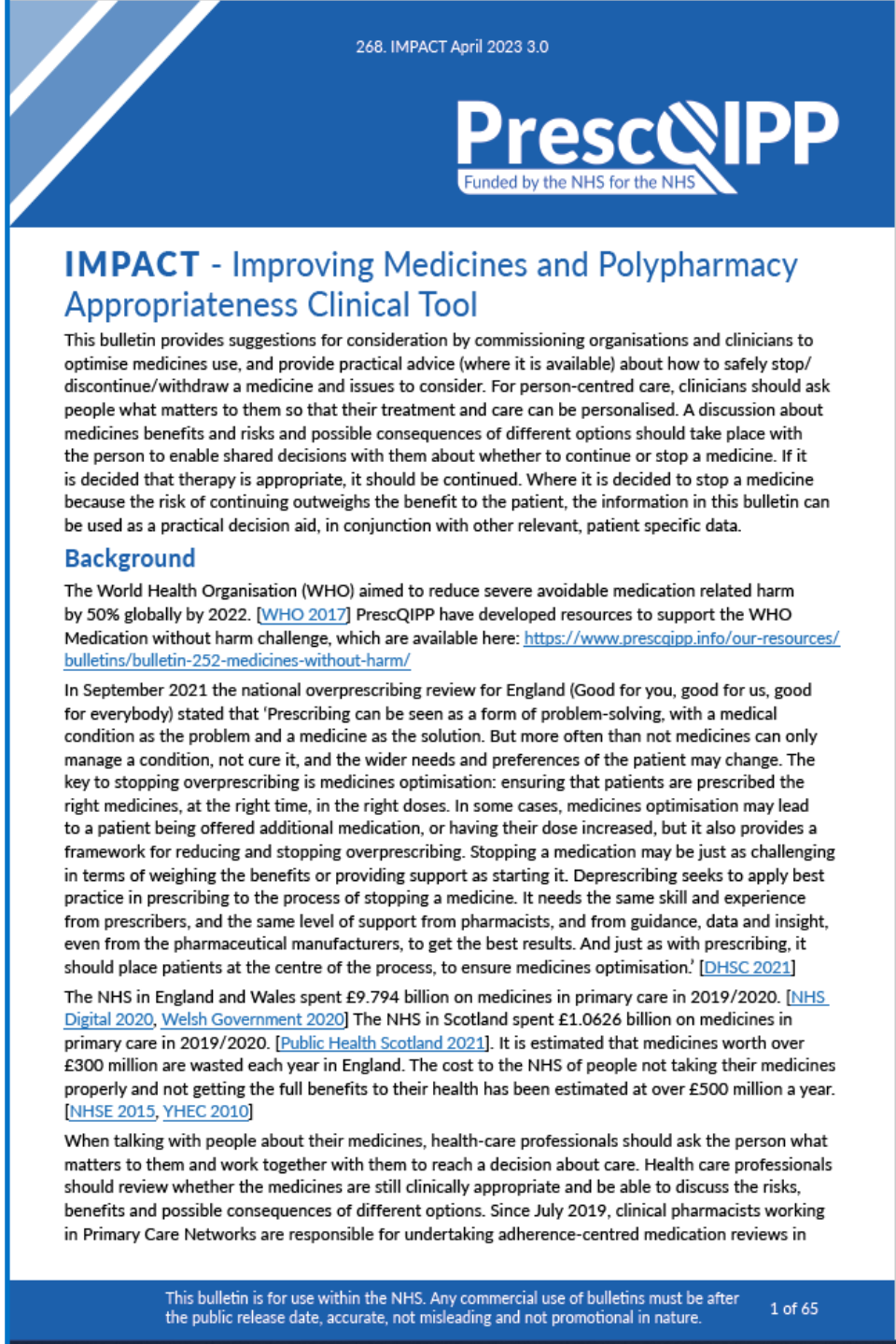
What is IMPACT?

- **I**mproving **M**edicines and **P**olypharmacy **A**ppropriateness **C**linical **T**ool
- Suggestions to optimise medicines use and practical info on how to stop if needed
- Highlights high risk medicines and measures to improve patient safety to prevent incidents of avoidable significant harm
- Summarises information from lots of sources for UK medicines
- Information evidence based and all references hyperlinked
- Information presented in two tools – evidence summary and data pack



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IMPACT - Improving Medicines and Polypharmacy Appropriateness Clinical Tool

This bulletin provides suggestions for consideration by commissioning organisations and clinicians to optimise medicines use, and provide practical advice (where it is available) about how to safely stop/discontinue/withdraw a medicine and issues to consider. For person-centred care, clinicians should ask people what matters to them so that their treatment and care can be personalised. A discussion about medicines benefits and risks and possible consequences of different options should take place with the person to enable shared decisions with them about whether to continue or stop a medicine. If it is decided that therapy is appropriate, it should be continued. Where it is decided to stop a medicine because the risk of continuing outweighs the benefit to the patient, the information in this bulletin can be used as a practical decision aid, in conjunction with other relevant, patient specific data.

Background

The World Health Organisation (WHO) aimed to reduce severe avoidable medication related harm by 50% globally by 2022. [WHO 2017] PrescQIPP have developed resources to support the WHO Medication without harm challenge, which are available here: https://www.prescqipp.info/our-resources/bulletins/bulletin-252-medicines-without-harm/

In September 2021 the national overprescribing review for England (Good for you, good for us, good for everybody) stated that 'Prescribing can be seen as a form of problem-solving, with a medical condition as the problem and a medicine as the solution. But more often than not medicines can only manage a condition, not cure it, and the wider needs and preferences of the patient may change. The key to stopping overprescribing is medicines optimisation: ensuring that patients are prescribed the right medicines, at the right time, in the right doses. In some cases, medicines optimisation may lead to a patient being offered additional medication, or having their dose increased, but it also provides a framework for reducing and stopping overprescribing. Stopping a medication may be just as challenging in terms of weighing the benefits or providing support as starting it. Deprescribing seeks to apply best practice in prescribing to the process of stopping a medicine. It needs the same skill and experience from prescribers, and the same level of support from pharmacists, and from guidance, data and insight, even from the pharmaceutical manufacturers, to get the best results. And just as with prescribing, it should place patients at the centre of the process, to ensure medicines optimisation.' [DHSC 2021]

The NHS in England and Wales spent £9.794 billion on medicines in primary care in 2019/2020. [NHS Digital 2020, Welsh Government 2020] The NHS in Scotland spent £1.0626 billion on medicines in primary care in 2019/2020. [Public Health Scotland 2021]. It is estimated that medicines worth over £300 million are wasted each year in England. The cost to the NHS of people not taking their medicines properly and not getting the full benefits to their health has been estimated at over £500 million a year. [NHSE 2015, YHEC 2010]

When talking with people about their medicines, health-care professionals should ask the person what matters to them and work together with them to reach a decision about care. Health care professionals should review whether the medicines are still clinically appropriate and be able to discuss the risks, benefits and possible consequences of different options. Since July 2019, clinical pharmacists working in Primary Care Networks are responsible for undertaking adherence-centred medication reviews in

How to use IMPACT for a medication review

https://www.prescqipp.info/our-resources/bulletins/bulletin-268-impact

Two options -

1. Look up each medicine in the IMPACT bulletin, click through to the original references for more information, manually work out priority for reviewing
2. Produce a medicines list using the IMPACT data pack, which you can prioritise based on clinical and deprescribing risk, links to deprescribing algorithms

1. Using the IMPACT document

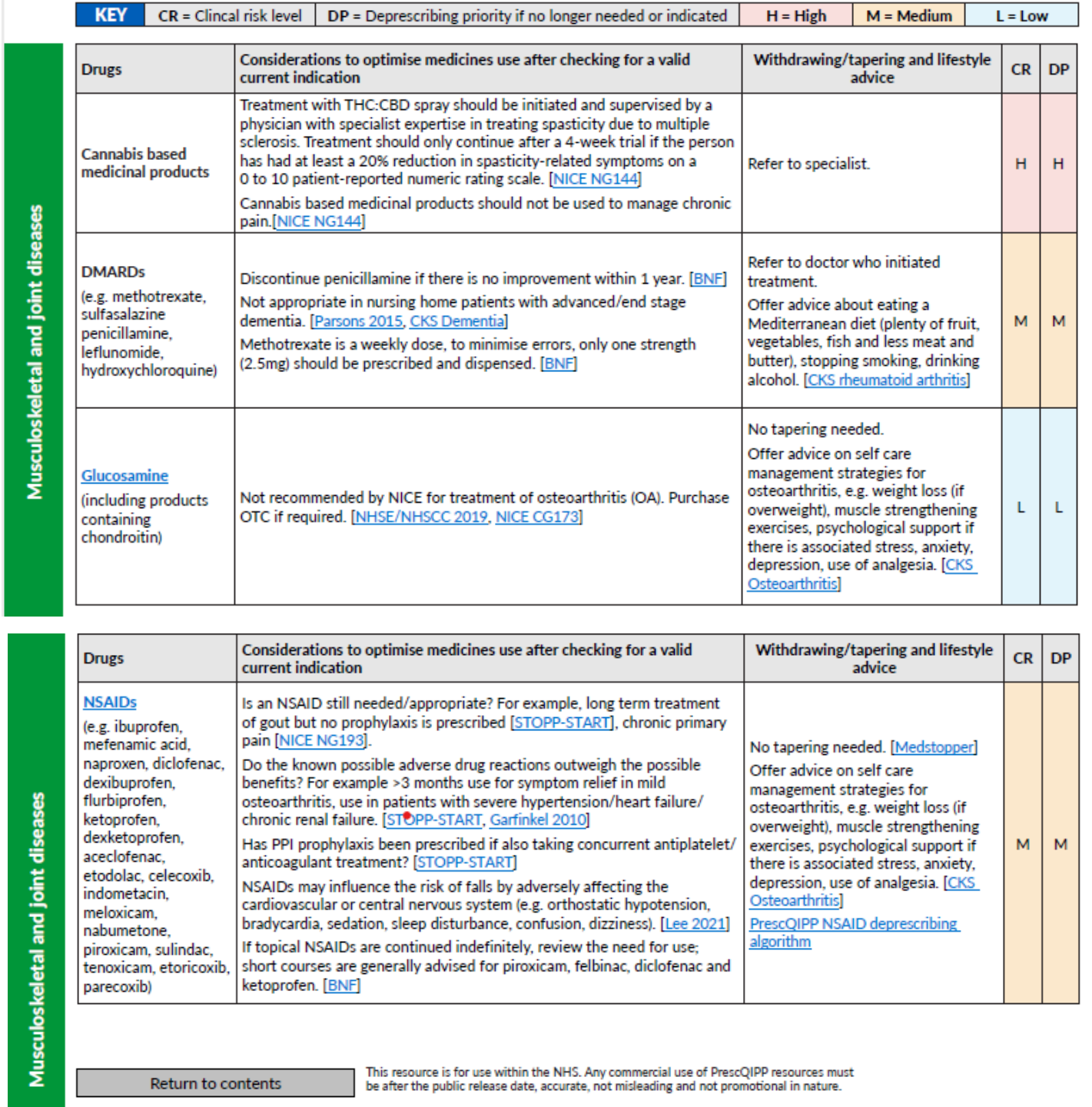
Interactive contents page allows you to click easily between medicines

Contents

Contents continued on next page

IMPACT layout

- Classes & individual medicines
- PrescQIPP resources
- Referenced
- Deprescribing algorithms
- Lifestyle advice
- Clinical risk & deprescribing priority
- Each page has key at top, back to contents at bottom



KEY	CR = Clincal risk level	DP = Deprescribing priority if no longer needed or indicated	H = High	M = Medium	L = Low

Musculoskeletal and joint diseases

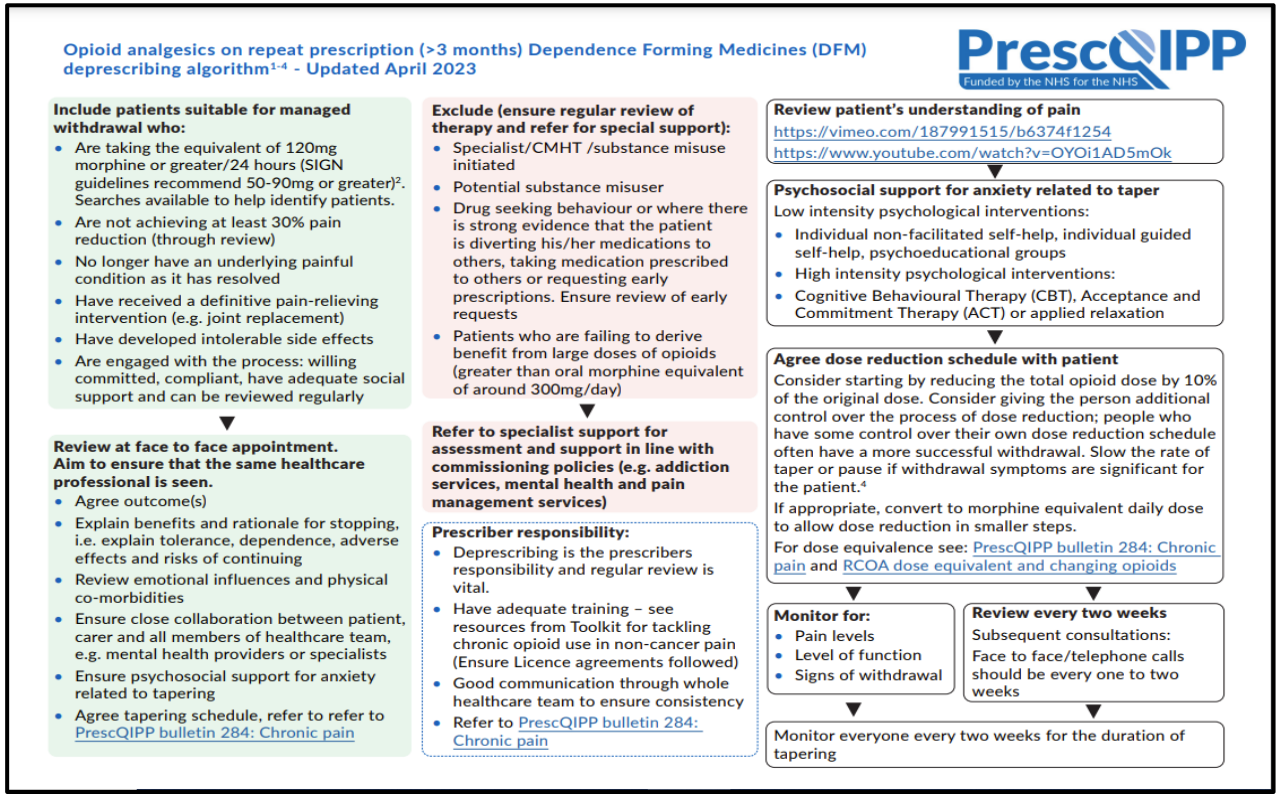
Drugs	Considerations to optimise medicines use after checking for a valid current indication	Withdrawing/tapering and lifestyle advice	CR	DP
Cannabis based medicinal products	Treatment with THC:CBD spray should be initiated and supervised by a physician with specialist expertise in treating spasticity due to multiple sclerosis. Treatment should only continue after a 4-week trial if the person has had at least a 20% reduction in spasticity-related symptoms on a 0 to 10 patient-reported numeric rating scale. [NICE NG144] Cannabis based medicinal products should not be used to manage chronic pain.[NICE NG144]	Refer to specialist.	H	H
DMARDs (e.g. methotrexate, sulfasalazine penicillamine, leflunomide, hydroxychloroquine)	Discontinue penicillamine if there is no improvement within 1 year. [BNF] Not appropriate in nursing home patients with advanced/end stage dementia. [Parsons 2015, CKS Dementia] Methotrexate is a weekly dose, to minimise errors, only one strength (2.5mg) should be prescribed and dispensed. [BNF]	Refer to doctor who initiated treatment. Offer advice about eating a Mediterranean diet (plenty of fruit, vegetables, fish and less meat and butter), stopping smoking, drinking alcohol. [CKS rheumatoid arthritis]	M	M
Glucosamine (including products containing chondroitin)	Not recommended by NICE for treatment of osteoarthritis (OA). Purchase OTC if required. [NHSE/NHSCC 2019, NICE CG173]	No tapering needed. Offer advice on self care management strategies for osteoarthritis, e.g. weight loss (if overweight), muscle strengthening exercises, psychological support if there is associated stress, anxiety, depression, use of analgesia. [CKS Osteoarthritis]	L	L

Musculoskeletal and joint diseases

Drugs	Considerations to optimise medicines use after checking for a valid current indication	Withdrawing/tapering and lifestyle advice	CR	DP
NSAIDs (e.g. ibuprofen, mefenamic acid, naproxen, diclofenac, dexibuprofen, flurbiprofen, ketoprofen, dexketoprofen, aceclofenac, etodolac, celecoxib, indometacin, meloxicam, nabumetone, piroxicam, sulindac, tenoxicam, etoricoxib, parecoxib)	Is an NSAID still needed/appropriate? For example, long term treatment of gout but no prophylaxis is prescribed [STOPP-START], chronic primary pain [NICE NG193]. Do the known possible adverse drug reactions outweigh the possible benefits? For example >3 months use for symptom relief in mild osteoarthritis, use in patients with severe hypertension/heart failure/ chronic renal failure. [STOPP-START, Garfinkel 2010] Has PPI prophylaxis been prescribed if also taking concurrent antiplatelet/ anticoagulant treatment? [STOPP-START] NSAIDs may influence the risk of falls by adversely affecting the cardiovascular or central nervous system (e.g. orthostatic hypotension, bradycardia, sedation, sleep disturbance, confusion, dizziness). [Lee 2021] If topical NSAIDs are continued indefinitely, review the need for use; short courses are generally advised for piroxicam, felbinac, diclofenac and ketoprofen. [BNF]	No tapering needed. [Medstopper] Offer advice on self care management strategies for osteoarthritis, e.g. weight loss (if overweight), muscle strengthening exercises, psychological support if there is associated stress, anxiety, depression, use of analgesia. [CKS Osteoarthritis] PrescQIPP NSAID deprescribing algorithm	M	M

Return to contents

Opioid deprescribing algorithm



Opioid analgesics on repeat prescription (>3 months) Dependence Forming Medicines (DFM) deprescribing algorithm[1-4] - Updated April 2023

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Include patients suitable for managed withdrawal who:

- Are taking the equivalent of 120mg morphine or greater/24 hours (SIGN guidelines recommend 50-90mg or greater)[2]. Searches available to help identify patients.
- Are not achieving at least 30% pain reduction (through review)
- No longer have an underlying painful condition as it has resolved
- Have received a definitive pain-relieving intervention (e.g. joint replacement)
- Have developed intolerable side effects
- Are engaged with the process: willing committed, compliant, have adequate social support and can be reviewed regularly

▼

Review at face to face appointment. Aim to ensure that the same healthcare professional is seen.

- Agree outcome(s)
- Explain benefits and rationale for stopping, i.e. explain tolerance, dependence, adverse effects and risks of continuing
- Review emotional influences and physical co-morbidities
- Ensure close collaboration between patient, carer and all members of healthcare team, e.g. mental health providers or specialists
- Ensure psychosocial support for anxiety related to tapering
- Agree tapering schedule, refer to refer to PrescQIPP bulletin 284: Chronic pain

Exclude (ensure regular review of therapy and refer for special support):

- Specialist/CMHT /substance misuse initiated
- Potential substance misuser
- Drug seeking behaviour or where there is strong evidence that the patient is diverting his/her medications to others, taking medication prescribed to others or requesting early prescriptions. Ensure review of early requests
- Patients who are failing to derive benefit from large doses of opioids (greater than oral morphine equivalent of around 300mg/day)

▼

Refer to specialist support for assessment and support in line with commissioning policies (e.g. addiction services, mental health and pain management services)

Prescriber responsibility:

- Deprescribing is the prescribers responsibility and regular review is vital.
- Have adequate training – see resources from Toolkit for tackling chronic opioid use in non-cancer pain (Ensure Licence agreements followed)
- Good communication through whole healthcare team to ensure consistency
- Refer to PrescQIPP bulletin 284: Chronic pain

Review patient's understanding of pain

https://vimeo.com/187991515/b6374f1254
https://www.youtube.com/watch?v=OYOi1AD5mOk

▼

Psychosocial support for anxiety related to taper

Low intensity psychological interventions:

- Individual non-facilitated self-help, individual guided self-help, psychoeducational groups
- High intensity psychological interventions:
- Cognitive Behavioural Therapy (CBT), Acceptance and Commitment Therapy (ACT) or applied relaxation

▼

Agree dose reduction schedule with patient

Consider starting by reducing the total opioid dose by 10% of the original dose. Consider giving the person additional control over the process of dose reduction; people who have some control over their own dose reduction schedule often have a more successful withdrawal. Slow the rate of taper or pause if withdrawal symptoms are significant for the patient.[4]

If appropriate, convert to morphine equivalent daily dose to allow dose reduction in smaller steps.

For dose equivalence see: PrescQIPP bulletin 284: Chronic pain and RCOA dose equivalent and changing opioids

▼

Monitor for:

- Pain levels
- Level of function
- Signs of withdrawal

▼

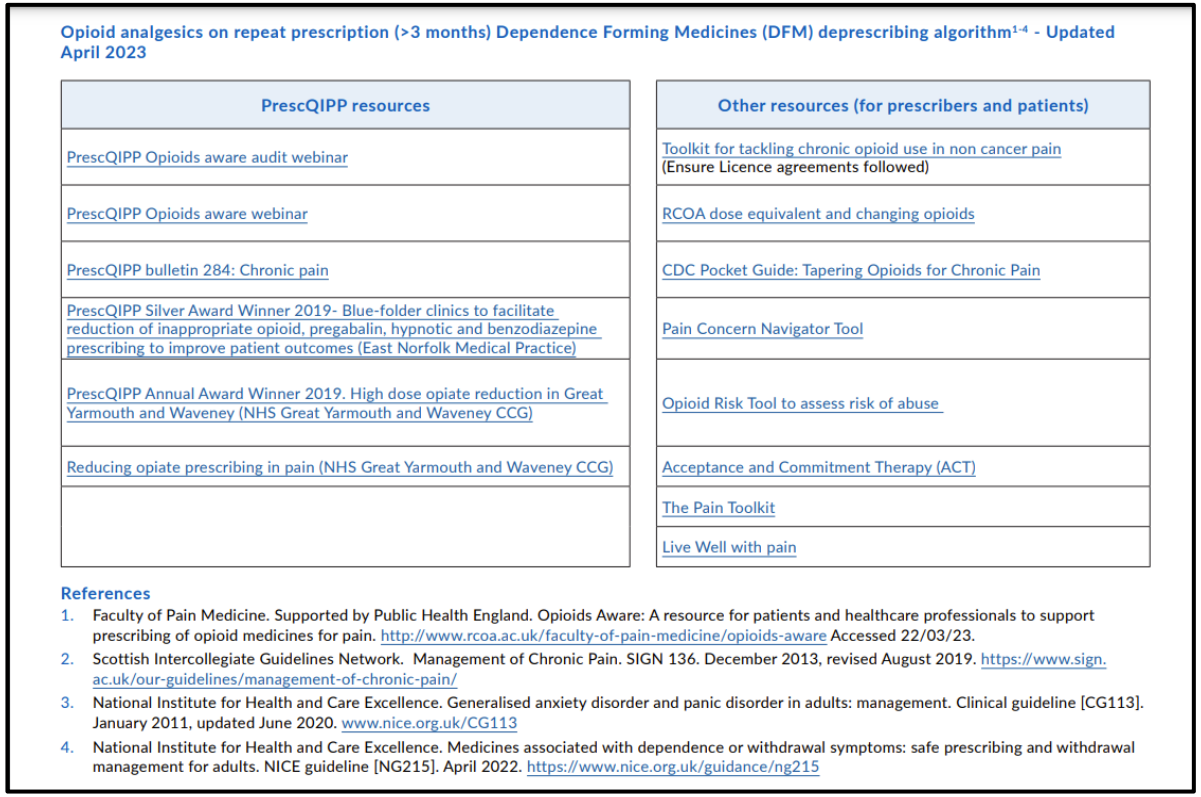
Review every two weeks

Subsequent consultations:

Face to face/telephone calls should be every one to two weeks

▼

Monitor everyone every two weeks for the duration of tapering



Opioid analgesics on repeat prescription (>3 months) Dependence Forming Medicines (DFM) deprescribing algorithm[1-4] - Updated April 2023

PrescQIPP resources	Other resources (for prescribers and patients)
PrescQIPP Opioids aware audit webinar	Toolkit for tackling chronic opioid use in non cancer pain (Ensure Licence agreements followed)
PrescQIPP Opioids aware webinar	RCOA dose equivalent and changing opioids
PrescQIPP bulletin 284: Chronic pain	CDC Pocket Guide: Tapering Opioids for Chronic Pain
PrescQIPP Silver Award Winner 2019- Blue-folder clinics to facilitate reduction of inappropriate opioid, pregabalin, hypnotic and benzodiazepine prescribing to improve patient outcomes (East Norfolk Medical Practice)	Pain Concern Navigator Tool
PrescQIPP Annual Award Winner 2019. High dose opiate reduction in Great Yarmouth and Waveney (NHS Great Yarmouth and Waveney CCG)	Opioid Risk Tool to assess risk of abuse
Reducing opiate prescribing in pain (NHS Great Yarmouth and Waveney CCG)	Acceptance and Commitment Therapy (ACT)
	The Pain Toolkit
	Live Well with pain

References

1. Faculty of Pain Medicine. Supported by Public Health England. Opioids Aware: A resource for patients and healthcare professionals to support prescribing of opioid medicines for pain. http://www.rcoa.ac.uk/faculty-of-pain-medicine/opioids-aware Accessed 22/03/23.
2. Scottish Intercollegiate Guidelines Network. Management of Chronic Pain. SIGN 136. December 2013, revised August 2019. https://www.sign.ac.uk/our-guidelines/management-of-chronic-pain/
3. National Institute for Health and Care Excellence. Generalised anxiety disorder and panic disorder in adults: management. Clinical guideline [CG113]. January 2011, updated June 2020. www.nice.org.uk/CG113
4. National Institute for Health and Care Excellence. Medicines associated with dependence or withdrawal symptoms: safe prescribing and withdrawal management for adults. NICE guideline [NG215]. April 2022. https://www.nice.org.uk/guidance/ng215

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2. Using the IMPACT data pack

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Data pack layout

- No direct links to references
- Deprescrbing algorithms
- Can exclude cost data

Visual data pack

Introduction | IMPACT Bulletin | Background | References

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Use the filters below to customise your IMPACT report.

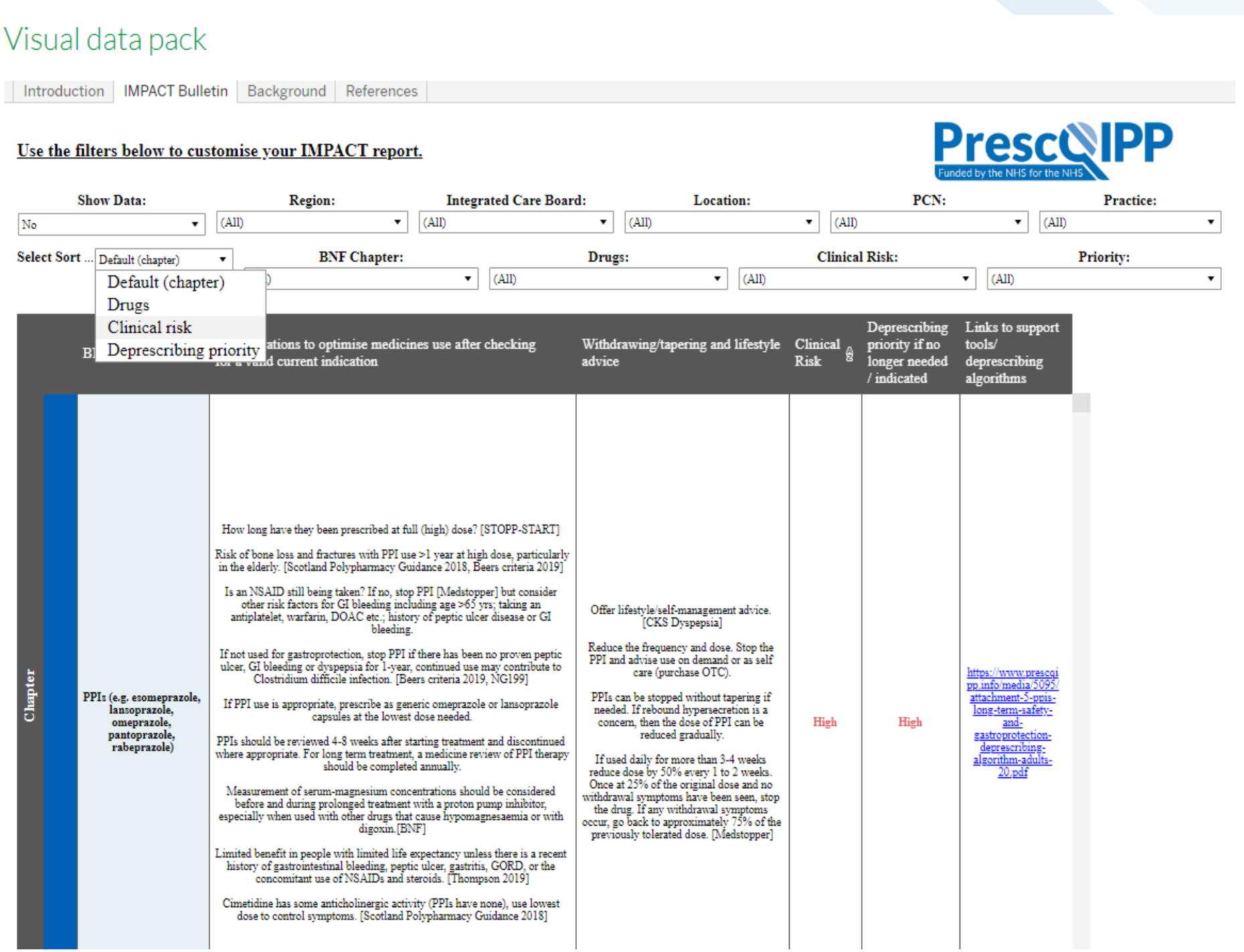
Show Data:	Region:	Integrated Care Board:	Location:	PCN:	Practice:
Yes	(All)	(All)	(All)	(All)	(All)

Select Sort ...	BNF Chapter:	Drugs:	Clinical Risk:	Priority:
Default (chapter)	(All)	(All)	(All)	(All)

Chapter	BNF class / Drugs	Considerations to optimise medicines use after checking for a valid current indication	Withdrawing/tapering and lifestyle advice	Clinical Risk	Deprescribing priority if no longer needed / indicated	Links to support tools/ deprescribing algorithms	Total Cost by BNF class / Drugs (Apr22-Mar23)
	PPIs (e.g. esomeprazole, lansoprazole, omeprazole, pantoprazole, rabeprazole)	How long have they been prescribed at full (high) dose? [STOPP-START] Risk of bone loss and fractures with PPI use >1 year at high dose, particularly in the elderly. [Scotland Polypharmacy Guidance 2018, Beers criteria 2019] Is an NSAID still being taken? If no, stop PPI [Medstopper] but consider other risk factors for GI bleeding including age >65 yrs; taking an antiplatelet, warfarin, DOAC etc.; history of peptic ulcer disease or GI bleeding. If not used for gastroprotection, stop PPI if there has been no proven peptic ulcer, GI bleeding or dyspepsia for 1-year, continued use may contribute to Clostridium difficile infection. [Beers criteria 2019, NG199] If PPI use is appropriate, prescribe as generic omeprazole or lansoprazole capsules at the lowest dose needed. PPIs should be reviewed 4-8 weeks after starting treatment and discontinued where appropriate. For long term treatment, a medicine review of PPI therapy should be completed annually. Measurement of serum-magnesium concentrations should be considered before and during prolonged treatment with a proton pump inhibitor, especially when used with other drugs that cause hypomagnesaemia or with digoxin.[BNF] Limited benefit in people with limited life expectancy unless there is a recent history of gastrointestinal bleeding, peptic ulcer, gastritis, GORD, or the concomitant use of NSAIDs and steroids. [Thompson 2019] Cimetidine has some anticholinergic activity (PPIs have none), use lowest dose to control symptoms. [Scotland Polypharmacy Guidance 2018]	Offer lifestyle/self-management advice. [CKS Dyspepsia] Reduce the frequency and dose. Stop the PPI and advise use on demand or as self care (purchase OTC). PPIs can be stopped without tapering if needed. If rebound hypersecretion is a concern, then the dose of PPI can be reduced gradually. If used daily for more than 3-4 weeks reduce dose by 50% every 1 to 2 weeks. Once at 25% of the original dose and no withdrawal symptoms have been seen, stop the drug. If any withdrawal symptoms occur, go back to approximately 75% of the previously tolerated dose. [Medstopper]	High	High	https://www.prescqipp.info/media/5095/attachment-5-ppis-long-term-safety-and-gastroprotection-deprescribing-algorithm-adults-20.pdf	£191,912,348

Data pack layout

- No cost data gives a cleaner layout for individual medication review
- Can sort by clinical risk, deprescribing priority or alphabetically



IMPACT limitations

- Should **not** be used as the only information source when doing a medicines review
- Does **not** replace shared decision making with the patient
- Clinical risk/deprescribing priority intended as a guide to start a discussion, **not** absolute value
- Does **not** replace **your** clinical knowledge

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How IMPACT can help

- Does each medicine have a current valid indication?
- Look at the info for each medicine in IMPACT to see if any of the medicines need optimising OR if withdrawal should be considered
- Look at clinical risk/deprescribing priority in conjunction with the patients wishes to continue or stop medicines

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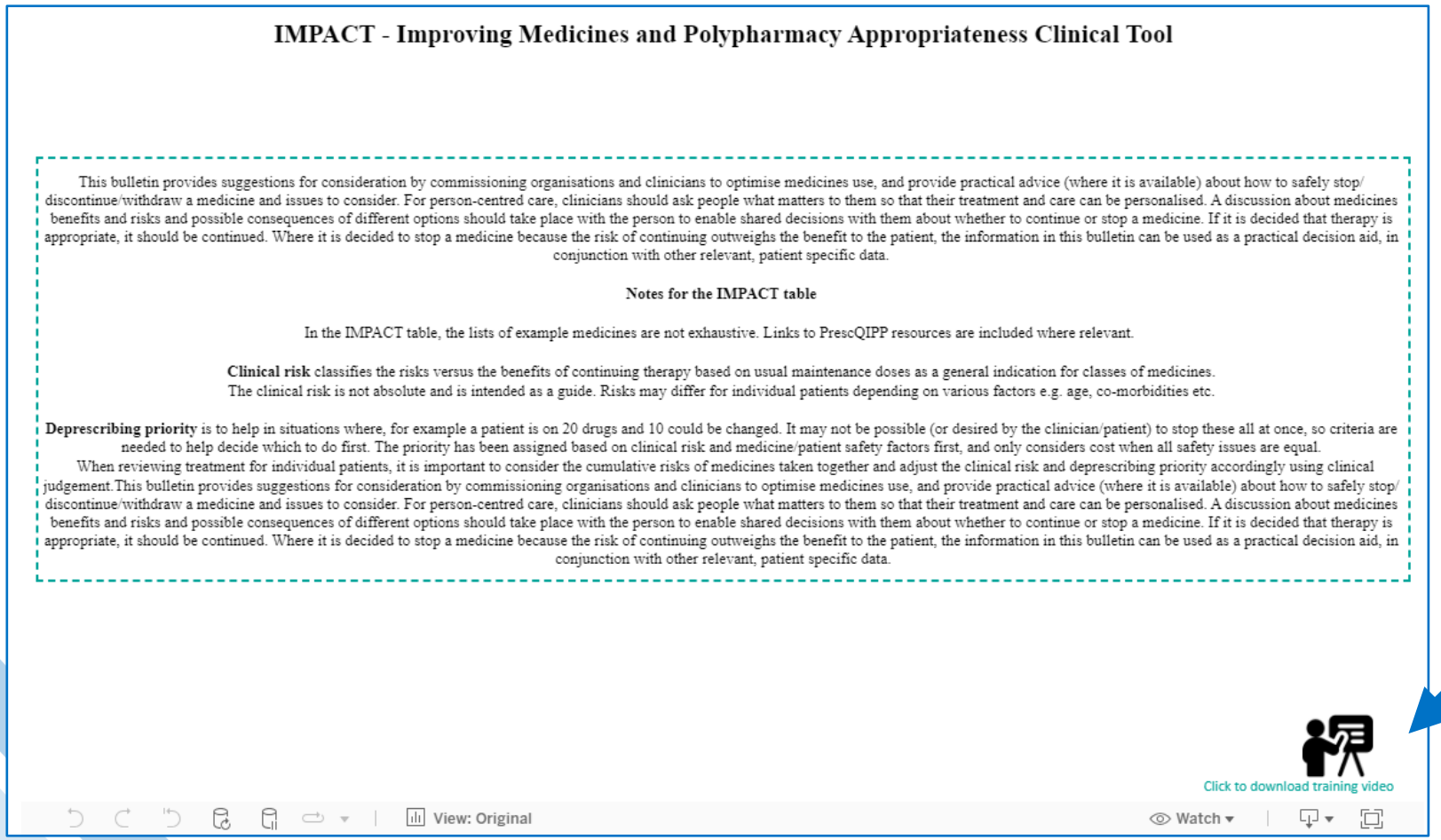
Where to access IMPACT

https://www.prescqipp.info/our-resources/bulletins/bulletin-268-impact/



Training video for creating an report

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