GPSA
GENERAL PRACTICE SUPERVISION AUSTRALIA

SKILLS
CONSULTATION SKILLS

Rational test ordering

Pathology, imaging, and other tests are essential elements of quality clinical practice, including for screening, diagnosis, and monitoring of disease. In 2015-16, at least one pathology test was ordered in 18.4 per cent of Australian general practice encounters, and for 13.7 per cent of all problems managed. The figures for imaging were 9.4 per cent and 6.4 per cent respectively. However, non-rational testing, or over-testing, is increasingly recognised as an important issue in health care. This can lead to increased costs, difficulties in interpretation and patient harm. Over-testing is especially problematic in general practice, a clinical setting characterised by a high prevalence of undifferentiated illness and a low pre-test probability of serious disease. Rational use of investigations is one of the core skills of Australian general practice training and previous research has demonstrated that this is a challenging area for GP registrars. Supervisors can play a key role in developing rational test ordering behaviour in their registrars. See the related GPSA teaching plan on Preventive health and screening

TEACHING AND LEARNING AREAS		• Common investigations prone to duplication or overtesting • Influences on test ordering behaviour – patients, supervisor and other GPs, 'opinion leaders', uncertainty, 'fear of missing something', prior hospital practice • Potential adverse effects and harms of overtesting e.g. cost, 'incidentalomas', false positives, test cascade, complications of invasive tests • Characteristics of tests • Strategies for rational test ordering • Strategies to manage uncertainty • Key resources for rational test ordering e.g. eTG, disease guidelines, Choosing Wisely Australia
PRE- SESSION ACTIVITIES		• Read the 2014 AFP article We live in testing times; teaching rational test ordering in general practice
ACTIVITIES		• Assessment and teaching on rational test ordering is best done by test result audit and feedback (TRAFk) or 'inbox review' • See over page for activities
TEACHING TIPS AND TRAPS		• General practice is a setting with a generally low pre-test probability of serious disease, meaning false positive results are common • Investigations should only be performed to confirm an existing clinical suspicion, not as a 'fishing expedition' • The fewer tests performed, the fewer 'difficult to interpret' results there will be! • Investigations should never replace a comprehensive history and physical examination • Involve patients in the decision to test or not • Patients are generally not reassured by ordering more tests • Speak to the laboratory or specialist if you are unsure what a test means or what tests to order • Base teaching around commonly over-ordered tests e.g. lumbar spine x-rays, or conditions prone to over-testing e.g. fatigue
RESOURCES	**Read**	• 2015 CFP article - Rational Test Ordering in Family Medicine • The Royal College of Pathologists Australasia manual • Choosing Wisely Australia • Rational use of specific pathology tests resource
FOLLOW UP & EXTENSION ACTIVITIES		• 'Testing, testing 1, 2, 3' online learning activity • Review the Common Sense Pathology series

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Activities

1. TEST RESULT, AUDIT AND FEEDBACK (TRAFK)

1. Read the 2016 AFP article Test result audit and feedback (TRAFk) as a supervision method for rational test ordering in general practice training
2. Undertake 'inbox review' of recent and random test results
3. Ask to registrar to present the case as a problem representation
4. Use the framework below to explore rationale for test ordering
5. Discuss evidence and resources

BOX 2. FRAMEWORK FOR ANALYSIS OF TEST ORDERING

Explore the rationale for ordering the test

- Why did you order this test?
- How will the result alter your management?
- What are the risks of ordering/not ordering this test?
- What is the likelihood of a positive result?
- What is the prevalence of the provisional diagnosis?
- Did any other factors influence your decision to order the test?

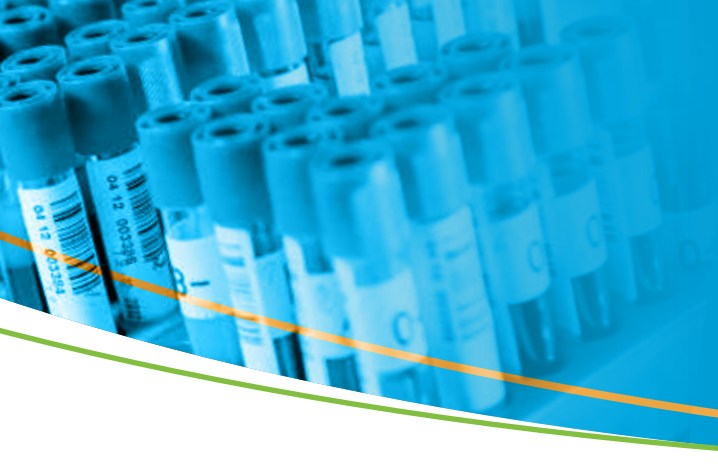
Pose hypothetical scenarios

- What if the test was positive/negative?
- What if the patient were older/younger/Aboriginal or Torres Strait Islander, etc?

Discuss best practice

- Does this presentation have any guidelines for testing?
- Where might you seek guidance on best practice?

From the AFP article Test result audit and feedback (TRAFk) as a supervision method for rational test ordering in general practice training



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2. CLINICAL REASONING CHALLENGE

Janice Frost is a 53-year-old accountant who presents to your practice for the first time. She is new to the area and brings her health summary from her previous GP.

Janice complains of a 6 week history of left shoulder pain, especially when doing up her bra and reaching up to high shelves. There is no history of trauma or injury, and no red flags for serious disease. On examination there is tenderness over the lateral aspect of the shoulder and a 'painful arc' on shoulder abduction, but otherwise normal range of movement.

Janice is otherwise asymptomatic, denies significant PMH, takes no medications, and has no significant family history. Her last period was 18 months previously. She is not overweight and her BP is 128/77. The remainder of the findings on physical examination are normal.

On questioning, Janice has had no investigations of any kind for at least 5 years.

QUESTION 1. What is the MOST LIKELY diagnosis? Write one specific diagnosis.

_____

QUESTION 2. What initial investigations, if any, are appropriate for Janice? Tick all that are appropriate.

FBC	Lipids	Cevical screening test
EUC	BSL	FOBT
LFT	Coagulation profile	X-ray L shoulder
ESR	Vitamin B12/folate	USS L shoulder
CRP	Oestrogen/progesterone/LH/FSH	MRI L shoulder
Ca/Po4	MSU	Bone scan L shoulder
Vitamin D	ECG	Bone mineral density
Iron studies	Mammogram	

QUESTION 3. You commence Janice on meloxicam 7.5mg daily and she returns a week later complaining of a few days of epigastric discomfort, nausea and mild diarrhoea. She has no other symptoms and examination is normal.

What investigations, if any, are appropriate to investigate these symptoms at this time? List up to FIVE.

1 _____

2 _____

3 _____

4 _____

5 _____

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CLINICAL REASONING CHALLENGE ANSWERS

QUESTION 1

What is the MOST LIKELY diagnosis? Write one specific diagnosis.

- Supraspinatus tendonitis

QUESTION 2

What initial investigations, if any, are appropriate for Janice? Tick all that are appropriate.

The RACGP 'Red Book' recommends the following investigations as screening tests in an asymptomatic woman in her 50s.

- EUC
- Lipids
- BSL or AUSDRISK
- Mammogram
- Cervical screening test
- FOBT

The NHMRC guidelines 'Evidence-based management of acute musculoskeletal pain' for acute shoulder pain do not recommend any investigations in the absence of red flags.

QUESTION 3

You commence Janice on meloxicam 7.5mg daily and she returns a week later complaining of a few days of epigastric discomfort, nausea and mild diarrhoea. She has no other symptoms and examination is normal.

What investigations, if any, are appropriate to investigate these symptoms at this time? List up to FIVE.

- This is most likely a side effect of the NSAID and does not warrant any investigations unless it persists after cessation of the medication.

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