Point of care tools in preventing overuse of care

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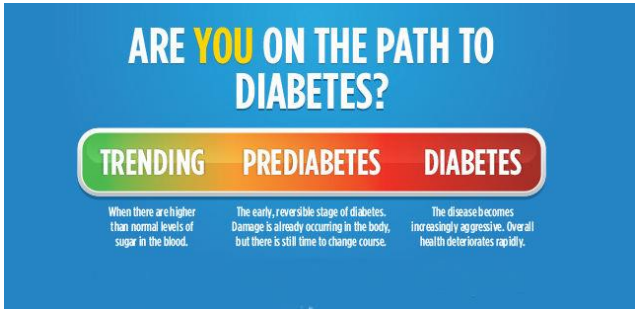
Conflict of interest statement

I am Deputy Head of Content at the BMJ Knowledge Centre, and responsible for content creation and updating for BMJ Best Practice our Point of Care clinical decision support tool, which could be perceived as a direct or indirect conflict of interest in the context or content of this presentation.

The problem


BMJ
Steroid injection for plantar fasciitis
Maintenance drugs for opioid dependence
Managing ventilator assisted pneumonia
BMJ Group Awards: the winners
OVERDIAGNOSIS
Harming the healthy

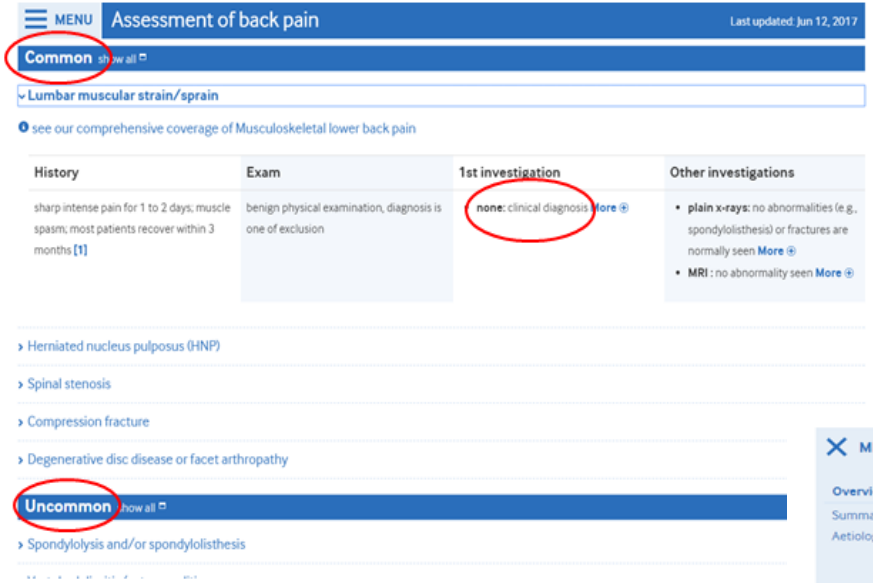

ARE YOU ON THE PATH TO DIABETES?
TRENDING
PREDIABETES
DIABETES
When there are higher than normal levels of sugar in the blood.
The early, reversible stage of diabetes. Damage is already occurring in the body, but there is still time to change course.
The disease becomes increasingly aggressive. Overall health deteriorates rapidly.

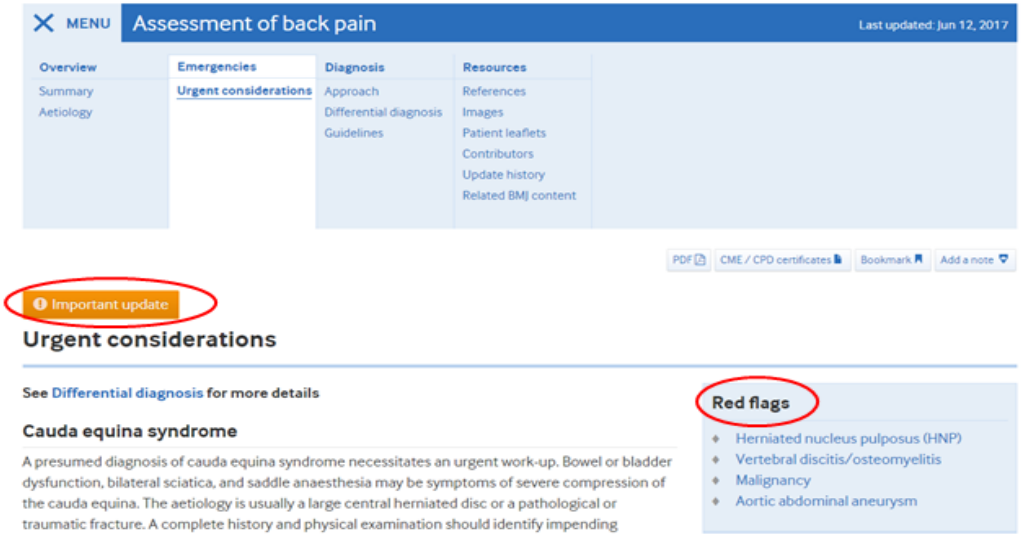
What are point of care tools and how can they help?

- Support clinical decision making
- Structured around the clinical workflow for use in routine care
- Constantly updated with the latest evidence-based research and guidelines
- Integrate evidence and expert opinion to offer step-by-step guidance on diagnosis, prognosis, treatment and prevention

Therefore can be used to:

- Educate and identify potential overdiagnosis issues
- Support shared decision making


MENU
Assessment of back pain
Last updated: Jun 12, 2017
Common show all
Lumbar muscular strain/sprain
see our comprehensive coverage of Musculoskeletal lower back pain
History
Exam
1st investigation
Other investigations
sharp intense pain for 1 to 2 days; muscle spasm; most patients recover within 3 months [1]
benign physical examination, diagnosis is one of exclusion
none: clinical diagnosis More
plain x-rays: no abnormalities (e.g., spondylolisthesis) or fractures are normally seen More
MRI: no abnormality seen More
Herniated nucleus pulposus (HNP)
Spinal stenosis
Compression fracture
Degenerative disc disease or facet arthropathy
Uncommon show all
Spondylolysis and/or spondylolisthesis


MENU
Assessment of back pain
Last updated: Jun 12, 2017
Overview
Summary
Aetiology
Emergencies
Urgent considerations
Diagnosis
Approach
Differential diagnosis
Guidelines
Resources
References
Images
Patient leaflets
Contributors
Update history
Related BMJ content
PDF
CME / CPD certificates
Bookmark
Add a note
Important update
Urgent considerations
See Differential diagnosis for more details
Cauda equina syndrome
A presumed diagnosis of cauda equina syndrome necessitates an urgent work-up. Bowel or bladder dysfunction, bilateral sciatica, and saddle anaesthesia may be symptoms of severe compression of the cauda equina. The aetiology is usually a large central herniated disc or a pathological or traumatic fracture. A complete history and physical examination should identify impending
Red flags
Herniated nucleus pulposus (HNP)
Vertebral discitis/osteomyelitis
Malignancy
Aortic abdominal aneurysm

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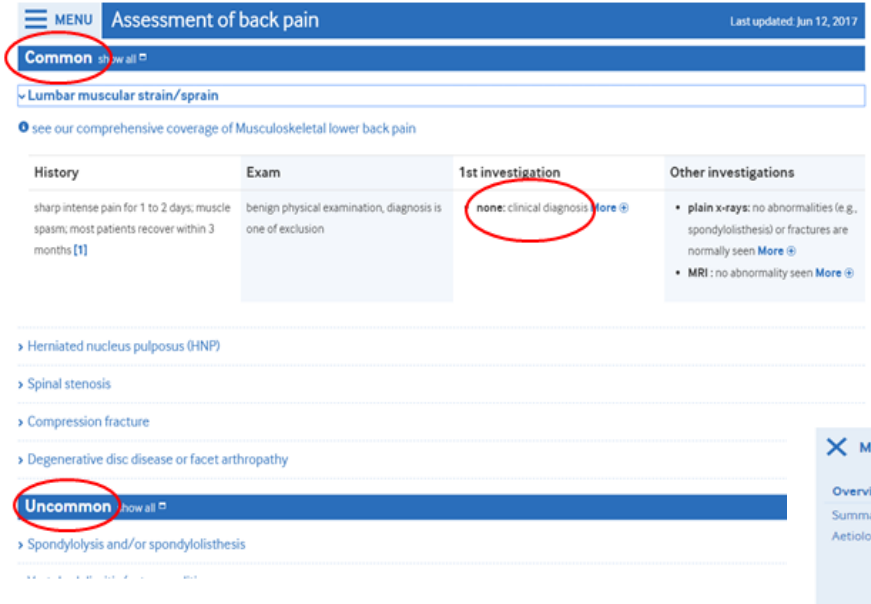

Important update

UK guidelines from the National Institute for Health and Care Excellence (NICE) on low back pain and sciatica in over 16s

The recommendation from the NICE guideline on low back pain and sciatica to not routinely offer imaging in a non-specialist setting for people with low back pain with or without sciatica has been highlighted in the update of this topic. Comments have been added on when imaging may be considered. See Diagnosis: approach and Diagnosis: differential.

Original source of update

details

A presumed diagnosis of cauda equina syndrome necessitates an urgent work-up. Bowel or bladder dysfunction, bilateral sciatica, and saddle anaesthesia may be symptoms of severe compression of the cauda equina. The aetiology is usually a large central herniated disc or a pathological or traumatic fracture. A complete history and physical examination should identify impending

Red flags

- Herniated nucleus pulposus (HNP)
- Vertebral discitis/osteomyelitis
- Malignancy
- Aortic abdominal aneurysm

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Diagnostic investigations

1st investigations to order show all

Test	Result
› clinical diagnosis	typical musculoskeletal back pain

Investigations to consider show all

Test	Result
› lumbar spine x-ray	degenerative changes
› lumbar spine MRI	visualises scar tissue and degenerative changes
› lumbar spine CT	identifies bony pathology
› myelography	absence of disc herniation and spinal stenosis
› FBC	normal
› ESR	normal
› C-reactive protein (CRP)	within normal limits

MENU **Prostate cancer** Last updated: Feb 23, 2017

Step by step management

Consult your local pharmaceutical database for comprehensive drug information including contraindications, drug interactions, and alternative dosing.

Acute

Patient group	Treatment line	Treatment show all
very low-risk disease		
<10 years' projected survival	1st	› expectant management
10-20 years' projected survival	1st	› expectant management
≥20 years' projected survival	1st	› expectant management
	1st	› brachytherapy
	1st	› external beam radiation therapy
	1st	› radical prostatectomy ± lymph node dissection

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Diagnostic investigations

1st investiga

Test

› clinical diagno

Investigation

Test

› lumbar spine x

› lumbar spine M

› lumbar spine C

› myelography

› FBC

› ESR

› C-reactive protein (CRP)

lumbar spine x-ray

X-rays may be sufficient for the initial evaluation of the following patient groups: recent significant trauma (at any age), osteoporosis, or age >70 years. [37] In this group, however, the American College of Radiology (ACR) advocates the use of MRI spine without contrast as the first-line investigation. [37]

Can eliminate fracture, spondylolisthesis, or tumour diagnoses.

It is reasonable to order this test if any other ACR red-flag symptoms are present, although MRI is the preferred modality. [37]

X-rays should not be ordered for non-specific LBP of <6 weeks' duration as it has no effect on outcomes. [36] [38] [39]

within normal limits

MENU Prostate cancer Last updated Feb 23 2017

options may be to take a wait-and-see approach and hold off on treatment for the time being (expectant management).

- **How long you're likely to live (your life expectancy).** This is based on your age and your health. If you are older or if you have other serious health issues, your prostate cancer may never cause problems in your lifetime and you may decide to hold off on treatment. However, if you are younger and otherwise in good health, there's a higher chance that your cancer will eventually spread and cause problems. So, your doctor may recommend having one or more treatments to get rid of the cancer.

- **Your preferences.** Your views and preferences play an important role in determining what treatments you have. For example, you may decide you're comfortable living with an untreated cancer if it means you can avoid the side effects of treatments. On the other hand, you may decide that getting rid of the cancer is the most important thing for you, and you want the most aggressive treatments, regardless of the possible side effects. Your doctor will fully explain all your options, and help you make a decision based on what is most important to you. ...

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Cochrane Clinical Answers

Accessible, independent, authoritative
from Cochrane Library

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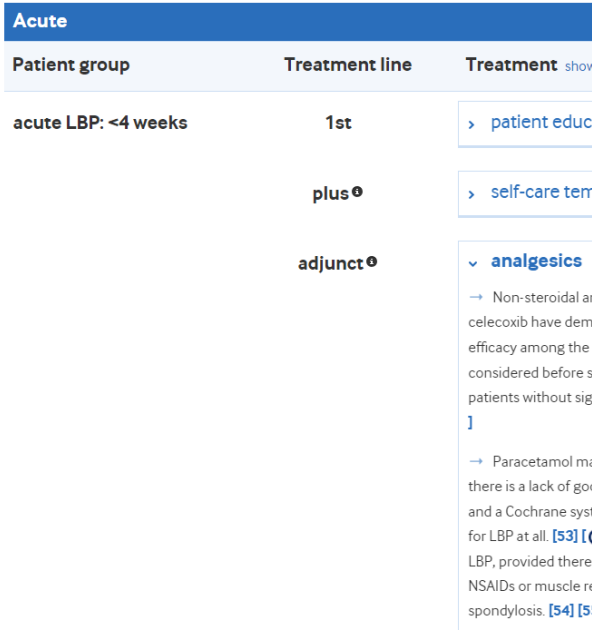
Provide a concise summary of the results of a Cochrane Review with sufficient underlying data to allow:

- Application of the results to a specific patient group
- Understanding of the strength of the evidence supporting conclusions about key clinical outcomes

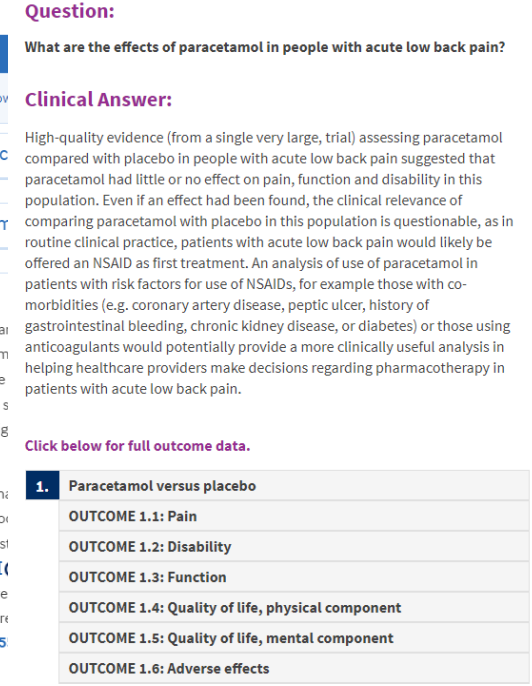


Acute

Patient group	Treatment line	Treatment show
acute LBP: <4 weeks	1st	› patient educ
	plus	› self-care ter
	adjunct	⌄ analgesics

→ Non-steroidal a
celecoxib have dem
efficacy among the
considered before s
patients without sig
]

→ Paracetamol ma
there is a lack of go
and a Cochrane syst
for LBP at all. [53] [(
LBP, provided there
NSAIDs or muscle re
spondylosis. [54] [5



Question:

What are the effects of paracetamol in people with acute low back pain?

Clinical Answer:

High-quality evidence (from a single very large, trial) assessing paracetamol compared with placebo in people with acute low back pain suggested that paracetamol had little or no effect on pain, function and disability in this population. Even if an effect had been found, the clinical relevance of comparing paracetamol with placebo in this population is questionable, as in routine clinical practice, patients with acute low back pain would likely be offered an NSAID as first treatment. An analysis of use of paracetamol in patients with risk factors for use of NSAIDs, for example those with co-morbidities (e.g. coronary artery disease, peptic ulcer, history of gastrointestinal bleeding, chronic kidney disease, or diabetes) or those using anticoagulants would potentially provide a more clinically useful analysis in helping healthcare providers make decisions regarding pharmacotherapy in patients with acute low back pain.

Click below for full outcome data.

1.	**Paracetamol versus placebo**
	OUTCOME 1.1: Pain
	OUTCOME 1.2: Disability
	OUTCOME 1.3: Function
	OUTCOME 1.4: Quality of life, physical component
	OUTCOME 1.5: Quality of life, mental component
	OUTCOME 1.6: Adverse effects

Cochrane Clinical Answers

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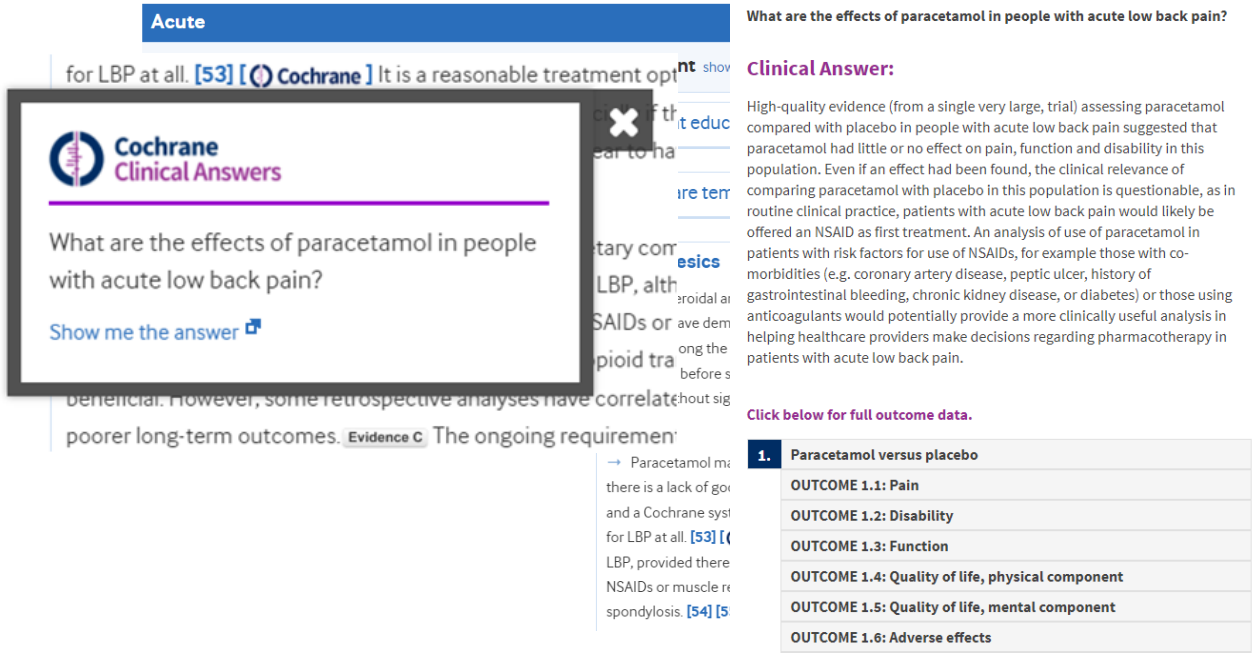


Rapid Recommendations - Accelerating Evidence Into Practice

MAGIC app

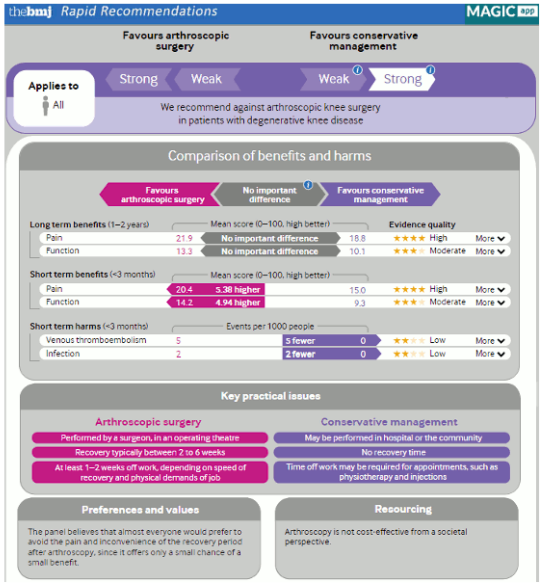
thebmj

BMJ Best Practice

MENU **Osteoarthritis** Last updated: May 23, 2017

Arthroscopic surgery is not effective for knee OA. **[13]** Clinical guidelines advocate against the use of arthroscopic surgery in knee OA. This guideline is based on a lack of high-quality evidence demonstrating that arthroscopic surgery leads to better outcomes compared with conservative management techniques. **[100]**

[BMJ Rapid Recommendations: arthroscopic surgery for degenerative knee arthritis and meniscal tears]

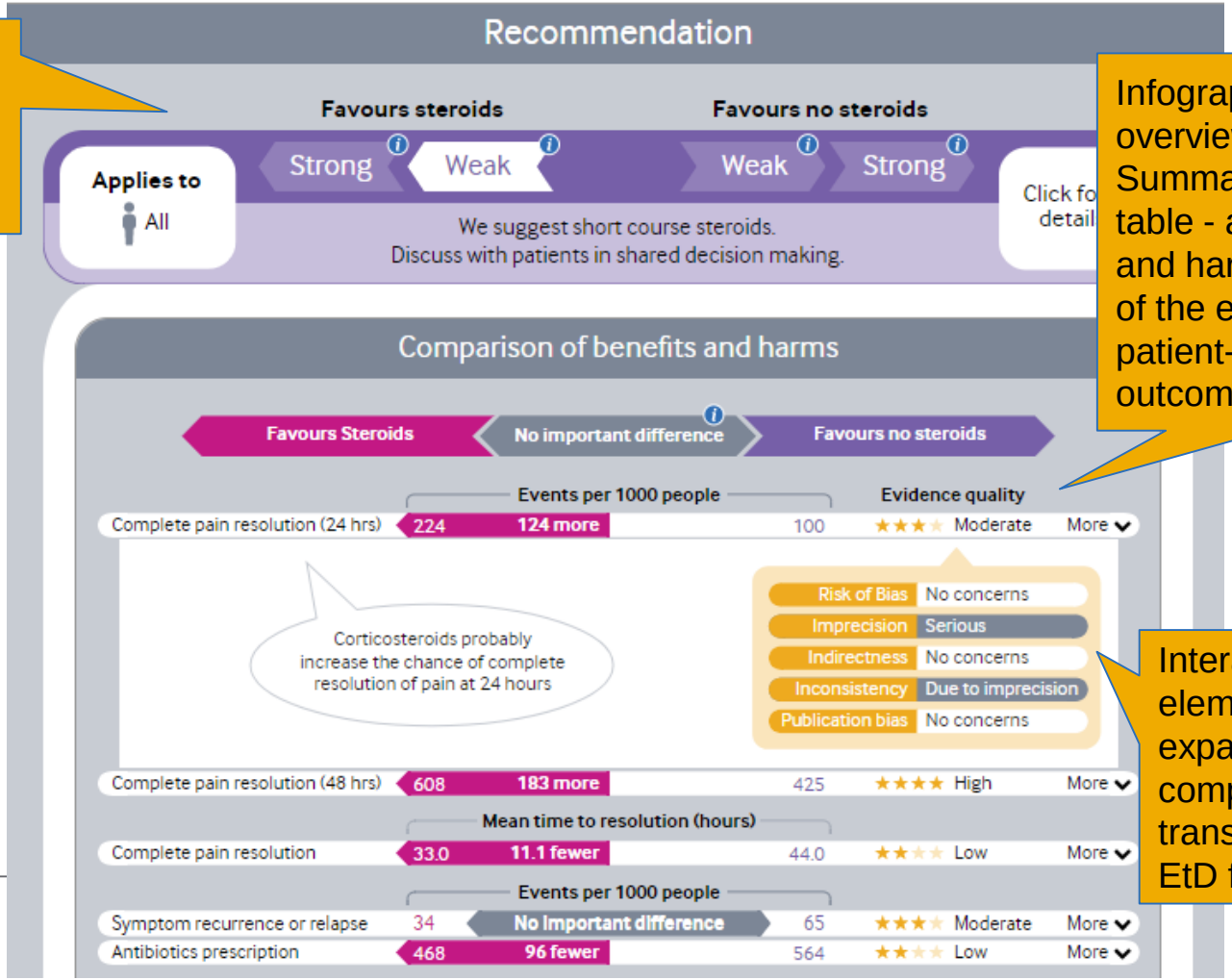


BMJ Rapid Recommendations: arthroscopic surgery for degenerative knee arthritis and meniscal tears

Siemieniuk RAC, et al. BMJ. 2017;357:j1982

[MAGICapp: recommendations, evidence summaries and consultation decision aids]

Recommendation with strength as defined by GRADE



Infographic gives overview of GRADE Summary of Findings table - absolute benefit and harms (with quality of the evidence) for all patient-important outcomes

Interactive elements can be expanded for complete transparency on EtD framework

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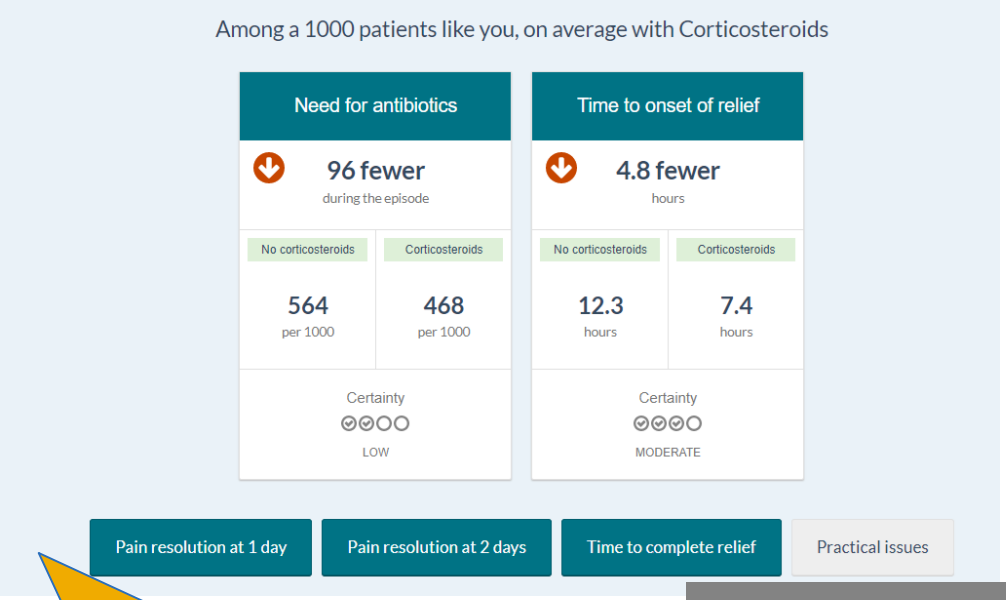
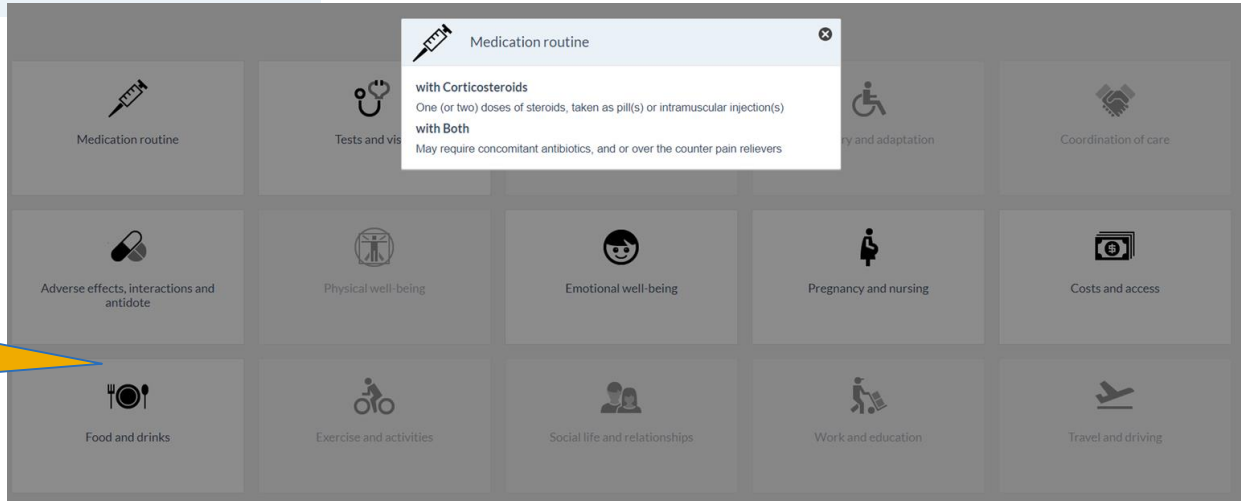


Patient values and preferences put evidence in context, and especially for weak recommendations, means that evidence-informed shared decisions can be made with individual patients.

Compare relative benefits and harms of selected outcomes that matter to individual

Evidence-informed information regarding preferences and values



Next steps

- To get user and customer feedback on these ideas and to identify any other areas of potential development
- To set up a pragmatic trial to evaluate whether these features can help reduce overuse of care in clinical setting
- Consider creation of dedicated user journeys or virtual care pathways in BMJ Best Practice