



Unit 518 July 2015

Stages of life: Older age



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The five domains of general practice

- Communication skills and the patient-doctor relationship
- Applied professional knowledge and skills
- Population health and the context of general practice
- Professional and ethical role
- Organisational and legal dimensions



ABOUT THIS ACTIVITY

National indicators show that the health and wellbeing of older Australians have improved significantly in the past two decades. However, the occurrence of chronic, progressive illnesses increases with age² and older people are higher users of health services than younger people. In the previous 12 months, 96% of people aged over 65 years consulted a GP, compared with 18% of those aged under 65 years. ³

This edition of *check* considers the healthcare of older people in general practice. The cases explore the management of chronic illnesses that commonly occur later in life, and examine issues such as advance care planning and the need for palliative care for older patients.

LEARNING OUTCOMES

At the end of this activity, participants will be able to:

- summarise the approach to de-prescribing medications in older people
- outline the diagnosis and management of sexually transmissible infections in older people
- describe the diagnosis and management of mild cognitive impairment and dementia in older people
- discuss the key considerations in developing advance care plans for older people
- outline the current management of patients with end-of-life comorbid diseases.

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- Australian Bureau of Statistics. Gender Indicators Australia. Cat. No. 4125. Canberra: Commonwealth of Australia, 2013. Available at www.abs.gov. au/ausstats/abs@.nsf/mf/4125.0 [Accessed 27 May 2015].
- Australian Institute of Health and Welfare. Leading types of ill health. Canberra: AlHW, 2014. Available at www.aihw.gov.au/australias-health/2014/ill-health [Accessed 27 May 2014].
- Australian Institute of Health and Welfare. Australia's health 2014.
 Canberra: AlHW, 2014. Available at www.aihw.gov.au/WorkArea/ DownloadAsset.aspx?id=60129548150 [Accessed 4 May 2015].

ACRON	IYMS				
ACD	advance care directive	GORD	gastro-oesophageal reflux disease	OTC	over-the-counter
ACP	advance care planning	GPCOG	GP assessment of cognition	PBS	Pharmaceutical Benefits Scheme
AD	Alzheimer's disease	HIV	human immunodeficiency virus	RUDAS	Rowland Universal Dementia
ADE	adverse drug event	INR	international normalised ratio		Assessment Scale
BMI	body mass index	LDL	low density lipoprotein	SDM	surrogate decision maker
COPD	chronic obstructive pulmonary	MBS	Medicare Benefits Schedule	SMMSE	Standardised Mini-Mental State
	disease	MCI	mild cognitive impairment		Examination
CT	computed tomography	MSU	mid-stream urine	STI	sexually transmissible infection
ECG	electrocardiogram	Naat	nucleic acid amplification test	TGA	Therapeutic Goods Administration
FBE	full blood evaluation	NSAID	non-steroidal anti-inflammatory drug		

CASE 1

PHYLLIS WONDERS WHETHER SOME OF HER MEDICINES ARE REALLY NECESSARY

Phyllis, 81 years of age, comes to see you to talk about her medications. She has a history of worsening joint pain in her hips, knees, wrists and shoulders, secondary to generalised osteoarthritis. She also has hypertension, ischaemic heart disease (she had an acute myocardial infarction 8 years ago), chronic heart failure, atrial fibrillation, osteoporosis with past Colles' fracture, depression, type 2 diabetes mellitus, mild renal insufficiency, some cognitive impairment, chronic obstructive pulmonary disease (COPD) and a past history of gastro-oesophageal reflux disease (GORD). Phyllis is on several medications (Table 1). She and her daughter wonder whether some of her medications are making her unwell and wants to know if she needs to continue taking them. She wants a good quality of life in her remaining years.

QUESTION 1 😃

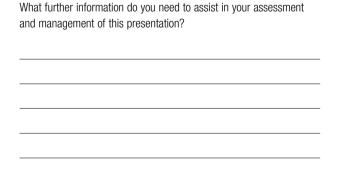


Table 1. Phyllis's medications				
Indication	Drug	Dose		
Angina	Isosorbide dinitrate	60 mg mane		
Congestive heart failure	Digoxin Frusemide Spironolactone	62.5 mg nocte 80 mg mane 12.5 mg mane		
Stroke prevention in congestive heart failure	Warfarin	3 mg mane		
Hypercholesterolaemia	Pravastatin	40 mg mane		
Hypertension	Amlodipine Carvedilol Perindopril	5 mg mane 12.5 mg bd 5 mg mane		
Type 2 diabetes mellitus	Gliclazide	80 mg bd		
GORD	Omeprazole	20 mg bd		
Prophylaxis for risk of osteoporotic fractures	Alendronate	75 mg weekly		
Vitamin D deficiency	Cholecalciferol	1000 units/day		
Pain due to osteoarthritis	Paracetamol Codeine Oxycodone	500 mg tds prn 8 mg tds prn 5 mg tds prn		
Prophylaxis of constipation due to opioids	Movicol	2 sachets bd		
Parkinsonian muscle rigidity	Levodopa + carbidopa	200/50 mg; 2 tablets tds		
Sedative	Oxazepam	15 mg nocte		
Depression	Sertraline	150 mg mane		
Dementia	Donepezil	10 mg nocte		

FURTHER INFORMATION

Phyllis lives with her daughter and is normally able to perform basic self-care, albeit slowly. She has limited mobility because of pain and stiffness in her hips and knees, and walks with a wheelie-walker. Her daughter does the shopping, cooking and washing. She had two falls in the last 12 months when walking outside her flat on uneven ground. She has reasonable hearing, wears reading glasses and is usually happy to engage in conversation. She has been hospitalised twice over the past year, the first time for exacerbation of her heart failure complicated by digoxin toxicity and the second for an episode of hypoglycaemia induced by missed meals because of anorexia associated with a bout of influenza.

QUESTION 2 🕮



What specific investigations should you request to assist in determining the ongoing need for each medication?

FURTHER INFORMATION

Phyllis looks frail and has kyphosis. She weighs 54 kg and has a body mass index (BMI) of 18 kg/m². Her heart rate is 64 beats/min and irregular. Blood pressure is normal at 110/60 mm Hg (sitting) and 115/55 mm Hg (standing). No cardiac murmurs are audible and she has mild pedal oedema with varicose veins. She has generalised increased tone but no cog-wheeling rigidity or tremor. Testing of muscle power in her upper and lower limbs is difficult because of osteoarthritic pain in her hips, knees, wrists and shoulders. Muscle bulk is generally reduced and she has absent knee and ankle jerks with sensory impairment in a 'stocking and glove' distribution. There is bony hypertrophy and crepitus in both knees, reduced flexion of the knees, reduced rotation of hips, and Heberden's nodes in small joints of the fingers. Earlier X-rays revealed osteopaenia.

QUESTION 3 🕮



Given the findings of her physical examination and recent
investigations (Table 2), list the relevant medical conditions that
warrant treatment with medications.

QUESTION 4	



What are th	e key steps in	selecting me	edications for	discontinuation?

OUESTION 5 💭



** · · · · · · ·
In applying the six questions to Phyllis's case, which drugs do you think have low utility and justify a trial of discontinuation?

Investigation	Result
Blood counts	
Haemoglobin (g/L)	104
White cell and platelet counts	Normal
Electrolytes (mmol/L)	
Serum sodium	128*
 Potassium 	5.1*
• Urea	13*
Albumin ratio	4.0*
Serum albumin (mmol/L)	31*
Biochemical tests	
Serum calcium	Normal
Phosphate	Normal
Magnesium	Normal
Vitamin D	Normal
Iron studies	Normal
• B12	Normal
 Folate 	Normal
 Liver transaminases 	Normal
Thyroid function test	Normal
Fasting serum lipids (mmol/L)	
Total cholesterol	3.2
Low density lipoprotein (LDL)-	1.5
cholesterol	
 Triglycerides 	2.1
HbA1c	6.7%*
Blood glucose	7–9 mmol/L
Renal function	
 Urinary creatinine (mmol/L) 	160
Glomerular filtration rate	35 mL/min/m ²
Chest X-ray	Moderate cardiomegaly with clear lung fields
Echocardiography	Atrial fibrillation
	• Q waves in leads V1–V4, and
	prolonged QRS of 140 ms
	 Anterior wall hypokinesis and mild hypertrophy of the left ventricle with systolic dysfunctio (ejection fraction 30%)
Standardised Mini-Mental State score	24/30
CHA ₂ DS ₂ -VASc score	6
HAS-BLED score	3
Geriatric Depression Scale (short version)	7/15

QUESTION 6	
-------------------	--

How would you engage Phyllis in a discussion about the advantages and disadvantages of weaning her off drugs that you feel are unnecessary?
QUESTION 7 🗢
How would you manage the process of withdrawal of drugs from Phyllis'
QUESTION 8 💭
How might you determine the order in which drugs should be withdrawn'

FURTHER INFORMATION

Over a period of 6 months, all of the selected drugs are discontinued without any adverse outcome. Regular combined oxycodone/naloxone at a dose of 5/2.5 mg per day is substituted for oxycodone up to 15 mg/day as required with good effect, and oxazepam is reduced to occasional use for insomnia rather than daily use. Phyllis and her daughter are satisfied with the successful reduction in the number of drugs and agree that Phyllis's feelings of mental and physical wellbeing have improved significantly.

CASE 1 ANSWERS

ANSWER 1

Patients such as Phyllis, aged >80 years, often have five or more long-term health conditions and are likely to be taking more than five medications. As a result, these patients are at an increased risk, up to 30%, of experiencing an adverse drug-related event (ADE) over the next 6 months, which may lead to hospitalisation.

The first step in the medication reconciliation process that forms the basis for therapeutic decisions is to obtain the best possible medication history.² Prescribers and pharmacists must collaborate in determining if the diagnosis substantiates ongoing prescribing, considering the evidence for benefit, the presence of any adverse effects and if there are equally effective, alternative non-pharmacological therapies available.

The following issues need to be established:3

- the current indications for each drug
- Phyllis's and her daughter's perception of the efficacy and side effects Phyllis has experienced with each drug
- whether there are any drugs she is not taking and reasons for non-compliance
- scientific evidence for the benefits and harms of each drug
- a shared understanding with Phyllis (and her daughter) of the likely future course of illness and what she values as the goals of care.

ANSWER 2

Phyllis should have a thorough general physical examination and relevant investigations that will tell you more about the severity, prognosis and symptom impact of each of the conditions for which she is receiving specific drugs. The investigations relevant for Phyllis and her results are listed in *Table 2*.

ANSWER 3

The investigations (*Table 2*) and physical examination confirm the presence of congestive heart failure with the risk of an embolic episode, and COPD, diabetes and troublesome reflux symptoms. From these tests, moderate-to-severe depression, hypercholesterolaemia, hypertension, moderate-to-severe dementia and angina can be excluded.

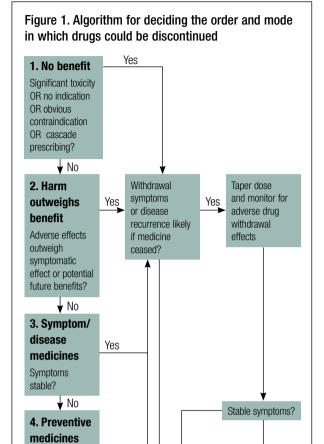
ANSWER 4

De-prescribing is the systematic process of identifying and discontinuing drugs in instances where existing or potential harms outweigh existing or potential benefits within the context of an individual patient's care goals, current level of functioning, life expectancy, values and preferences.³

The CEASE protocol includes a systematic method for appraising

the utility of individual medications and deciding which ones may be worthy of discontinuation and in which order.³ In terms of utility of each medication, the following questions need to be asked:

- 1. Is there a valid indication for each medication?
 - The diagnosis itself may be in doubt (eg no objective criteria or highly atypical presentations) or the condition is inactive/ resolved (eg past episode of reactive depression associated with a major life event that has now passed).
 - The diagnosis is confirmed and current, but where evidence
 of efficacy of a drug is non-existent (eg ivabradine for stable
 angina despite randomised trials showing no benefit) or no
 longer applies to this patient (eg a bisphosphonate that has been
 prescribed for more than 5 years, or hormonal replacement
 therapy that is being given to a patient over 70 years of age).
- Is the drug part of a prescribing cascade seeking to counteract side effects of other medicines?
 - For example, potassium supplements counteract the effects of diuretics prescribed for ankle swelling, which is secondary to calcium channel blockers.
- 3. Is the drug, on balance, more likely to do harm than confer benefit over the medium to longer term?
 - Examples include 'medicines to avoid in older patients'(eg
 opioids, psychotropic medications and those with potent
 anticholinergic effects) in addition to those that have clear
 contraindications or are associated with well-known side effects
 that are more prevalent in older patients (eg constipation with
 calcium antagonists; postural symptoms with alpha-blockers).
- 4. Is the drug being prescribed for disease or symptom control despite either being ineffective or where symptoms have completely resolved or are amenable to non-drug interventions?
 - If the patient indicates that, from the time a drug was commenced and despite appropriate up-titration, it has really done very little, if anything, to relieve symptoms or control disease (eg levodopa for Parkinsonian muscle rigidity or alpha-blockers for prostatism), or if the target condition has resolved or is mild or intermittent (eg dyspepsia or symptoms of oesophageal reflux), or that they are very amenable to non-drug interventions (eg dietary and behavioural changes to manage insomnia rather than rely on hypnotic medications; reduced alcohol intake to manage headache rather than use analgesics), then the drug may serve no useful purpose.
- 5. Is the drug a primarily preventive medicine, which is unlikely to confer any patient-important benefit over the patient's remaining lifespan?
 - For example, a patient with a life expectancy <12 months is unlikely to benefit from continued use of bisphosphonates, cholinesterase inhibitors or high-dose statins.
- 6. Is the drug imposing unacceptable treatment burden?
 - Some medicines are particularly burdensome (eg difficulty swallowing large tablets, out-of-pocket expense, or monitoring requirements [eg warfarin]).



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Cease

medicine

No Yes

No

Restart

medicine

ANSWER 5

Potential benefit

unlikely to be

realised due

to limited life

expectancy?

Continue

medicine

The results of the physical examination and clinical investigations, and responses to each of these six questions, have identified the following drugs as being eligible for a trial of discontinuation:

- **Digoxin** is not thought indicated given past toxicity and concurrent use of a beta-blocker to control ventricular rate.
- **Amlodipine** is not warranted for blood pressure control and predisposes to peripheral oedema.
- **Spironolactone** increases the risk of hyperkalaemia in the presence of renal insufficiency and is not indicated in patients with ejection fraction of ≥30% whose symptoms and signs of heart failure are well controlled on an angiotensin-converting enzyme inhibitor and frusemide.

- Isosorbide dinitrate is a potent vasodilator that predisposes to hypotension in older patients and is not warranted for Phyllis as she has no history of frequent or limiting angina.
- Gliclazide, an oral hypoglycaemic agent, is not needed as Phyllis's
 HbA1c result suggests her blood glucose control is too stringent,
 especially given the past episode of severe hypoglycaemia requiring
 hospitalisation.
- Pravastatin is probably not necessary as Phyllis's LDL-cholesterol level is very low, despite her elevated cardiovascular risk. Ceasing the drug avoids the risk of rhabdomyolysis if her renal function was to suddenly deteriorate in the event of intercurrent illness. In any event, her fasting lipids could be rechecked 4–6 months after drug cessation. If her LDL-cholesterol rises to unacceptable levels (ie >2.5 mmol/L) in the presence of a low-cholesterol diet, then the drug could be recommenced at a low dose.
- Alendronate is a bisphosphonate that Phyllis has taken for more than 5 years. It is unlikely to confer further benefit in reducing the risk of osteoporotic fractures and may simply aggravate symptoms of oesophageal reflux.
- Sertraline was taken for a past episode of reactive depression around the time Phyllis's husband died. In the absence of subsequent overt symptoms of depression, however, the drug may no longer be indicated. Her Geriatric Depression Scale (short version) returneds a score of 7/15 (with a nominal cut-off of 5 suggesting the possibility of significant depression and need for further psychological assessment) and it may be prudent to have Phyllis consult a psychologist prior to a trial of weaning the drug under close observation.
- Donepezil and other cholinesterase inhibitors have no evidence supporting benefit in patients with mild cognitive impairment (MCI) and increase risk of syncope and peptic ulcer as a result of vagal stimulation.
- Oxazepam, a benzodiazepine, and oxycodone, a strong opioid analgesic, are drugs that should be avoided in older patients because of their central nervous system effects, addictive potential and propensity to cause falls, with attendant risk of hip fractures and impaired concentration. Further, an Australian study of hospital records for people over the age of 60 years found analgesics were responsible for around 17% of more than 37,000 admissions attributed to adverse drug reactions.⁴

At this stage, the following prescription medications should be continued:

- Carvedilol, perindopril and frusemide: it is considered likely that symptoms of congestive heart failure will quickly resume if these medications are stopped. Of all her medications, these are probably the most important in keeping her symptom-free and alive.
- Warfarin: given Phyllis's high risk of a disabling embolic stroke, based on her high CHA₂DS₂.VASc score, and that her bleeding risk, based on the HAS-BLED score, is lower than her embolic risk, the benefit of continuing anticoagulants, in the absence of any significant lability in her international normalised ratio (INR), outweigh the risk of harm. However, this issue needs to be discussed with Phyllis and her daughter and their consent obtained for a trial of discontinuation. The indications for ongoing warfarin need to be reviewed at regular intervals

in response to whether Phyllis has further falls, or if the burden of anticoagulant monitoring is becoming too great.

• Omeprazole: given her troublesome reflux symptoms, but this should be reviewed at monthly intervals.

The non-prescription drugs to be continued include:

- cholecalciferol to maintain vitamin D levels, given her frail appearance
- · paracetamol only (without codeine)
- · stool softener
- calcium carbonate.

ANSWER 6

The significant harm and treatment burden resulting from the increasing prevalence of inappropriate polypharmacy in older populations cannot be ignored. Research shows that both doctor and patient are often hesitant in ceasing medications that have been prescribed for some time and seemingly tolerated without any ill effects. The overriding fear for both is relapse of underlying disease or precipitation of some serious adverse event. However, evidence indicates that, when making decisions about their healthcare, older patients are very sensitive to the risk of adverse treatment effects. When properly informed of benefits and harms, they tend to choose those interventions that optimise current quality of life rather than prolong life or prevent future morbid events.

ANSWER 7

Multiple studies, including randomised controlled trials, have shown that deliberate yet judicious de-prescribing of unnecessary drugs is feasible, safe and beneficial.^{5–10} Caution is required in weaning patients off drugs with a higher proclivity towards withdrawal or disease rebound syndromes. These include drugs with short half-lives and the potential to cause physical dependence and/or exert effects on the central nervous and cardiovascular systems. In such instances, patients need to be monitored every few weeks as the dose of drug is gradually reduced then ceased. Medicine management needs to be a team effort between patients, carers, GPs and community pharmacists. It is important to communicate the discontinuation regimen and contingency plans to all health professionals and other relevant parties (carers, family) involved in the patient's care. At this stage, it is essential to engage Phyllis's daughter and the local pharmacist to reinforce the optimal use of drugs.

ANSWER 8

The drugs that should take priority in being discontinued are those with the lowest utility (ie lowest benefit-to-harm ratio) and least likelihood of being associated with withdrawal syndromes or disease rebound (*Figure 1*).³

In Phyllis's case, digoxin, oral hypoglycaemic agents, spironolactone and donepezil may be the first to be discontinued. The statin, bisphosphonate and amlodipine may be next in line as they have no rebound or withdrawal risk and have minimal benefit.

Levodopa, sertraline, opioids, benzodiazepine and isosorbide dinitrate may follow but will require slow weaning given their central nervous and cardiovascular effects. 8

CONCLUSION

In summary, the GP, pharmacist and carers should communicate and implement a management plan, with contingencies, in agreement with the patient to:

- Cease one drug at a time so that harms (withdrawal reactions or return
 of disease) and benefits (resolution of adverse drug effects) can be
 attributed to specific drugs and rectified (if necessary).
- Wean, not abruptly cease, drugs that are more likely to cause adverse
 withdrawal effects. Instruct the patient (or carer) on what to look for
 and report in the event of such effects occurring, and what actions they
 can self-initiate if these were to occur.
- Fully document the reasons for, and outcomes of, de-prescribing.

RESOURCES FOR DOCTORS

- The Royal Australian College of General Practitioners. Medical care of older persons in residential aged care facilities (Silver book), www.racgp.org.au/ download/documents/Guidelines/silverbook.pdf
- Australian Medicines Handbook. Prescribing for the elderly, amhonline.amh. net.au/guides/guide-elderly
- NHS Highland. Polypharmacy: Guidance for prescribing in frail adults, www.nhshighland.scot.nhs.uk/Publications/Pages/ PolypharmacyGuidanceforPrescribinginFrailAdults.aspx
- Best Practice Advocacy Centre New Zealand. A practical guide to stopping medicines in older people, www.bpac.org.nz/magazine/2010/april/ stopGuide.asp

- NPS MedicineWise. Older wiser safer. Sydney: National Prescribing Service Ltd, 2013. Available at www.nps.org.au/__data/assets/pdf_file/0009/235593/ Medicinewise-News-September-2013.pdf [Accessed 20 April 2015].
- Gnjidic D, Hilmer SN, Blyth FM, et al. Polypharmacy cutoff and outcomes: five or more medicines were used to identify community dwelling older men at risk of different adverse outcomes. J Clin Epidemiol 2012;65:989–95.
- Scott IA, Hilmer SN, Reeve E, et al. Reducing inappropriate polypharmacy the process of deprescribing JAMA Intern Med 2015;175:827–34.
- McLachlan AJ, Bath S Vasi Naganathan V, et al. Clinical pharmacology of analgesic medicines in older people: impact of frailty and cognitive impairment. Br J Clin Pharmacol 2011;71:351–64.
- Hilmer SN, Gnjidic D. The effects of polypharmacy in older adults. Clin Pharmacol Ther 2009;85:86–88.
- Le Couteur DG, Hilmer SN, Glasgow N, et al. Prescribing in older people. Aust Fam Physician 2004;33:777–81.
- Scott IA, Anderson K, Freeman C, et al. First do no harm the urgent need to deprescribe in older populations. Med J Aust 2014;201:390–92.
- Scott IA, Gray LA, Martin JH, Pillans P, Mitchell CA. Deciding when to stop: towards evidence-based deprescribing of drugs in older populations. Evidence-based Med 2013;18:121–24.
- Hilmer SN, Gnjidic D, Le Couteur DG. Thinking through the medication list. Appropriate prescribing and deprescribing in robust and frail older patients. Aust Fam Phys 2012;41:924–28.
- Anderson K, Stowasser D, Freeman C, Scott I. Prescriber barriers and enablers to minimising potentially inappropriate medications in adults: A systematic review and thematic synthesis. BMJ Open 2014;4:doi:10.1136/ bmjopen-2014-006544.

think she is at risk of a sexually transmissible infection (STI). She

that Pamela should be screened for STIs.

Which STIs will you screen for and how?

QUESTION 3 🗅

does not recall ever having an STI in the past and is unaware if her partner has ever had any STIs. After the sexual history, you suggest

CASE 2

PAMELA COMES FOR A ROUTINE PAP SMEAR

Pamela is a bank manager, 62 years of age, who sees you for her routine Pap smear. Pamela's last consultation with you was for a Pap smear 2 years ago, which was normal.

QUESTION 1 (C)	
What should you ask Pamela before you do the Pap smear?	
	FURTHER INFORMATION
	Pamela's swab comes back as positive for chlamydia.
	QUESTION 4 🔾 😞
FURTHER INFORMATION	What management plan would you develop for Pamela?
When you last saw Pamela, 2 years ago, she was going through a messy divorce and was having trouble sleeping. Today, Pamela tells you that she struggled for a while after her divorce and lost some	
weight. However, she feels much happier now and has no particular anxieties about her health or any worrying symptoms. She also tells you that she is in a new relationship with a man she met recently.	
QUESTION 2 ()	
Is there anything else you should explore? Why?	
	QUESTION 5 🗘 😂
	What other steps do you need to follow for cases of STIs such as chlamydia?
FURTHER INFORMATION	
Pamela's current partner is the only sexual partner she has had since her divorce. She reveals that the sex was slightly painful at	
first, but there has been no bleeding and she is using lubrication. Pamela and her partner do not use condoms, but she does not	

CASE 2 ANSWERS

ANSWER 1

This is an opportunity to make general enquiries about Pamela's health, including whether she has seen any other health professionals since her last consultation at the practice. A good way to start is to ask open questions such as:

- How have you been since I saw you 2 years ago?
- Do you have any concerns or questions about your health?

Then focus on some specific questions:

- When was your last period and have you had any bleeding at all since that time?
- · Have you had any bowel symptoms or change in bowel habit?
- Do you have any urinary symptoms such as frequency or incontinence?
- Is your weight steady?
- What sort of exercise do you do?
- Do you smoke or have you ever smoked in the past (check if there is a record of this in her notes)?
- Do you drink alcohol? If so, how much per day/week?
- What does your diet consist of?
- Are you getting an adequate amount of sleep (ask about her sleeping pattern)?
- When did you last have a mammogram?
- Are you taking any medication, either prescribed or over-thecounter?
- Would you like a chaperone to be present during the examination?

ANSWER 2

This is an ideal opportunity to ask Pamela about her sexual health, particularly as she has presented for a Pap smear.

Doctors routinely enquire about sexual health and activity in patients aged <25 years, but are less likely to consider these topics in older women. This is often because of the persistence of ageist stereotypes that affect the ease with which doctors are able to discuss sexuality with older people. Many people continue to have sexual intercourse well into old age. 2

Although men are more likely to be sexually active for longer, one US study found that about 17% of women were still having sex into their late 70s and early 80s.³ As there is a growing incidence of STIs in the older age group, ^{4,5} you need to explore whether there is any risk of Pamela having contracted an STI through her new relationship. This requires a very delicate conversation.⁶

One way to broach the subject is to acknowledge Pamela's news about her new relationship. 'That's really good news. Have you been together long?' Gauge how relaxed Pamela appears when discussing the relationship. Then, 'I hope you don't mind me asking if you are

sexually active in the relationship? After menopause, some women can find sex uncomfortable — how is it for you? Any problems?' Although Pamela is not at risk of pregnancy, it is important to consider STI protection when having sex. One way to broach this is to say, 'When I do a Pap smear, I routinely ask women if they would like a test for STIs as I can do this at the same time'. Then you can begin a discussion about the importance of using protection and her risk of infection.

As with all consultations involving sexual health, it is important to be non-judgmental and Pamela should expect to receive confidential and non-judgmental advice. You may feel you have some understanding of Pamela's situation but you need to ask the standard questions in relation to sexual partners and risk behaviour. Ye You can introduce the questions by advising Pamela that you will be asking certain questions that may not appear relevant to her but that they are important and routine in assessing the risk of infection. Questions include:

- what she knows about STIs
- · her current sexual activity and use of any protection
- the number of previous partners
- · whether she has been tested for STIs in the past and when
- any past infections
- whether her current partner has been tested, what for, when and the results of any testing
- what she knows about her partner's sexual activity
- her immunisation status, in particular, with respect to hepatitis B
- history of drug use, tattoos and body piercing (it is important not to make any assumptions about these on the basis of Pamela's age and career)
- · whether she has any concerns or questions.

ANSWER 3

Chlamydia is the most common sexually transmitted bacterial pathogen worldwide and there has been a steady rise in its prevalence in Australia. Pamela should be screened for chlamydia but does not require other tests, as she is not in a high-risk population, unless she requests them. A nucleic acid amplification test (NAAT) endocervical swab should be taken when she has her Pap smear. When the cervix is visualised, the swab should be rotated for 360 degrees inside the os.

ANSWER 4

You need to contact Pamela and ask her to make an appointment to discuss the results of her tests. How you do this will depend on your practice policy and what you have told Pamela about test results. She will be anxious and should be given an appointment as soon as possible. At the consultation, you will need to explore Pamela's emotional response to the STI. She may be angry, upset, embarrassed, anxious and feel betrayed. It is important not to assume how she is feeling and to be sensitive and empathetic. As Pamela has an uncomplicated infection, the standard treatment is azithromycin 1 g orally. An alternative is doxycycline 100 mg orally twice a day

for 1 week.^{11,12} Prompt recognition and appropriate treatment is essential in the control of *Chlamydia trachomatis* infection, not only in an infected individual but also through simultaneous management of their partner(s). You should advise Pamela to have no sexual contact for 7 days after she has completed the full course of antibiotics and that she should not have sexual intercourse with her current partner until he has also been tested and treated. Given Pamela's history, it would appear that she did contract chlamydia from this sole partner.⁷

You need to explore the physical diagnosis, and it is essential to have a conversation with Pamela as to how she feels about the STI and whether she has discussed this with her partner (depending on what she was told over the phone about the results) or how she will broach the subject with him.

ANSWER 5

Chlamydia infections have been nationally notifiable for all jurisdictions in Australia since 1997. The relevant state/territory legislation that governs the surveillance and reporting of infectious diseases to be followed is available on the Federal Department of Health website. 13,14

You should also advise Pamela that for all communicable diseases, it is obligatory to carry out contact tracing of all partners from the previous 6 months. You should check again that Pamela has only had this one partner. Pamela should also be advised that a test of cure is not necessary but that she should have another test in 3 months in case of re-infection.⁷

You should also re-assess Pamela's risk and offer testing for other STIs including gonorrhoea, syphilis and human immunodeficiency virus (HIV) as minimum, bearing in mind the appropriate window periods.⁷

RESOURCES FOR PATIENTS

- Australian Society for HIV Medicine provides a patient handout on http:// ctm.ashm.org.au/images/pdf/chlamydia_patient_handout.pdf
- Healthdirect Australia, www.healthdirect.gov.au/chlamydia
- Australian Government Department of Health, www.sti.health.gov.au/ internet/sti/publishing.nsf

RESOURCES FOR DOCTORS

- British Association for Sexual Health and HIV, Royal College of General Practitioners. Sexually transmitted infections in primary care www. bashh.org/documents/Sexually%20Transmitted%20Infections%20in%20 Primary%20Care%202013.pdf
- The Royal Australian College of General Practitioners. Guidelines for preventative activities in general practice. STIs. 8th edn, www.racgp.org. au/your-practice/quidelines/redbook/
- The Royal Australian College of General Practitioners. Clinical guidelines.
 Sexual health and blood borne viruses, www.racgp.org.au/your-practice/guidelines/national-guide/sexual-health-and-bloodborne-viruses
- Australasian Sexual Health Alliance. Australian STI management guidelines for use in primary care. Standard asymptomatic check-up, www.sti.guidelines.org.au/standard-asymptomatic-check-up
- Australasian Sexual Health Alliance. Australian STI management guidelines for use in primary care. Chlamydia, www.sti.guidelines.org.au/ sexually-transmissible-infections/chlamydia#diagnosis
- Antibiotic Expert Group. Antibiotic. In: eTG Complete [internet] Melbourne. Therapeutic Guidelines Ltd 2014, http://online.tg.org.au/complete/desktop/index.htm

- Australian Government Department of Health. Links to states and territories fact sheets for communicable diseases, www.health.gov.au/ internet/main/publishing.nsf/Content/cda-state-legislation-links.htm
- Australasian Society for HIV Medicine. Contact Tracing Manual. A practical handbook for health care providers managing people with HIV, viral hepatitis, other STIs and HIV-related tuberculosis, http://ctm.ashm.org.au

- 1. Yee L. Aging and sexuality. Aust Fam Physician 2010;39:718-21.
- 2. Kessel B. Sexuality in the older person. Age Ageing 2001;30:121-24.
- Lindau ST, Schumm LP, Laumann EO, Levinson W, O'Muircheartaigh CA, Waite LJ. A study of sexuality and health among older adults in the United States. N Engl J Med 2007;357:762–74.
- Australian Bureau of Statistics. Australian Social Trends. Sexually transmissible infections. Canberra: Commonwealth of Australia, 2012. Available at www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+F eatures10Jun+2012 [Accessed 17 April 2015].
- Australian Government Department of Health. National Notifiable Diseases Surveillance System. Canberra: Commonwealth of Australia, 2015.
 Available at www9.health.gov.au/cda/source/cda-index.cfm [Accessed 17 April 2015].
- Barton D, Joubert L. Psychological aspects of sexual disorders. Aust Fam Physician 2000;29:527–31.
- Lazaro N. Sexually transmitted infections in primary care. 2nd edn. London: RCGP and BASHH, 2013. Available at www.bashh.org/ documents/Sexually%20Transmitted%20Infections%20in%20Primary%20 Care%202013.pdf [Accessed 17 April 2015].
- The Royal Australian College of General Practitioners. Guidelines for preventive activities in general practice. STIs. 8th edn. Melbourne: RACGP, 2013. Available at www.racgp.org.au/your-practice/guidelines/redbook/ [Accessed 17 April 2015].
- Hall G. Clinical guidelines. Sexual health and bloodborne viruses. In: National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people. 2nd edn. Melbourne: RACGP, 2012. Available at www.racgp.org.au/your-practice/guidelines/national-guide/sexual-healthand-bloodborne-viruses [Accessed 17 April 2015].
- Australasian Sexual Health Alliance. Australian STI management guidelines for use in primary care. Chlamydia. Darlinghurst: ASHA, 2015. Available at www.sti.guidelines.org.au/sexually-transmissible-infections/ chlamydia#diagnosis [Accessed 17 April 2015].
- Antibiotic Expert Group. Antibiotic. In: eTG Complete [internet] Melbourne. Therapeutic Guidelines Ltd, 2014. Available at http://online.tg.org.au/ complete/desktop/index.htm [Accessed 17 April 2015].
- British Medical Association and Royal Pharmaceutical Society.
 British National Formulary. London: BMJ Publishing Group and Royal Pharmaceutical Society, 2014.
- Australian Government Department of Health. National Notifiable Diseases Surveillance System tables. Canberra: Commonwealth of Australia, 2013. Available at www.health.gov.au/internet/main/publishing.nsf/Content/ cdi3702m [Accessed 17 April 2015].
- 14. Australian Government Department of Health. Links to States and Territory Public Health Legislation, the Quarantine Act, and the National Health Security Act 2007. Canberra: Commonwealth of Australia, 2009. Available at www.health.gov.au/internet/main/publishing.nsf/Content/cda-statelegislation-links.htm [Accessed 17 April 2015].

QUESTION 3 💭 CASE 3 How would you explain these results? MARIE'S MEMORY IS BECOMING AWFUL Marie, 74 years of age, is a longstanding patient of yours. She has hypertension, type 2 diabetes mellitus, hypercholesterolaemia and a body mass index (BMI) of 32 kg/m2. As is customary for you in January, you decide to review Marie's medications. She tells you that among her over-the-counter (OTC) preparations are 'vitamins for my memory'. When you query this, she tells you that her memory has been getting markedly worse in recent times. QUESTION 1 🚇 QUESTION 4 (LL) What risk factors for dementia does Marie have? What further investigations are warranted? QUESTION 2 💭 What other history might you take to identify Marie's risk of dementia? QUESTION 5 🕮 What advice might you give Marie in the meantime?

FURTHER INFORMATION

Marie worked for many years as a legal secretary and still takes a keen interest in legal matters reported in the newspapers. She tells you she is worried about getting Alzheimer's disease as her mother was diagnosed with this condition. Because of her symptoms, family history, age, vascular risk factors (identified above) and a rather sedentary lifestyle, she is at risk of dementia. You ask your practice nurse to complete a Standardised Mini-Mental State Examination (SMMSE) on her. Marie's SMMSE score is 25/30.

FURTHER INFORMATION

Marie's computed tomography (CT) scan shows some mild cortical thinning, consistent with age. All of the other tests are normal. Marie is not depressed. A pharmacy-led home medicines review assessed her anticholinergic load (this may be discussed with the pharmacist) and found it to be acceptable. Marie was not on a

cholesterol-lowering medication, which is known to affect memory, so de-prescribing did not need to be considered in her case. However, Marie's daughter tells you it is true that her mother's memory is 'awful' and probably getting worse, and admits to going shopping with her so she does not forget items.

have a diagnosis of dementia, she does have a diagnosis of MCI, which is an important diagnosis to consider and places her at risk of progressing to dementia.

What additional strategies would you implement now?

QUESTION 8 ()

QUESTION 6 🗅
What might you do next to assess Marie's condition? What are the referral pathways for managing Marie?

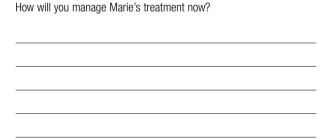
FURTHER INFORMATION

A letter from the memory clinic reports that Marie scored in the borderline range on the complete tests and advises that Marie currently has a diagnosis of mild cognitive impairment (MCI), which may progress to Alzheimer's disease. The clinic asks to review Marie again in 6 months.

FURTHER INFORMATION

Six months later, a review of Marie by the memory clinic identifies early Alzheimer's disease and initiates anti-dementia medication at Marie's request. The medications may enhance cognitive function and slow the progression of the disease but do not provide a cure.²⁰ A Cochrane review of the anticholinesterase medications for which she might be eligible shows an average 2.7 point (range 2.3-3 point) improvement on the Alzheimer's Disease Assessment Score - Cognition (ADAS-Cog) scale (full scale 70 points). The P value for this improvement is <0.00001.20 The focus of management from now on is supportive chronic disease management, ideally led by the primary care doctor.

QUESTION 7 💭



QUESTION 9 ()

How would you initiate discussions with Marie for her progressive	
reatment plan?	

FURTHER INFORMATION

You ring Marie and ask her and her daughter to come to see you. She sounds surprised but complies with your request. When Marie arrives at your rooms she says, 'I didn't think I needed to see you as I don't have dementia'. You explain that although she does not

CASE 3 ANSWERS

ANSWER 1

Marie has a range of vascular risk factors including hypertension, type 2 diabetes mellitus, hypercholesterolaemia and obesity. These conditions, particularly in middle age, are all risk factors for Alzheimer's disease and vascular dementia, which are the most common types of dementia.

Marie's age is also a risk factor for dementia. In Australia, the prevalence of dementia was estimated in 2011 at 9% in those aged 65 years and over, and 30% in those aged 85 years and over.²

Other risk factors that you might enquire about include: 3-5

- · sedentary lifestyle
- · excessive alcohol intake
- smoking
- traumatic brain injury
- · low education and low cognitive activity
- · limited social network and engagement
- depression
- · family history of dementia.

Conversely, a weekly serving of fish and daily intake of fruit and vegetables was associated with a decreased risk of dementia.⁶

There is increased awareness that dementia can be related to lifestyle and changing some of these behaviours over a person's lifetime can reduce the risk of developing dementia. The risk of dementia is often a powerful stimulus for people to consider lifestyle changes in relation to some of the modifiable factors listed above. ⁷

ANSWER 2

A history of Marie's memory problems should include a sensitive conversation about her functional ability, as dementia, even in the early stages, may have a significant effect on a person's ability to function in the home and at work. Cooking meals, for example, is a complex planning task that may be affected early in the course of the disease. However, many people with early dementia do not have good insight into their functional decline because of the anosognosia associated with the disease. At this stage, it is worth administering a dementia-screening instrument, such as the SMMSE or GP Assessment of Cognition (GPCOG) for Marie. There are practice nurse Medicare Benefits Schedule (MBS) item numbers for activities such as dementia case finding, which provide the practice with remuneration for the nurse to administer the instrument, provided a chronic disease management plan is in place. Marie already has a chronic disease management plan for her diabetes.

Dementia screening for all patients is not recommended by most guidelines, because of a large number of false positives in this low prevalence population. However, once a person has symptoms or a high number of risk factors, screening (in these cases called case finding) is more likely to produce a genuine positive result. ¹⁰ It should be noted, however, that most brief dementia-testing instruments just indicate probability and are not sufficient in themselves for a diagnosis to be made.

After considering differential diagnoses, the GP needs to put together an understanding of the person's education and pre-existing cognitive ability, risk factors, any information that can be gleaned from the family, and good observation of the patient's behaviour in order to make sense of the scores on a screening instrument. A decline in the result of a screening instrument measured over time (eg every 6 months) is a more powerful indication of dementia than a single poor result.¹¹

Patients, guided by their GPs, can complete a dementia risk factor instrument developed at the Australian National University, which gives a comprehensive summary of a person's risk factors. ¹² Note that the assessment, completed online, is quite thorough and does take 15 minutes or so to complete. A longer consultation time should be planned or it should be done by the patient at home.

ANSWFR 3

A score of <24 is usually regarded as being in the possible dementia range. 8,13-15 However, although Marie's score is not in the dementia range, you cannot confidently say she does not have dementia. Marie had a job requiring good cognitive skills, including verbal skills, and such patients often score well on the dementia screening tests. Ideally, you should discuss the possibility of dementia with Marie, particularly as she has introduced the issue as being of concern to her. Such a concern should not be dismissed, as many people are now well aware of dementia and wish to plan ahead for their financial and legal affairs, take that last overseas trip (or other bucket-list activities) and access support from Alzheimer's Australia and others with a clear understanding of the diagnosis. A sensitive conversation needs to take place and may take several consultations as you respond to Marie's concerns. It would be helpful at this early stage if Marie could bring a family member or close friend with her to the consultations, to support her and help her understand what you are saying, and also to provide some further information if possible.

ANSWER 4

Marie needs further work-up, including physical examination, blood tests, imaging, a depression screen and a medication review. This work-up is mainly to exclude other causes of cognitive decline such as depression, the effects of anticholinergic medication, hypothyroidism, a brain tumour or other medical illnesses including post-operative cognitive problems, some of which may be reversible. A useful mnemonic for dementia differential diagnoses is to consider the four Ds:

- Dementia
- Depression
- Delirium
- · Drugs (medications).

The physical exam may also help identify reversible causes of dementia. The recommended tests are listed in *Table* $1.^{16}$

ANSWER 5

While you and Marie are waiting for the results of her tests, you could suggest some strategies to address her risk factors for dementia. Randomised controlled trials show that some of these strategies may also improve cognitive function, at least in the short term.⁷

These strategies include:

- increasing exercise
- increasing socialisation (often this can be combined with exercise in a walking group or similar)
- improving diet, including intake of fish and vegetables, and the Mediterranean diet¹⁷ (not yet proven in intervention studies)
- activities that encourage cognitive engagement (eg Sudoku, Scrabble) and can be a social activity or done online.¹²

Table 1. Assessments to be made in dementia 16

Clinical history: cognitive, behavioural and psychological symptoms (carer/family input preferable)

Physical examination: causes of cognitive impairment (eg urinary tract infection, cardiac failure, visual or hearing impairment)

Activities of daily living

Include safety issues (eg driving, falls, nutrition)

Depression (eg Geriatric Depression Scale)

Medication review

Cognitive screening test (eg SMMSE, Rowland Universal Dementia Scale, GPCOG)

Routine tests

Full blood evaluation

Erythrocyte sedimentation rate

Liver function tests

Calcium

Thyroid function

Vitamin B12, folate

Computed tomography scan of brain without contrast

If indicated (*recommended)

Chest X-ray*

Fasting blood sugar levels

Fasting lipids*

Fasting homocysteine level

Electrocardiogram*

Mid-stream urine*

Serology for HIV, syphilis

Special investigations – not usually done early on and often not in general practice

Electroencephalogram

Magnetic resonance imaging

Positron emission tomography

Apolipoprotein E (E4 status confers increased risk)

Neuropsychological assessment

Adapted with permission from The Royal Australian College of General Practitioners from Pond D. Dementia: An update on management. Aust Fam Physician 2012;41:936–39.

ANSWER 6

In view of the marked cognitive symptoms reported by the daughter, along with a degree of 'carer burden' that she expresses, a referral to a specialist memory clinic, if available, is indicated. Such clinics provide more extended and sensitive memory tests for borderline cases and have time to spend with the family as well as the patient. Ensure that you tell Marie to take her daughter with her and ensure the clinic has a copy of all the investigations you have done. Marie should understand that the visit is exploring the possibility of dementia.

ANSWER 7

It is possible to have Alzheimer's disease in the early stages without a formal diagnosis of dementia, as the full criteria for that diagnosis are not yet met. MCl is a specific diagnosis that indicates cognitive impairment without significant loss of functional abilities. Around 10% of those with MCl go on to get diagnosable dementia each year.¹⁸

It is important at this stage for the GP to review the patient and their carer.

ANSWER 8

The timing is now right to discuss the implications of the diagnosis of MCI with Marie. For example, she would need to:

- limit her driving to less busy and complicated areas. An occupational therapy driving assessment may be considered depending on her daughter's information about driving
- consider her legal affairs, in particular:
 - making sure that she has a will
 - appointing an appropriate power of attorney
 - appointing someone to make health decisions for her (this is separate from a power of attorney and is termed differently in different states)
- prepare an advance care plan (see Case 4).

These conversations may take several consultations. Marie might also be provided with written material, such as the Alzheimer's Australia help sheet on $\rm MCL^{19}$

ANSWER 9

Marie comes to see you again for her monthly review and you initiate a conversation about the progressive nature of Alzheimer's disease, the need for and availability of support from local services (different in different areas) and suggest she join Alzheimer's Australia and access one of their *Living with Memory Loss* programs along with her daughter. ²¹ Alzheimer's Australia also has a helpline and a number of helpful advice sheets for different issues encountered in dementia. ²¹ The management plan for Marie should now be modified to include dementia, which is regarded as a chronic disease.

GPs are well placed to manage and provide care for patients with dementia, beginning with early diagnosis at home to ensure the patient and family are supported during the course of this progressive illness, which inevitably leads to death. Caring for patients with dementia is often overwhelming for caregivers and includes physical, emotional and economic stresses. Carers, therefore, require support from the health, social, financial and legal systems (practice nurses may be trained to provide resources to support carers). It is necessary to undertake regular reviews of Marie's functioning (not just cognitive, but also physical measures of activities of daily living). Review of carer burden and carer stress is also helpful and may be done in consultation with the carer's GP, if possible (carers do not always mention to their GP that they are looking after a person with dementia).

The GP should also decide, in collaboration with the patient and carer, the timing for when the aged care assessment team should be called to assess Marie for a home care package and later for admission to residential aged care.²¹ Further, The National Health Services Directory and the Department

of Health allows the GP to search and follow appropriate guidelines according to each state/territory.^{21–23}

RESOURCES FOR PATIENTS AND CARERS

- Alzheimer's Australia National Dementia Helpline provides carer support, Living with Memory Loss programs and other services. 1800 100 500
- Alzheimer's Australia provides information and support for patients and carers, as well as tools for dementia assessment including people from a non-English speaking background, www.fightdementia.org.au
- Dementia Behaviour Management Advisory Service provides strategies to help manage behaviour associated with dementia, 1800 699 799
- Commonwealth Respite and Carelink Centres, 1800 200 422
- Dementia Collaborative Research Centres. A guide for family carers dealing with behaviours in people with dementia, www.dementiaresearch.org.au/ images/dcrc/pdf/A_Guide_for_Family_Carers_Dealing_with_Behaviours_in_ People with Dementia 2014.pdf
- World Health Organization. 10 facts on dementia, www.who.int/features/ factfiles/dementia/dementia_facts/en/index4.html
- Australian Government Department of Social Services, www.myagedcare.gov.
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RESOURCES FOR DOCTORS

- Alzheimer's Australia provides information and support for patients and carers, as well as tools for dementia assessment, www.fightdementia.org.au
- General practitioner assessment of cognition (GPCOG) assessment tools, www. gpcoq.com.au
- Australian National University has developed a dementia risk factor instrument, which gives a comprehensive summary of a person's risk factors, http:// anuadri.anu.edu.au
- Dementia Collaborative Research Centre has tools and resources, including the Dementia Outcomes Measurement Suite, to assist professionals in assessing dementia. www.dementia-assessment.com.au/function/index.html
- Dementia Collaborative Research Centre. A guide to good practice managing behavioural and psychological symptoms of dementia, www.dementiaresearch. org.au/images/dcrc/output-files/328-2012_dbmas_bpsd_guidelines_guide.pdf
- Dementia Collaborative Research Centre. Managing behavioural and psychological symptoms of dementia. A clinician's field guide to good practice, www.dementiaresearch.org.au/images/dcrc/pdf/A_Clinicians_Field_Guide_to_ Good_Practice_Managing_Behavioural_and_Psychological_Symptoms_of_ Dementia 2014.pdf
- Brodaty H. Fourteen essentials for good dementia care in general practice, www.dementiaresearch.org.au/images/dcrc/pdf/14essentials.pdf
- Carlson L, Abbey J, Kocur J, Palk E, Parker D. (2008). Cognition/dementia care system general practitioner education package for people with dementia living in the community, www.health.qld.gov.au/caru/networks/docs/dementiapackage-qp.pdf
- Abbey J, Palk E, Carlson L, Parker D. Clinical practice guidelines and care pathways for people with dementia living in the community, http://eprints.qut. edu.au/17393/1/17393.pdf
- The Royal Australian College of General Practitioners. Medical care of older persons in residential aged care facilities. 4th edn, www.racgp.org.au/yourpractice/guidelines/silverbook/general-approach-to-medical-care-of-residents/ advanced-care-planning/

- Richard E, den Heuvel EV, Moll van Charante EP, et al. Prevention of dementia by intensive vascular care. Alzheimer Dis Assoc Disord 2009;23:198–204.
- Australian Institute of Health and Welfare. Dementia in Australia. Cat. no. AGE 70. Canberra: AlHW, 2012. Available at www.aihw.gov.au/WorkArea/ DownloadAsset.aspx?id=10737422943 [Accessed 25 May 2015].

- Norton S, Matthews FE, Barnes DE, et al. Potential for primary prevention of Alzheimer's disease: an analysis of population-based data. Lancet Neurology 2014;13:788–04
- Gons RA, van Norden AG, de Laat KF, et al. Cigarette smoking is associated with reduced microstructural integrity of cerebral white matter. Brain 2011;134:2116–24.
- Wilson RS, Boyle PA, Yu L, Barnes LL, Schneider JA, Bennett DA. Life-span cognitive activity, neuropathologic burden and cognitive aging. Neurology 2013;81:314–21.
- Barberger-Gateau P, Raffaitin C, Letenneur L, et al. Dietary patterns and risk of dementia. The Three City Cohort Study. Neurology 2007;69:1921–30.
- Brodaty H, Pond D, Kemp NM, Luscombe GS, Harding L. The GPCOG: a new screening test for dementia designed for general practice. J Am Geriatr Soc 2002:50:530–34.
- Molloy DW and Standish TI. A guide to the Standardized Mini-Mental State Examination. Int Psychogeriatr 1997;9 (Suppl 1):87–94.
- The Royal Australian College of General Practitioners. Medicare Benefits Schedule fee summary. Melbourne: RACGP, 2014. Available at www.racgp.org. au/your-practice/business/billing/mbs [Accessed 22 April 2015].
- The National Institute for Health and Care Excellence. Dementia. Supporting people with dementia and their carers in health and social care. London: NICE, 2006. Available at www.nice.org.uk/guidance/cg42/resources/guidancedementia-pdf [Accessed 22 April 2015].
- Helkala EL, Kivipelto M, Hallikainen M, et al. Usefulness of repeated presentation of Mini-Mental State Examination as a diagnostic procedure – a population-based study. Acta Neurol Scand 2002;106:341–46.
- Australian National University. Alzheimer's disease risk Index (ANU-ADRI). Canberra: Australian National University. Available at http://anuadri.anu.edu.au [Accessed 22 April 2015].
- Lopez M, Charter RA Mostafavi B, Nibut LP, Smith WE. Psychometric properties
 of the Folstein Mini-mental state examination. Assessment 2005;12:137–44.
- Dementia Collaborative Research Centres. Dementia Outcome Measurement Suite. Cognition assessment measures. Available at www.dementiaassessment.com.au/measures.html [Accessed 22 April 2015].
- Independent Hospital Pricing Authority. Standardised Mini-Mental State Examination (SMMSE). Guidelines for administration and scoring instructions. Canberra: Commonwealth of Australia, 2014. Available at www.ihpa.gov.au/internet/ihpa/publishing.nsf/Content/4E22FCBF77981A7BCA257D09000AA8C D/\$File/smmse-guidelines-v2.pdf [Accessed 22 April 2015].
- 16. Pond D. Dementia: an update on management. Aust Fam Physician 2012;41:936–39.
- Lourida I, Soni M, Thompson-Coon J, et al. Mediterranean diet, cognitive function, and dementia: a systematic review. Epidemiolog 2013;24:479–89.
- Barber B, Ames D, Ellis K, Martins R, Masters C, Szoeke C. Lifestyle and late life cognitive health: sufficient evidence to act now? Int Psychogeriatr 2012;24:683–88.
- Storey J, Rowland JTJ, Conforti DA, Dickson HG. The Rowland Universal Dementia Assessment Scale (RUDAS): a multicultural cognitive assessment scale. Int Psychogeriatr 2004;16:13

 –31.
- Mitchell AJ, Shiri-Feshki M. Rate of progression of mild cognitive impairment to dementia – meta-analysis of 41 robust inception cohort studies. Acta Psychiatr Scand 2009;119:252–65.
- Alzheimer's Australia. Help sheets. Sydney: Alzheimer's Australia, 2010.
 Available at https://fightdementia.org.au/about-dementia-and-memory-loss/help-sheets [Accessed 22 April 2015].
- Birks J. Cholinesterase inhibitors for Alzheimer's disease. Cochrane Database Sys Rev 2006,CD005593. Available at http://dx.doi.org/10.1002/14651858. CD005593 [Accessed 22 April 2015].
- Australian Government Department of Social Services. My aged care. Find a service. Canberra: Commonwealth of Australia, 2013. Available at www. myagedcare.gov.au/service-finders [Accessed 22 April 2015].

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BEVERLEY WOULD LIKE TO DIE WITH DIGNITY

Beverley is 86 years of age and lives alone in low-level residential care. She has severe, inoperable aortic stenosis and has had five hospital admissions for decompensated heart failure over the past 12 months. She feels she has a diminished quality of life. Beverley has no cognitive impairment, has made a will and is fully aware that her condition is deteriorating and untreatable. She is aware of advance care planning (ACP) and would like the opportunity to discuss her options for end-of-life care and avoid having to go to hospital again or end up dying there.

advance care planning (ACP) and would like the opportunity to discuss her options for end-of-life care and avoid having to go to hospital again or end up dying there.	
QUESTION 1	QUESTION 4
	QUESTION 5 🗘
QUESTION 2	How would you identify other important decision makers in the process of ACP?
	·

QUESTION 3

How would you initiate discussions around ACP?

FURTHER INFORMATION

Beverley has not yet given her eldest daughter power of attorney to finalise affairs in the event of her passing.

Beverley has attempted to raise the subject with her family, who seem reluctant and uncomfortable to enter into this conversation. She fears that if she becomes ill and, for whatever reason, is unable to speak for herself, she may be subjected to life-support measures she would rather not have but which her family, who love her very much, would insist on her receiving in order to keep her alive.

FURTHER INFORMATION

An advance care plan that records Beverley's wishes is drafted. This is in accordance with her values, life goals and preferred outcomes. The advance care plan includes directions about her care and treatment refusals, and lists her nominated surrogate decision maker (SDM).

Beverley comes back for review with her daughter. They concede that their conversation around her ACP was not easy and caused some shedding of tears on both sides. However, her daughter is now happy that they have both come to terms with what they might expect and want in regards to Beverley's condition and care over coming months.

QUESTION 7 🗅



After completing an advance care plan what needs to happen to ensure it is retrieved and actioned at the appropriate time?

CASE 4 ANSWERS

ANSWER 1

Beverley should be given realistic information about her prognosis and treatment options for her comorbid conditions. There should be an emphasis on how these might contribute to improving or mitigating her diminishing ability to conduct activities of daily living. Beverley's repeated hospital admissions for decompensated heart failure, indicating irreversible deterioration in her health status, serve as a trigger for discussions around ACP.

ACP is a series of steps that GPs can take with their patients to help them plan for their future healthcare. 1-3 ACP enables people to prepare for, and make choices about, the type of future medical treatment they wish to have, or refuse, if they become unable to make or communicate decisions. 1-4 ACP allows a person to plan for future health and personal care needs. An ACP discussion with patients centred on their medical history and current conditions, and their values and preferences for future medical care, can be formalised and recorded as a written advance care plan, which can then be used to quide future decision making.

ACP is a process to identify and facilitate a 'good death' (eg managing symptoms, avoiding prolonged dying, achieving a sense of control, relieving burdens on the family and strengthening relationships).^{2,3}

Randomised trials and observational studies have shown that ACP improves concordance between expressed preferences for care and delivered care, provides greater patient and carer satisfaction with care, alleviates anxiety and sense of guilt in relatives, and lessens decisional conflict.^{5–8} Despite this, acceptance and implementation of advance care plans in general practice has been slow.^{1,3,6}

As many as 70–80% of older patients with end-stage chronic disease would like to discuss ACP, but less than 50% of patients receive care in their terminal phase that accords with their wishes and preferences. The Grattan Institute report published in 2014, entitled *Dying well*, highlights the current disconnect in Australia between people's expressed wishes with regard to end-of-life care and what actually happens. 2

It should be emphasised to patients that ACP is the process of developing a valid and accessible written expression of their wishes, choices and treatment preferences for end-of-life care when they may be unable to make or voice decisions for themselves in the future. Completing an advance care plan may lead to completion of an advance care directive (ACD), which involves the signing of a statutory document, signed by a competent adult and recognised by common law or legislation.⁹

ANSWER 2

The GP is pivotal to the process of embedding ACP into routine general practice and guiding patients through the process.⁵

GPs are also in an ideal position to facilitate the advance care planning process, as the majority of older patents visit a GP at least once a year. 1 Further, the GP knows the patient well — in all their

circumstances – and is best suited to take primary charge of ACP discussions, with support and endorsement from attending specialists. During the initial discussion phase, patients should be given an introductory brochure outlining the aims and processes of ACP and invited to discuss further, if they wish, at a subsequent consultation.

The role of GPs in advance care planning include: 1,5

- discussing the idea of ACP with patients
- providing patients (and carers) with information regarding their current health status, prognosis and future treatment options
- witnessing and assisting in the completion of instructional documents
- applying patients' wishes to medical management, with attention to cultural sensitivities that may differentially impact on the level of patient autonomy, informed decision making, truth telling and control over the dving process.

Discussion leading to ACP may involve asking patients the following questions:

- What types of things and activities give their life meaning and are intrinsically most important to them?
- Who or what sustains them when they face serious challenges in life (eq religious conviction)?
- Have they thought about what their medical treatments may entail in the future and how these might affect them physically and mentally?
- Have they had any experience with a family member or friend
 who was faced with decisions about medical care near the end of
 life, and the processes used to make such decisions? If yes, was
 their experience positive or do they wish things could have been
 different and, if so, how?
- Who would they like to participate in finalising clinical decisions on their behalf if they were, at some future time, unable to make their own choices known?

Moreover, the GP acts as the central coordinator in assisting patients in their interactions with all healthcare organisations (general practices, hospitals, residential care facilities) that need to become conversation ready, that is, committed to systematically eliciting, documenting and enacting patients' care preferences.¹

ANSWER 3

The timing for these sensitive conversations is crucial. There needs to be a specific trigger. In Beverley's case, she has a poor prognosis and is aware of ACP from the media, so initiating the conversation may be relatively easy in her case, compared with that of patients who are unaware of ACP or not fully appreciative of the seriousness of their condition. In identifying patients who might be eligible for ACP discussions, the GP should ask:

- Does the patient have a poor prognosis?
- Knowing all I know about this patient, would I be surprised if he/ she were to die within the next 6–12 months?

Patients should be given realistic information about their prognosis and treatment options for each of their medical conditions,

emphasising how these might affect physical and mental function. The GP also needs to be sensitive to the clinical nuances of the disease and its management as scenarios for a patient with heart failure, for example, will be different from that of a patient with cancer. The timing and the content of conversations with patients need to be not only sensitive but also pragmatic. Tips for ensuring successful ACP conversations and examples of open conversations are outlined in the article by Scott et al.¹

ANSWER 4

Patients like Beverley who have had frequent hospital admissions for acute exacerbations of chronic disease are ideal candidates for ACP.

The optimal timing of ACP can be difficult. Starting too early, when patients and family are not ready, may result in loss of confidence in the doctor—patient relationship and a disinclination to enter into further discussions; too late and in the opportunity to pre-empt sudden worsening in health and to clarify the patient's preferences may be lost, resulting in precipitous decisions towards overly invasive care at times of clinical crisis that the patient may not have desired.

ANSWER 5

An essential task at an early stage is identifying an SDM and involving them in discussions around foreseeable events. The GP is also essential at this stage in helping bring the patient and SDM together.

This process may involve assigning a person who has legal authority to be the SDM, who can interpret and articulate a patient's healthcare preferences at a time when the patient may not be able to do so. The appointed SDM is commonly a family member or legal guardian.¹

ANSWER 6

There are five sequential phases to ACP, beginning with precontemplation, then implementation and maintenance. ¹⁰ These inform the steps presented and discussed in detail by Scott et al. ¹ The first step is to define values, goals and preferences for care of the patient and, at a later phase, move to more binding decisions about specific forms of care pertinent to the most likely future clinical scenarios. Open discussions with Beverley should be conducted in a non-threatening environment, preferably with carers and family members present. It is important to initiate and maintain positive interactions between the family and patient by clarifying and resolving any issues of ambiguity or disagreement as they arise. Facilitative language needs to be used in maximising patient and carer comfort in discussing end-of-life care. ¹⁰

Patients should be asked to describe clinical states they would find unacceptable (eg being mechanically ventilated, being in a vegetative state, dying with unrelieved pain, being totally bed-bound or fully dependent on others for care, or any other state they would regard as being grossly undignified).

At the end of each conversation, summarise and check patients' and SDMs' understanding of what has been discussed and document the outcomes using a suitable statement of choices/ACP form, reassuring all parties that such documentation is not necessarily final or

binding. Finally, plan for a review of the advance care plan as clinical circumstances change, emphasising the plan is a living document.

The steps for formulating an advance care plan by the GP are summarised below.

Step 1. Incorporate ACP into routine patient care:

- Provide information and offer the opportunity to develop an advance care plan when doing a comprehensive medical assessment.
- Suggest that the SDM be involved in future consultations where the patient's wishes and preferences are to be subject to further discussion.

Step 2. Assess the capacity of patients to appoint an SDM and complete an advance care plan:

- Where patients have decisional capacity, check and witness that
 the nominated SDM is appropriate and agrees to assuming this
 role, and that the appropriate form conferring legal authority (eg
 enduring power of attorney, statutory health attorney) has been
 completed correctly.
- Where patients do not have decisional capacity, and no SDM has been previously assigned and/or legal authority conferred, refer to state legislation for deciding who can be the representative.

Step 3. Support discussion and documentation of advance care plan:

- Discuss the patient's wishes with resident and SDM in the presence or absence of other relatives and carers according to the patient's or SDM's wishes, when appropriate.
- Provide information about the nature and impact of medical conditions, their prognosis, and benefits and burdens of treatment.
- Complete relevant forms (statement of choices/ACP form) at the appropriate time and, where feasible, identify circumstances where patients indicate they do not want invasive or life-saving treatment and/or want to be resuscitated in the event of cardiorespiratory arrest.

Step 4. Apply the patient's wishes to medical care:

- Advance care plans come into use only when patients are no longer able to articulate or communicate their wishes. Until such a time, they can speak for themselves and may choose care that differs from what they indicated was their first preference when writing the advance care plan.
- Consult patients and their SDMs and review the advance care plan prior to any major clinical decisions concerning invasive or lifesaving treatments.

Step 5. Review the advance care plan regularly or when the patient's health status changes significantly. Any pre-existing advance care plans can be revoked at any time as long as the patient has the mental capacity to make this decision.

ANSWER 7

Beverley should be informed that, if she were to go to hospital for any reason, she should take a copy of her advance care plan with her so that her doctors can be made aware of her preferences and ensure her management, including acute resuscitation plans, accords with

her wishes. The SDM should also have a copy of the plan in order to be able to present it as confirmation of his/her nomination as SDM if required.

It is important that the GP and other attending healthcare professionals document the existence of any advance care plan, and that systems are in place to ensure this information is transferred with the patient and/or SDM, should the patient require care in another facility or jurisdiction. Completed advance care plans should be filed and noted in all patient records (including patient-controlled electronic health records) to ensure that they can be rapidly retrieved. Where the option exists to have the advance care plan stored in a centralised electronic repository maintained by area health services or primary health networks, this should be promoted to patients and their SDMs.^{1,9}

Additionally, patient-held wallet cards or alert bracelets should be provided to flag the existence of advance care plans, for the benefit of ambulance services and emergency physicians at times of crisis when patients may be temporarily unable to make or communicate their treatment preferences.

Finally, the GP should be cognisant of the requirements of the relevant state/territory legislation that governs the procedures to be followed for ACP. This legislation is available on the Advance Care Planning Australia website.¹¹

FURTHER INFORMATION

A few months later, Beverley becomes acutely short of breath. In accordance with her wishes expressed in her advance care plan, the palliative care outreach team is contacted and they arrange for home oxygen and intravenous diuretics to be provided. Beverley dies peacefully over a few days in the company of her daughter and family, who are grateful to have been relieved of the emotional burden and the possible guilt that might have accompanied their acquiescence to palliative care in the absence of knowing and accepting their mother's wishes as recorded in the advance care plan.

CONCLUSION

This case highlights aspects of the use, implementation and retrieval of advance care plans for patients with advanced chronic disease, and the need for GPs to be proactive in the process of ACP.⁹ It should be emphasised that unlike ACDs, advance care plans are not formal, multi-page, legally binding documents, but instead are living documents capable of iterative modification, as required, by the patient and SDM in consultation with the GP.^{1,9}

RESOURCES FOR DOCTORS

Many resources are available to assist with ACP. The following are recommended:

- Advance Care Planning Australia has a website that includes links to training resources and courses provided by the Respecting Patient Choices Program at Austin Health, http://advancecareplanning.org.au
- Caresearch, a national palliative care information service hosted by Flinders University, provides extensive information on palliative care topics including ACP, and has a specific hub for GPs, www.caresearch.com.au/ caresearch/tabid/2583/Default.aspx

- Decision Assist, an Australian Government-funded specialist advice phone line for GPs and aged care providers, available 24/7 for palliative care advice, and 8 am to 8 pm for ACP advice. In addition, the website has many useful facts sheets and educational resources, www.decisionassist. org.au (tel: 00 668 908)
- The Royal Australian College of General Practitioners. Medical care of older persons in residential aged care facilities. 4th edition, http://www. racgp.org.au/your-practice/guidelines/silverbook/general-approach-to-medical-care-of-residents/advanced-care-planning/
- Care planning in general practice, www.neml.org.au/wp-content/uploads/ Care-Planning-Guide-for-General-Practice.pdf
- Respecting Patient Choices, www.respectingpatientchoices.org.au

- Scott IA, Mitchell GK, Reymond EJ, Daly MP. Difficult but necessary conversations – the case for advance care planning. Med J Aust 2013;199:662–66.
- 2. Swerissen H, Duckett S. Dying well. Carlton: Grattan Institute, 2014.
- Cartwright CM, Parker MH. Advance care planning and end of life decision making. Aust Fam Physician 2004;33:815–19.
- Houben CHM, Spruit MA, Groenen MTJ, et al. Efficacy of advance care planning: a systematic review and meta-analysis. J Am Med Dir Assoc 2014;15:477–89.
- Mitchell G, Zhang J, Burridge L, et al. Case conferences between general practitioners and specialist teams to plan end of life care of people with end stage heart failure and lung disease: an exploratory pilot study. BMC Palliat Care 2014:13:24.
- Rhee JJ, Zwar NA, Kemp LA. Uptake and implementation of advance care planning in Australia: findings of key informant interviews. Aust Health Rev 2012;36:98–104.
- Levy C, Morris M, Kramer A. Improving end-of-life outcomes in nursing homes by targeting residents at high-risk of mortality for palliative care: program description and evaluation. J Palliat Med 2008;11:217–25.
- Detering KM, Hancock AD, Reade MC, et al. The impact of advance care planning on end of life care in elderly patients: randomised controlled trial. BMJ 2010;340:c1345.
- Leditsche, A, Crispin, T, Bestic, J. Approaching advance care directives for patients in residential care. Aust Fam Physician 2015;44:186–90.
- Fried TR, Redding CA, Robbins ML, et al. Stages of change for the component behaviours of advance care planning. J Am Geriatr Soc 2010;58:2329–36.
- Australian Government Department of Health. State/Territory legislation at http://advancecareplanning.org.au/advance-care-planning/forprofessionals/the-law-of-advance-care-planning

CASE 5

FRED IS SHORT OF BREATH

Fred is 80 years of age and has been a long-term patient at your practice. Fred was admitted to hospital 2 weeks ago with a suspected exacerbation of congestive cardiac failure. A chest X-ray revealed a large mass in the lower lobe of his right lung. He now presents to you complaining of shortness of breath, which has been present since his admission to hospital.

present since his admission to hospital.	
QUESTION 1 😃	
What clinical examination would assist in making a diagnosis?	
	QUESTION 4 😃
	Who else should be involved in Fred's care at this stage?
FURTHER INFORMATION	
Examination reveals decreased air entry at the base of the right	
ung, a normal jugular venous pressure, mild swelling of the ankles	
pilaterally, and soft, non-tender calves. Fred does not have a fever out has a mildly elevated respiratory rate of 22 breaths/minute,	
and oxygen saturations of 94% in room air.	
Fred has a history of hypertension and glaucoma, and is an	
ex-smoker. He lives with his wife and previously had an exercise tolerance of 100 m because of his heart failure. During his recent	FURTHER INFORMATION
nospital admission, he had a biopsy of the lung mass, which	The local community palliative care service admits Fred to their
detected an adenocarcinoma. A staging computed tomography (CT)	program and he commences oral immediate-release morphine
scan suggested multiple liver and lung metastases. Fred was not offered chemotherapy in view of his comorbidities and he did not	liquid 2 mg PRN with good effect. As part of the admission process, the community palliative care service asks you to
nave a mutation amenable to targeted therapy.	prescribe injectable medications for use in the home.
QUESTION 2 💭	QUESTION 5 💭
What differential diagnoses would you consider for his dyspnoea?	What would you consider prescribing?
,	····a····g·

FURTHER INFORMATION

QUESTION 3 😃

How would you manage his dyspnoea?

A CT pulmonary angiogram performed the day before discharge showed the presence of a small right pleural effusion but no evidence

of pulmonary embolus. You suspect that Fred's dyspnoea is most

probably related to his lung cancer and underlying heart failure.

FURTHER INFORMATION

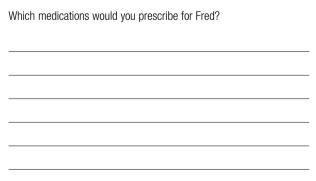
Four weeks later, you receive a phone call from the community palliative care nurse who visits Fred and is concerned about his increasing left iliac crest and right lateral chest pain. He has been taking approximately 10 doses of morphine mixture per day for his dyspnoea and pain. Imaging reveals bone metastases at the painful sites.

QUESTION 6 💭
What options would you consider to manage Fred's pain?

FURTHER INFORMATION

Fred has a single fraction of radiotherapy, 8 Gy, to the left ilium and right sixth rib. This treatment reduced his pain considerably. Five weeks later, the community palliative care nurse calls to tell you that Fred is no longer able to swallow his oral medications and that he has vomited several times. He has expressed a wish to die at home and his wife and children are supportive of this. The nurse requests orders for a continuous subcutaneous infusion of medication delivered by a syringe driver to replace Fred's oral analgesia. Until now, he has been taking slow-release morphine 30 mg twice daily and immediate-release morphine mixture 10 mg per dose. He has required 30 mg of the immediate-release mixture in the last 24 hours.

QUESTION 7



QUESTION 8 🕮

Are there any special prescribing considerations for palliative care patients?

FURTHER INFORMATION

Fred dies at home 4 days later, surrounded by his family. Two months later, Fred's daughter Janice comes to see you, expressing her thanks for helping Fred to remain in his own home. She confides that she is having trouble concentrating at work and often finds herself crying at night. She has a history of depression but has been well for the past several years.

QUESTION 9 💭



What sources of professional support may be available to Janice from other healthcare professionals?

CASE 5 ANSWERS

ANSWER 1

Pulse oximetry, vital signs and respiratory examination should be performed for evidence of bronchoconstriction, effusion, diaphragmatic splinting and pneumonia. Examination of the respiratory lymph nodes and abdominal examination to rule out organomegaly should also be performed. Cardiovascular examination should be performed for evidence of cardiac failure and pulmonary embolus pericardial effusion. ¹

ANSWER 2

- Intra or extraluminal tumour: this may be associated with a fixed wheeze on examination. Imaging, such as a CT scan of the chest, may be helpful to assess the radiological extent of disease.
- Pulmonary embolism: associated chest pain, tachycardia and electrocardiogram changes with or without peripheral signs such as lower limb swelling are of concern. A D-dimer test is generally unhelpful as it is often positive in the presence of cancer. A CT pulmonary angiogram or ventilation/perfusion (VQ) scan is often needed to exclude pulmonary embolism.
- Pleural effusion: reduced air entry on auscultation and dullness to percussion may indicate a pleural effusion. A plain chest X-ray can confirm the presence of an effusion.
- Heart failure: signs of fluid overload such as a raised jugular venous pressure, peripheral oedema, rapid weight gain and crepitations on auscultation of the chest may suggest an exacerbation of heart failure as the underlying cause. A chest X-ray may also be helpful in this setting.¹
- Pneumonia: fever, cough, crepitiations in the affected area and hypoxia may suggest pneumonia and a chest X-ray may assist in confirming the diagnosis.

ANSWER 3

Management of Fred's dyspnoea includes:

- energy conservation techniques (referral to an occupational therapist may be helpful)¹
- diaphragmatic breathing techniques (referral to a physiotherapist may be helpful)¹
- adequate ventilation (fan, open window, cool face washer)¹
- addressing underlying anxiety and fears.¹

Morphine is beneficial for reducing the dyspnoea² but is not currently approved for use in Australia for this indication.³ It is widely recommended by many reputable clinical practice guidelines in Australia and internationally.^{1,4,5} The *Therapeutic Guidelines* recommend immediate-release morphine, 1–2.5 mg orally as needed for patients with intermittent dyspnoea who have never had opioids.¹ For continuous dyspnoea, immediate-release morphine 1–2.5 mg orally every 4 hours, or modified-release morphine 5–10 mg orally twice a day, is recommended; doses should be titrated to effect.¹ Morphine should

be used with caution in patients with renal failure, particularly elderly patients. Other opioids have not been studied for dyspnoea, but may also be effective. 1,4 Remember that 'the hand that writes the opioid order must also write the aperient order'.1 Constipation is an almost universal consequence of opioid use and so prophylaxis is essential.¹ A combination of a softening agent and a stimulant such as docusate with sennoside B 100 + 16 mg orally once or twice daily is a suitable initial choice. 1 Nausea and vomiting occur commonly when starting opioids and an antiemetic such as metoclopramide, up to 10-20 mg orally four times a day or haloperidol 0.5-2.5 mg orally twice a day may be required. The degree of dyspnoea does not necessarily correlate well with levels of hypoxaemia. A trial of oxygen should be considered for patients with oxygen saturations <90% on room air at rest or with minimal exertion. It may also be helpful during an acute event such as an active infection and should be considered if needed to facilitate hospital discharge at the end of life or if the patient or family are distressed by its absence. Home oxygen therapy is expensive and potentially cumbersome, and many patients will find measures such as circulating air from a fan equally effective.6

ANSWER 4

Consider referring Fred to the local community palliative care service. Referral to palliative care at the time of diagnosing metastatic disease in non-small cell lung cancer has been shown to have a survival benefit and to improve quality of life. Specialist palliative care helps to promote the quality of life of the patient and family throughout the course of the illness, not just in the final weeks or days. Most services are provided free of charge and assist patients in their homes. They provide assistance with monitoring and managing symptoms, promoting quality of life and independence, liaising with GPs and other health professionals involved in the care of the patient and bereavement care. Community palliative care services may also facilitate access to equipment, allied health professionals with expertise in palliative care and specialist palliative care physicians. Local services can be located via state-based palliative care organisations or Medicare Locals (see *Resources for Doctors*).

Radiotherapy can be useful for palliating the thoracic symptoms of advanced lung cancer of at least moderate intensity.⁸ Higher doses of therapy have been associated with a survival benefit for patients with a good performance status, but patients with a poorer performance status are usually treated with a lower dose to avoid toxicity, as efficacy in symptom control is not dose-dependent.⁹

Referral for radiotherapy is often made in conjunction with the treating medical oncologist. Some institutions offer rapid assessment and treatment clinics to quickly access radiation treatment for patients being managed with palliative intent.

ANSWER 5

Anticipatory prescribing at the end of life assists in the timely management of distressing symptoms in the home. Consideration should be given to prescribing subcutaneous medication according to an agreed protocol to manage pain, agitation, nausea and vomiting, and respiratory tract secretions.¹⁰

To calculate an appropriate dose of subcutaneous morphine, calculate the daily oral morphine equivalent (see *Therapeutic Guidelines: Palliative Care* for conversion ratios¹). The subcutaneous equivalent is approximately one-third of the oral dose.¹ Divide this by one-sixth to half for the breakthrough dose. For patients who are opioid-naive, a reasonable starting dose would be 2.5 mg.⁴

ANSWER 6

For continuous pain, commence regular paracetamol and/or a non-steroidal anti-inflammatory drug (NSAID) if not contraindicated.¹ NSAIDs should be used with caution in the elderly and patients with renal impairment, cardiac failure or a history of peptic ulcer disease.^{1,11} There is weak evidence to support the addition of an NSAID to a strong opioid for cancer pain,¹² but there is no quality data to support the assertion that NSAIDs are specifically beneficial in cancer-induced bone pain.¹³

When pain is moderate to severe in intensity, or continues despite paracetamol/NSAID use, it is reasonable to commence an opioid analgesic. Morphine is the opioid of choice in patients with normal renal function, and the oral route is preferred where possible. For patients who are opioid-naive (note that codeine is an opioid) it is reasonable to commence immediate-release morphine 5–10 mg every 4 hours or, alternatively, modified-release morphine 10–15 mg twice a day (if using a formulation designed for BD dosing). Halve the doses for an elderly/frail patient. Immediate-release breakthrough or rescue medication should also be prescribed, typically one-sixth to one-twelfth of the daily background dose.

As Fred has been taking an opioid for dyspnoea, first calculate the total daily dose of morphine that he has been taking (eg 10 doses of 2 mg = 20 mg). As Fred's pain is still poorly controlled, increase the total daily dose by 30–50% (ie to 30–40 mg). 1 This could be given as 5-mg immediate-release morphine every 4 hours plus 5 mg for breakthrough pain, or modified-release morphine 15–20 mg twice a day (if using a formulation designed for BD dosing) with immediate-release morphine 5 mg as needed. 1

Consider the addition of neuropathic agents, such as a gabapentinoid, as neuropathic pain is thought to contribute to bone pain. Pregabalin is listed on the Pharmaceutical Benefits Scheme (PBS) for the management of neuropathic pain refractory to other drugs.

For patients with painful bone metastases, consider referral for radiotherapy, often a single fraction. Radiotherapy has been shown to be effective for managing painful bony metastases and a single fraction is as effective as highly fractionated regimens.¹⁷

There is evidence that bisphosphonates can reduce the incidence and severity of bone pain;¹ the strongest evidence is in the setting of breast cancer and myeloma.¹⁸ The commonly used agents are zolendronic acid and palmidronate, which are given by intravenous

infusion.¹ This may be difficult in the general practice setting and collaboration with other healthcare professionals, such as the treating medical oncologist, is advisable.

ANSWER 7

First, calculate the oral morphine requirement in 24 hours. In this case, Fred has taken 60 mg of modified-release and 30 mg of immediate-release morphine, a total of 90 mg. Convert this to the subcutaneous dose by dividing by three¹ (ie 30 mg). It is usually prudent to reduce the subcutaneous opioid by 30–50% of the strict conversion ratio when changing opioids,¹ for example, when converting modified-release oxycodone to subcutaneous morphine. This is not required when simply changing the route unless there is concern that oral medications may have been poorly absorbed (eg vomiting of medications). Given that Fred has nausea and already has metoclopramide at home, add metoclopramide 30 mg to the infusion.⁴ Not all medications can be combined in a single infusion (refer to the *Resources for Doctors* for compatibility guidelines). As Fred has expressed a wish to die at home, medication for terminal restlessness/agitation and secretions should be prescribed. Glycopyrrolate and hyoscine hydrobromide are approved for the

As Fred has expressed a wish to die at home, medication for terminal restlessness/agitation and secretions should be prescribed. Glycopyrrolate and hyoscine hydrobromide are approved for the management of secretions in the pre-operative setting. Hyoscine hydrobromide crosses the blood brain barrier (unlike glycopyrrolate and hyoscine butylbromide) and may therefore potentiate or worsen delirium. None of these agents is available on the PBS for the management of secretions in palliative care. There is no evidence to support the use of one agent over another; however, hyoscine butylbromide may be more readily accessible from community pharmacies and *Therapeutic Guidelines* advises 20 mg subcutaneously 4-hourly or via a continues infusion in addition to non-pharmacological measures such as positioning of the patient.

Antipsychotics such as haloperidol can be effective treatments for delirium. Low doses (eg 1 mg) are often effective and, although not approved in Australia for subcutaneous use, are widely recommended. Haloperidol is also an effective antiemetic. Terminal restlessness is common and estimates suggest 62–88% of dying patients are affected. He benzodiazepines clonazepam 0.5 mg sublingually or midazolam 2.5 mg subcutaneously may be helpful but neither drug is PBS-listed for this indication.

ANSWER 8

The Australian Medical Association, supported by the Council of Australian Therapeutic Advisory Groups, issued a warning for doctors in February 2014 that off-label use should be considered only 'when all other options, including the use of medicines approved by the Therapeutic Goods Administration (TGA), are unavailable, exhausted, not tolerated or unsuitable'. High-quality evidence should be available to determine appropriateness of off-label medicine use (both for safety and efficacy).²¹ Further, prescribers are expected to use their 'professional judgement' to determine appropriateness in individual patients.

Palliative care operates in a different paradigm to other areas of medicine, where the relief of suffering is paramount and the long-term

consequences of therapeutic options are often irrelevant. High-quality evidence is often lacking in palliative care and recommendations are often based on expert opinion. Off-label prescribing is regularly required to adequately manage symptoms at the end of life and is commonly recommended in reputable best practice guidelines. If a drug is not listed on the PBS for reimbursement for that indication then it is considered to be used off-label (ie the medicine is being used for indications other than that specified in the TGA approved product information (Pl). Off-label use of a medicine should only be considered when the TGA-approved use of a registered medicine does not address the clinical needs of the patient. It is important to consider the cost of medications prescribed off-label and to have patient consent when a drug is prescribed for indications other than those approved, to avoid any potential medicolegal risk.

The National Palliative Care Program aims to increase affordable access to medications for patients receiving palliative care.²² For the purpose of prescribing under the Palliative Care section of the PBS, a patient receiving palliative care must be defined as 'a patient with an active, progressive, far-advanced disease for whom the prognosis is limited and the focus of care is the quality of life'.

Medications for palliative care may be listed as 'Authority required' (with specific indications) and prescribers can request an initial authority to provide therapy for a maximum of 4 months for such patients. Where a subsequent authority is requested for continuing treatment, the provision of repeats is subject to confirmation by the prescriber that a palliative care physician or palliative care service has been consulted and has approved the ongoing treatment of the patient. ^{16,23}

Note that prescribers must also adhere to state/territory laws when prescribing drugs listed as Schedule 8 (eg opioids) and receive approval from the appropriate health authority. 14,20–23

ANSWER 9

Community palliative care services generally offer follow-up bereavement support for the families of their patients. This often involves a phone call or card sent after the death and face-to-face contact with those identified as needing more support. Local cancer support organisations such as Cancer Council Victoria may offer support groups including for bereaved relatives (refer to *Resources for Patients*).

Family members suffering from a more complicated bereavement may require more formal support. The Australian Centre for Grief and Bereavement offers assistance through support groups and individual grief counselling in various locations in Australia (refer to *Resources for Patients*). Patients with comorbid psychiatric illness or bereavement disorder may also benefit from a referral to a psychologist with experience in complicated bereavement, which may be facilitated by GP Mental Health Plan for eligible patients.²⁰ In complex cases, referral to a psychiatrist may also be warranted.¹

RESOURCES FOR PATIENTS

- Cancer Council Australia, www.cancer.org.au
- Cancer Council Victoria has telephone support groups for bereaved, www. cancervic.org.au/how-we-can-help/find-a-support-group/phone-groups

- Australian Centre for Grief and Bereavement (VIC), www.grief.org.au
- National Association for Loss and Grief (NSW), www.nalag.org.au or phone 02 6882 9222

RESOURCES FOR DOCTORS

- Australian Government. Delivering better cancer care, www.health.gov.au/ internet/publications/publishing.nsf/Content/CA2578620005D57ACA257 6FE000579F8/\$File/cancare.pdf
- National Institute for Clinical Excellence. Guidance on Cancer Services Improving Supportive and Palliative Care for Adults with Cancer The Manual [Internet] www.nice.org.uk/guidance/csgsp/evidence/supportive-and-palliative-care-the-manual-2
- Cancer Council Australia. Cancer Wiki guidelines, http://wiki.cancer.org. au/australia/Guidelines:Cancer pain management
- State and territory cancer councils, www.cancer.org.au/about-us/stateand-territory-councils
- Palliative Care Australia www.palliativecare.org.au (also produce a number of educational resources for patients about palliative care and dying)
- Palliative Care NSW, www.palliativecarensw.org.au
- Palliative Care Queensland, www.palliativecaregld.org.au
- Palliative Care Victoria, www.pallcarevic.asn.au
- Palliative Care WA, www.palliativecarewa.asn.au
- Palliative Care Council of South Australia, www.pallcare.asn.au
- ACT Palliative Care Society, www.pallcareact.org.au
 - Syringe driver compatibilities
 - Eastern Metropolitan Region Palliative Care Consortium (Victoria)
 Clinical Group. Syringe Driver Drug Compatibilities Guide to Practice 2013, http://centreforpallcare.org/assets/uploads/EMRPCC_Syringe_ Driver_Drug_Compatibilities-_Guide_to_Practice_2013_Version_2_ Nov_2014.pdf
- Access to medicines for Palliative Care, www.pbs.gov.au/info/publication/ factsheets/shared/2007-08-09-Palliative Care on the PBS

- Palliative Care Expert Group. Therapeutic Guidelines: Palliative Care. In: eTG Complete [internet] Melbourne. Therapeutic Guidelines Ltd, 2014. Available at http://online.tg.org.au/complete/desktop/index.htm [Accessed 21 April 2015].
- Jennings AL, Davies AN, Higgins JP, Anzures-Cabrera J, Broadley K.
 Opioids for the palliation of breathlessness in terminal illness. Cochrane Database of Syst Rev 2001;CD002066:doi10.1002/14651858.

 CD002066. Available at www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD002066/pdf_fs.html [Accessed 21 April 2015].
- MIMS Australia. MIMS Online [Internet]. Sydney: MIMS Australia Pty Ltd, 2015. Available at www.mimsonline.com.au/Search/Search.aspx [Accessed 21 April 2015].
- Government of Western Australia Department of Health. WA Cancer and Palliative Care Network. Evidence based clinical guidelines for adults in the terminal phase. Perth: Government of Western Australia Department of Health, 2010. Available at www.healthnetworks.health.wa.gov.au/ cancer/docs/Flip_Chart.pdf [Accessed 21 April 2015].
- Ben-Aharon I, Gafter-Gvili A, Paul M, Leibovici L, Stemmer SM.
 Interventions for alleviating cancer-related dyspnea: a systematic review. J
 Clin Oncol 2008;26:2396–404.
- Abernethy AP, McDonald CF, Frith PA, et al. Effect of palliative oxygen versus room air in relief of breathlessness in patients with refractory dyspnoea: a double-blind, randomised controlled trial. Lancet 2010;376:784–93.
- Temel JS, Greer JA, Muzikansky A, et al. Early palliative care for patients with metastatic non-small-cell lung cancer. N Engl J Med 2010;363:733–42.

- Stevens R, Macbeth F, Toy E, Coles B, Lester JF. Palliative radiotherapy regimens for patients with thoracic symptoms from non-small cell lung cancer. Cochrane Database Syst Rev 2015;1:CD002143. doi: 10.1002/14651858.CD002143.pub4.
- Vinod S, Cancer Council Australia Lung Cancer Guidelines Working Party. What is the clinical benefit of radiotherapy to the lung primary in Stage IV NSCLC? Available at http://wiki.cancer.org.au/australia/ Clinical_question:What_is_the_clinical_benefit_of_radiotherapy_to_the_ lung_primary_in_Stage_IV_NSCLC%3F [Accessed 21 April 2015].
- National Institute for Health and Clinical Excellence. Guidance on cancer services improving supportive and palliative care for adults with cancer. London: NICE, 2004. Available at www.nice.org.uk/guidance/csgsp/ evidence/supportive-and-palliative-care-the-manual-2 [Accessed 21 April 2015].
- Rossi S, editor. NSAIDs. In: Australian Medicines Handbook 2014.
 Adelaide: Australian Medicines Handbook Pty Ltd2014. Available at https://amhonline.amh.net.au/chapters/chap-15/musculoskeletalconditions-other/nsaids [Accessed 21 April 2015].
- Nabal M, Librada S, Redondo MJ, et al. The role of paracetamol and nonsteroidal anti-inflammatory drugs in addition to WHO Step III opioids in the control of pain in advanced cancer. A systematic review of the literature. Palliat Med 2012;26:305–12.
- Kane CM, Hoskin P, Bennett MI. Cancer induced bone pain. BMJ 2015;350:h315.
- Wiffen PJ, McQuay HJ. Oral morphine for cancer pain. Cochrane Database Syst Rev 2007;4:CD003868.
- Australian Adult Cancer Pain Management Guideline Working Party. Cancer pain management in adults. Sydney: Cancer Council Australia, 2015. Available at http://wiki.cancer.org.au/australia/Guidelines:Cancer_ pain management [Accessed 21 April 2015].
- Australian Government Department of Health. Pharmaceutical Benefits Scheme. Canberra: Department of Health, 2015. Available at www.pbs. gov.au/pbs/home [Accessed 21 April 2015].
- Vinod S, Cancer Council Australia Lung Cancer Guidelines Working Party. What is the clinical benefit of radiotherapy to the bone for metastatic disease from NSCLC? Sydney: Cancer Council Australia, 2015. Available at http://wiki.cancer.org.au/australia/Guidelines:Lung_cancer [Accessed 21 April 2015].
- Palliativedrugs.com [Internet]. Bisphosphonates. Nottingham UK: Palliativedrugs.com Limited, 2000–2015. Available at www. palliativedrugs.com/formulary/en/bisphosphonates.html [Accessed 23 April 2015]
- Lawlor PG, Gagnon B, Mancini IL, et al. Occurrence causes and outcome of delirium in patients with advanced cancer. Arch Intern Med 2000;160:786–94.
- Australian Government Department of Health. GP mental health treatment Medicare items. Canberra: Commonwealth of Australia, 2012. Available at www.health.gov.au/internet/main/publishing.nsf/Content/pacd-gp-mentalhealth-care-pdf-qa [Accessed 21 April 2015].
- Australian Medical Association. Position statement: Medicines 2014.
 Sydney: Australian Medical Association Limited, 2015. Available at https://ama.com.au/position-statement/medicines-2014 [Accessed 24 April 2015].
- Australian Government Department of Health. Pharmaceutical Benefits Scheme. Access to medicines for Palliative Care. Canberra: Department of Health, 2015. Available at www.pbs.gov.au/info/publication/factsheets/ shared/2007-08-09-Palliative_Care_on_the_PBS [Accessed 21 April 2015].
- Prescribing Medicines Information for PBS Prescribers. Available at http://www.pbs.gov.au/info/healthpro/explanatory-notes/section1/ Section_1_2_Explanatory_Notes [Accessed 23 April 2015].

ACTIVITY ID: 28103

STAGE OF LIFE: OLDER AGE

This unit of *check* is approved for 6 Category 2 points in the RACGP QI&CPD program. The expected time to complete this activity is 3 hours and consists of:

- reading and completing the questions for each case study
- you can do this on hard copy or by logging on to the gplearning website, http://gplearning.racgp.org.au
- answering the following multiple choice questions (MCQs) by logging on to the gplearning website, http://gplearning.racgp.org.au
- you must score ≥80% before you can mark the activity as 'Complete'
- · completing the online evaluation form.

You can only qualify for QI&CPD points by completing the MCQs online; we cannot process hard copy answers.

If you have any technical issues accessing this activity online, please contact the *gplearning* helpdesk on 1800 284 789.

If you are not an RACGP member and would like to access the *check* program, please contact the *gplearning* helpdesk on 1800 284 789 to purchase access to the program.

CASE 1 - MADELINE

Madeline is 85 years of age. She is frail and fearful of falling. She has congestive heart failure and atrial fibrillation with a high risk of stroke. She also has documented gastric reflux and chronic obstructive pulmonary disease (COPD). Madeline has a history of controlled diabetes, high cholesterol, depression and mild cognitive impairment. Madeline has been prescribed more than five medications to control her current conditions and another five based on her past medical history.

QUESTION 1

In an elderly patent taking more than five medications, what investigations are required to determine the ongoing need for each medication?

- A. Full medication history, medical history and physical examination, current symptoms and biochemical screen
- B. Physical examination, medication history, biochemical screen and X-rays
- C. Cognitive tests, physical examination, X-rays and medication history
- Full general physical examination, relevant biochemical investigations, cognitive assessments and medication history

QUESTION 2

What are the key steps in selecting medications for discontinuation?

- A. The goals of care, indications for each drug and efficacy
- B. The indication for each drug, patient's perception of the efficacy and side effects
- C. Safety and efficacy, patients prognosis and non-compliance
- The goals of care, safety and efficacy, and the patient's cognitive and functional ability.

CASE 2 - CAROL

Carol, 66 years of age, attends her GP clinic for a routine Pap smear. She asks for a check-up as well. She denies any health problems and there is no apparent family history that could affect her. Carol has never been pregnant. She requests a sexual health screen, as she has had short-term sexual relationships, mostly using condoms.

QUESTION 3

What specific questions should you ask Carol?

- A. What she knows about sexually transmissible infections (STIs); her current sexual activity; if she uses any protection and the number of previous partners.
- B. Whether she has been tested for STIs in the past; whether her current partner has been tested; any past infections; number of previous partners her partner has had.
- C. Any past infections; whether her current partner has been tested, what she knows about her partner's sexual activity.
- D. Carol and her partners' sexual history including number and gender of previous partners, previous infections, use of protection and drug history.

FURTHER INFORMATION

Carol's swab test comes back positive for chlamydia.

QUESTION 4

What management plan is appropriate now?

- A. Notify the state/territory health department; initiate contact tracing; test Carol's partners for all STIs; treat the chlamydia with antibiotics in Carol only; advise no sexual contact for 14 days.
- B. Treat the chlamydia; initiate contact tracing for 3 months; ask Carol to speak to her partners; advise sex only with use of condoms; notify the state/territory health department.
- C. Treat the chlamydia; offer testing for other STIs; follow Carol up in 6 months; notify the state/territory health department; advise no sex for 1 month.
- D. Treat the chlamydia; advise no sexual contact for 7 days following treatment; notify the state/territory health department; and initiate contact tracing for the past 6 months; provide patient fact sheet; re-test both parties in 3 months.

QUESTION 5

A useful mnemonic for dementia is the four Ds. What are the four Ds?

- A. Depression, Drugs, Delirium, Dementia
- B. Drugs, Delirium, Dementia, Disorientation
- C. Dementia, Drugs, Disorientation, Deterioration
- D. Disorientation, Drugs, Dementia, Decline

OUESTION 6

What are the most appropriate first step in examining the cognitive status in older people?

- A. A full clinical history that includes consideration of physical, functional, biochemical, cognitive, behavioural and psychological symptoms and signs
- B. A discussion of the activities of daily living and other cognitive symptoms with the carer of the older person
- C. Referral of the patient to other health service providers who are experts in cognition
- D. Initiation of a home medication review at the local pharmacy.

OUESTION 7

What is the first step for the general practitioner in preparing an advance care plan?

- A. To ensure that only the patient and their carer prepare and retain the completed advanced care documents.
- B. To define values, goals and preferences for end-of-life care.
- C. To prepare a legally binding written document that both the patient and carer can use to facilitate a 'good death'.
- D. To offer a complete comprehensive medical assessment that leads to a formal advance care plan.

OUESTION 8

What is the GP's primary role in the advance care planning (ACP) process?

- A. Implementing the surrogate decision makers wishes to medical management and control over the dying process.
- B. Providing patients (and carers) with information regarding their current health status, prognosis and future treatment options.
- C. Assisting the patient and carer in their interactions with all healthcare professionals for their medical treatment.
- D. Initiating discussion around the purpose and processes of ACP.

CASE 3 - JOE

Joe is 81 years of age and has come to see you because he has been experiencing shortness of breath. After comprehensive medical examination and testing, it is revealed that Joe has inoperable lung adenocarcinoma with multiple metastases. Joe's prognosis is 4–6 months. His previous medical history includes chronic heart failure and impaired renal function.

QUESTION 9

How would you best manage Joe's dyspnoea?

- A. Energy conservation techniques, stress management and sustained-released morphine
- B. Sitting in a well-ventilated room, diaphragmatic breathing techniques with oxygen, and haloperidol
- C. Stress management, well-ventilated rooms and metoclopramide
- D. Energy conservation, sitting in a well ventilated room and an immediate-release opioid

FURTHER INFORMATION

One week later, Joe becomes quite constipated. He also has some nausea and vomiting, and severe right lateral chest pain that is refractory to paracetamol. His secretions and vomiting are becoming troublesome and he expresses the wish to die at home.

QUESTION 10

What treatments would you use to manage Joe's symptoms?

- A. Increased fibre in the diet, radiotherapy and oral non-steroidal anti-inflammatory agents (NSAIDs)
- B. Oral slow-release morphine, metoclopramide and stool softener
- C. Radiotherapy, subcutaneous morphine and haloperidol
- D. Subcutaneous metoclopramide, a subcutaneous opioid and hyoscine butylbromide

