Membership by Assessment of Performance

Sample Portfolio

Candidate Number 01100100

You must indicate which criteria are included in this submission by inserting a cross (X) in the relevant boxes below. Any submissions which do not indicate which criteria are being submitted will be returned.

A minimum of three criteria must be submitted

<table>
<thead>
<tr>
<th>Criterion 1</th>
<th>☐</th>
<th>Criterion 2</th>
<th>☐</th>
<th>Criterion 3</th>
<th>☐</th>
<th>Criterion 4</th>
<th>☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion 5</td>
<td>☐</td>
<td>Criterion 6</td>
<td>☐</td>
<td>Criterion 7</td>
<td>☐</td>
<td>Criterion 8</td>
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<tr>
<td>Criterion 9</td>
<td>☐</td>
<td>Criterion 10</td>
<td>☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You must only include the proformas for the criteria which you are submitting. ALL others must be removed.

☐ I confirm that at the date of submission the evidence included adheres to the time limits set out in each criterion
☐ I confirm that I have read, understood and agree to the terms and conditions set out in the MAP Regulations (MM/YY) ¹ and that the information submitted herewith complies with the Regulations.

¹ Please insert the date of the current version of the MAP Regulations which is available on the RCGP website

**Candidate Context**

In the box below, please outline in no more than 200 words, the context of your work as a General Practitioner. This will not form part of the assessment, but may assist assessors to understand the context of some of your submitted material.

Please provide details about:
- your role e.g. are you a locum, salaried, partner or other working arrangement
- no. of colleagues in practice (if applicable)
- context in terms of number of patients in your practice (if applicable)
- details about the population group(s) you work with
- any other relevant details such as being part-time

**Overall Reflection**

In the box below, please summarise, in no more than 200 words, how undertaking MAP has affected your personal practice. This will not form part of the assessment.

For examples areas where you have learned, improved or changed routines.

**Word count guidance**

There is no word count as such for MAP. However, a guide would be approximately 1,000 words for each criterion. This should be regarded as guidance and not as an absolute maximum for the number of words that can be used. We do not want candidates to spend an excessive amount of time reducing words in a perfectly acceptable submission to achieve a prescribed word count. However, submissions that are unfocused, poorly written or that have irrelevant information and are significantly over the word guide will be sent back for resubmission.

**N.B.**

Please note that you should use situations and / or patients in one criterion only. e.g. a patient should not be included in both Acute Illnesses and Urgent referral to Secondary Care; and a scenario described as a Learning Event could not also be described as a complaint.
### 1. Prescribing

#### EVIDENCE/PROFORMA (1 OF 2)

Please list the 50 items prescribed which were recorded for this survey below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
<th>Drug preparation and strength</th>
<th>Cost effective (Y/N)</th>
<th>Evidence based (Y/N)</th>
<th>Significant Safety Issues (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18/05/17</td>
<td>SINEMET PLUS tabs 1 THREE TIMES A DAY</td>
<td>Yes at £4.22 for 30 tablets.</td>
<td>Yes, BNF.</td>
<td>N</td>
</tr>
<tr>
<td>2</td>
<td>18/05/17</td>
<td>AMLODIPINE tabs 10mg TAKE ONE DAILY</td>
<td>Yes, at 79p for 28 tablets.</td>
<td>Yes, particularly the Anglo Scandinavian Cardiac Outcomes Trial. NICE guidelines.</td>
<td>N</td>
</tr>
<tr>
<td>3</td>
<td>18/05/17</td>
<td>CO-DYDRAMOL tabs TAKE 2 FOUR TIMES A DAY WHEN REQUIRED</td>
<td>Yes.</td>
<td>Yes, BNF.</td>
<td>N</td>
</tr>
<tr>
<td>4</td>
<td>18/05/17</td>
<td>ASPIRIN disp tab 75mg ONE EVERY DAY</td>
<td>Yes, in preference to enteric-coated tablets.</td>
<td>Yes, Joint British Societies Guidelines on the prevention of CVD.</td>
<td>Y</td>
</tr>
<tr>
<td>5</td>
<td>18/05/17</td>
<td>BENDROFLUMETHIAZIDE tabs 2.5mg ONE EVERY DAY</td>
<td>Yes at £0.81 for 28 tablets.</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>6</td>
<td>18/05/17</td>
<td>SYMBICORT TURBHALER 200micrograms + 6micrograms/actuation TWICE A DAY AS DIRECTED</td>
<td>Yes when combination therapy is necessary as more cost-effective than seretide MDI. However expensive at £38.</td>
<td>NICE guidelines.</td>
<td>N</td>
</tr>
<tr>
<td>7</td>
<td>18/05/17</td>
<td>NAPROXEN 500mg TAKE 1 IN THE MORNING AND 1 AT LUNCHTIME</td>
<td>Yes at £1.42 for 28 tablets.</td>
<td>Yes, BNF.</td>
<td>Y</td>
</tr>
<tr>
<td>8</td>
<td>18/05/17</td>
<td>NITROFURANTOIN tabs 100mg TAKE ONE od</td>
<td>Yes, at £7.03 for 28 tablets. However more expensive</td>
<td>Yes, supported by local &quot;management of infection&quot; protocol. BNF</td>
<td>Y</td>
</tr>
<tr>
<td>Item</td>
<td>Date</td>
<td>Drug preparation and strength</td>
<td>Cost effective (Y/N)</td>
<td>Evidence based (Y/N)</td>
<td>Significant Safety Issues (Y/N)</td>
</tr>
<tr>
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<td>-------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>18/05/17</td>
<td>FERROUS FUMARATE tabs 210mg TAKE ONE BD</td>
<td>Yes, cheaper than ferrous sulphate.</td>
<td>Yes, BNF.</td>
<td>N</td>
</tr>
<tr>
<td>10</td>
<td>18/05/17</td>
<td>HYOSCINE HYDROBROMIDE patch 1mg/72 hours APPLY EVERY 72 HOURS</td>
<td>At £5.72 for 2 patches it is more expensive than tablets. However it can be better tolerated.</td>
<td>Yes, BNF, unlicensed indication.</td>
<td>Y</td>
</tr>
<tr>
<td>11</td>
<td>18/05/17</td>
<td>CITALOPRAM tabs 20mg TAKE 1 IN THE MORNING</td>
<td>Yes at 81p for 28 tablets</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>12</td>
<td>18/05/17</td>
<td>CITALOPRAM tabs 10mg TAKE 1 IN THE MORNING</td>
<td>Yes at 77p for 28 tablets.</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>13</td>
<td>18/05/17</td>
<td>QUETIAPINE tabs 150mg At night Relatively expensive at £23.99 for 30 tablets.</td>
<td>Yes, BNF.</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>19/05/17</td>
<td>ASPIRIN disp tab 75mg TAKE ONE DAILY</td>
<td>Yes, in preference to enteric-coated tablets.</td>
<td>Yes, Joint British Societies Guidelines on the prevention of CVD</td>
<td>Y</td>
</tr>
<tr>
<td>15</td>
<td>19/05/17</td>
<td>AMLODIPINE tabs 10mg TAKE ONE DAILY</td>
<td>Yes, at 79p for 28 tablets.</td>
<td>Yes, particularly the Anglo Scandinavian Cardiac Outcomes Trial. NICE guidelines.</td>
<td>N</td>
</tr>
<tr>
<td>16</td>
<td>19/05/17</td>
<td>TELMISARTAN tabs 80mg TAKE ONE DAILY</td>
<td>Yes and inexpensive at £1.46 for 28 tablets.</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>17</td>
<td>19/05/17</td>
<td>METFORMIN tabs 500mg TAKE 1 TWICE A DAY</td>
<td>Yes.</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>18</td>
<td>19/05/17</td>
<td>GLICLAZIDE tabs 80mg two TWICE A DAY</td>
<td>Yes.</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>19</td>
<td>19/05/17</td>
<td>PIOGLITAZONE tabs Only when</td>
<td></td>
<td>NICE</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Date</td>
<td>Drug preparation and strength</td>
<td>Cost effective (Y/N)</td>
<td>Evidence based (Y/N)</td>
<td>Significant Safety Issues (Y/N)</td>
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<tr>
<td>------</td>
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<td>----------------------</td>
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</tr>
<tr>
<td></td>
<td>45mg</td>
<td>TAKE ONE DAILY</td>
<td>necessary after metformin and gliclazide.</td>
<td>guidelines</td>
<td>Y</td>
</tr>
<tr>
<td>20</td>
<td>19/05/17</td>
<td>SIMVASTATIN tabs 20mg</td>
<td>Yes at 80p for 28 tablets.</td>
<td>NICE guidelines, 4S study.</td>
<td>N</td>
</tr>
<tr>
<td>21</td>
<td>19/05/17</td>
<td>FUROSEMIDE tabs 40mg</td>
<td>Yes.</td>
<td>NICE guideline – Chronic Heart Failure.</td>
<td>N</td>
</tr>
<tr>
<td>22</td>
<td>19/05/17</td>
<td>BISOPROLOL tabs 1.25mg</td>
<td>Yes.</td>
<td>NICE guideline – Chronic Heart Failure.</td>
<td>N</td>
</tr>
<tr>
<td>23</td>
<td>19/05/17</td>
<td>SIMVASTATIN tabs 20mg</td>
<td>Yes 80p for 28 tablets.</td>
<td>NICE guidelines, 4S study.</td>
<td>N</td>
</tr>
<tr>
<td>24</td>
<td>19/05/17</td>
<td>RANITIDINE tabs 150mg</td>
<td>Yes.</td>
<td>NICE guidelines – Management of dyspepsia.</td>
<td>N</td>
</tr>
<tr>
<td>25</td>
<td>21/05/17</td>
<td>LATANOPROST eye drp 0.005%</td>
<td>Yes.</td>
<td>Yes, BNF.</td>
<td>N</td>
</tr>
<tr>
<td>26</td>
<td>21/05/17</td>
<td>ATORVASTATIN tabs 40mg</td>
<td>Expensive</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>27</td>
<td>21/05/17</td>
<td>QUETIAPINE tabs 150mg</td>
<td>Relatively expensive at £23.99 for 30 tablets.</td>
<td>Yes, BNF.</td>
<td>Y</td>
</tr>
<tr>
<td>28</td>
<td>21/05/17</td>
<td>OMEPRAZOLE gastro-res cap 10mg</td>
<td>Yes.</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>29</td>
<td>21/05/17</td>
<td>SALBUTAMOL cfc/free b/act inh 100micrograms/actuation</td>
<td>Yes.</td>
<td>British Thoracic Society and NICE guidelines.</td>
<td>N</td>
</tr>
<tr>
<td>30</td>
<td>21/05/17</td>
<td>BECLOMETASONE breath act inh 100micrograms/actuation</td>
<td>It should be changed to clenil as branded product is</td>
<td>British Thoracic Society and NICE guidelines.</td>
<td>N</td>
</tr>
<tr>
<td>Item</td>
<td>Date</td>
<td>Drug preparation and strength</td>
<td>Cost effective (Y/N)</td>
<td>Evidence based (Y/N)</td>
<td>Significant Safety Issues (Y/N)</td>
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<tr>
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</tr>
<tr>
<td>31</td>
<td>21/05/17</td>
<td>INSULIN GLARGINE CARTRIDGE inj soln 100 units/ml as dir</td>
<td>Expensive. Should be prescribed as branded product.</td>
<td>NICE guidelines</td>
<td>Y</td>
</tr>
<tr>
<td>32</td>
<td>21/05/17</td>
<td>NOVORAPID FLEXPEN inj soln 100 units/ml as dir</td>
<td>Expensive</td>
<td>NICE guidelines</td>
<td>Y</td>
</tr>
<tr>
<td>33</td>
<td>21/05/17</td>
<td>METHOTREXATE tabs 2.5mg 25mg (ten tablets) to be taken weekly</td>
<td>Yes</td>
<td>British Society for Rheumatology</td>
<td>Y</td>
</tr>
<tr>
<td>34</td>
<td>21/05/17</td>
<td>FLUOXETINE caps 20mg TAKE ONE DAILY</td>
<td>Yes</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>35</td>
<td>21/05/17</td>
<td>HUMALOG CARTRIDGE inj soln 100 units/ml asd</td>
<td>Expensive</td>
<td>NICE guidelines</td>
<td>Y</td>
</tr>
<tr>
<td>36</td>
<td>21/05/17</td>
<td>SERTRALINE tabs 100mg ONE EVERY MORNING</td>
<td>Yes</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>37</td>
<td>21/05/17</td>
<td>SERTRALINE tabs 50mg 1 EVERY DAY</td>
<td>Yes</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>38</td>
<td>21/05/17</td>
<td>METFORMIN tabs 500mg TAKE 2 TWICE A DAY</td>
<td>Yes</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>39</td>
<td>22/05/17</td>
<td>RAMIPRIL caps 2.5mg TAKE 1 IN THE MORNING</td>
<td>Yes</td>
<td>NICE guidelines</td>
<td>Y</td>
</tr>
<tr>
<td>40</td>
<td>22/05/17</td>
<td>TELMISARTAN tabs 20mg TAKE 1 IN THE MORNING</td>
<td>Yes and inexpensive at £1.01 for 28 tablets.</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>41</td>
<td>22/05/17</td>
<td>FLUOXETINE caps 20mg TAKE two DAILY</td>
<td>Yes</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>42</td>
<td>22/05/17</td>
<td>METFORMIN tabs 500mg 2 mane 2 nocte</td>
<td>Yes</td>
<td>NICE guidelines</td>
<td>N</td>
</tr>
<tr>
<td>43</td>
<td>22/05/17</td>
<td>NICORANDIL tabs 10mg TAKE ONE TWICE DAILY</td>
<td>Yes at £2.15 for 30 tablets</td>
<td>SIGN guidelines for the management of angina.</td>
<td>N</td>
</tr>
<tr>
<td>44</td>
<td>22/05/17</td>
<td>ATENOLOL tabs 50mg</td>
<td>Yes</td>
<td>NICE</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Date</td>
<td>Drug preparation and strength</td>
<td>Cost effective (Y/N)</td>
<td>Evidence based (Y/N)</td>
<td>Significant Safety Issues (Y/N)</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>TAKE ONE EACH MORNING</td>
<td>guidelines.</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>45</td>
<td>22/05/17</td>
<td>SIMVASTATIN tabs 20mg TAKE 1 AFTER EVENING MEAL</td>
<td>Yes 80p for 28 tablets..</td>
<td>NICE guidelines. 4S study.</td>
<td>N</td>
</tr>
<tr>
<td>46</td>
<td>22/05/17</td>
<td>AMLODIPINE tabs 5mg TAKE 1 IN THE MORNING</td>
<td>Yes.</td>
<td>NICE guidelines. ASCOT.</td>
<td>N</td>
</tr>
<tr>
<td>47</td>
<td>22/05/17</td>
<td>ASPIRIN disp tab 75mg TAKE ONE DAILY</td>
<td>Yes, in preference to enteric-coated tablets.</td>
<td>Yes, Joint British Societies Guidelines on the prevention of CVD</td>
<td>Y</td>
</tr>
<tr>
<td>48</td>
<td>22/05/17</td>
<td>GLICLAZIDE tabs 80mg TAKE 1 IN THE MORNING</td>
<td>Yes.</td>
<td>NICE guidelines.</td>
<td>N</td>
</tr>
<tr>
<td>49</td>
<td>22/05/17</td>
<td>RAMIPRIL caps 2.5mg TAKE 1 IN THE MORNING</td>
<td>Yes.</td>
<td>NICE guidelines.</td>
<td>Y</td>
</tr>
<tr>
<td>50</td>
<td>22/05/17</td>
<td>SIMVASTATIN tabs 20mg TAKE 1 AFTER EVENING MEAL</td>
<td>Yes 80p for 28 tablets..</td>
<td>NICE guidelines. 4S study.</td>
<td>N</td>
</tr>
</tbody>
</table>

Justification of all departures from cost effectiveness for any of the 50 items prescribed

Nitrofurantoin tabs 100mg ONE OD as UTI prophylaxis: at £7.03 for 28 tablets it is more expensive than trimethoprim. It was necessary for rotation of antibiotic prophylaxis and for treatment of UTIs resistant to trimethoprim as BD regimen.

Hyoscine hydrobromide patch 1mg/72 hours: I used it on a patient with cerebral palsy who had severe sialorrhoea. It is more expensive than tablets. However it is better tolerated. Although this is an unlicensed use, it helped her cope with her symptoms better until she could have a bilateral excision of sublingual glands with diversion of the submandibular salivary ducts into the oropharynx.

Quetiapine is relatively expensive but I was guided by the local psychiatric services.

Clarithromycin is more expensive than erythromycin but it is better tolerated. I use it second line and in penicillin allergy.

Justification of each departure from clinical effectiveness for any of the 50 items prescribed

Telmisartan was used second line to ACE inhibitor. Its long half-life is advantageous and it also has a good side effect profile. Telmisartan also has good medical evidence and it is equivalent to ramipril in patients with vascular disease or high-risk diabetes and it is...

Atorvastatin can be used if simvastatin or pravastatin are not tolerated or, in secondary prevention, if lipid control is not to target on less potent statins (Ref. NICE guidelines).

Ezetimibe was used as per NICE guidelines when statin was not tolerated or was not achieving the target

Seretide and salmeterol inhalers are used according to BTS and NICE guidelines when turbodrivers are not suitable (poor respiratory effort, reliance on spacers).

<table>
<thead>
<tr>
<th>Justification of any significant safety issues for any of the 100 items prescribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naprosyn and aspirin being non steroidal Anti-Inflammatories are contraindicated in patients with a hypersensitivity to Aspirin or other NSAIDs – which includes those in whom attacks of asthma, angioedema, urticaria or rhinitis, have been precipitated by aspirin or any other NSAID.</td>
</tr>
<tr>
<td>They need to be used with caution in the elderly and patients with connective tissue disorders. NSAIDs may impair renal function and need to be used with caution in patients with heart failure. (contra-indicated if severe heart failure).</td>
</tr>
<tr>
<td>Non selective NSAIDs are associated with a small risk of thrombotic events. The CSM has recommended non-selective NSAIDs are not to be used in patients with a history of previous or active peptic ulceration. In patients over 65 it is recommended that a PPI is prescribed as well.</td>
</tr>
<tr>
<td>NSAIDs need to be used cautiously is there is Hepatic Impairment.</td>
</tr>
<tr>
<td>Avoid NSAIDs in pregnancy and only use with caution if breast feeding.</td>
</tr>
<tr>
<td>Any degree of worsening Asthma may be associated with the ingestion of NSAIDs.</td>
</tr>
<tr>
<td>Hyoscine is effective for smooth muscle spasm, but needs to be used with caution in Downs Syndrome, children, and the elderly. They should also be used with caution in patients with reflux, diarrhoea, ulcerative colitis, myocardial infarction and high fever.</td>
</tr>
<tr>
<td>Quetiapine is used for schizophrenia and mania, but should be used with caution in patients with cardiovascular disease or a history of epilepsy. It should be used with great caution in the elderly.</td>
</tr>
<tr>
<td>Pioglitazone is useful in type 2 diabetes, but one needs to monitor liver function. Use with extreme caution where there is cardiovascular disease or when used in combination with insulin (risk of heart failure). There is also documented increased risk of bone fractures in females. Avoid in acute porphyria. It is contra indicated in hepatic impairment, history of heart failure and pregnancy.</td>
</tr>
<tr>
<td>The insulins are used for treatment of diabetics, but it is essential the patient fully understands the condition and how to administer the insulin in order to avoid hypoglycaemic episodes.</td>
</tr>
<tr>
<td>Methotrexate. The CSM advice in view of reports of blood dyscrasias and liver cirrhosis with low dose methotrexate is that:</td>
</tr>
<tr>
<td>- FBC and renal and liver function tests be done before starting treatment and repeated</td>
</tr>
</tbody>
</table>
weekly until therapy stabilised, then patients should be monitored every two to three months
-patients should be advised to report all symptoms and signs of infection – especially sore throat.
It is important therefore that practices have failsafe measures in place for monitoring patients on Methotrexate – both the taking of the bloods and the checking of the results and reporting back to the patient.

Ramipril is our first line treatment for hypotension in the under 55s, but regular monitoring of renal function needs to be done prior to initiating treatment and on titrating up the dose, as renal function could deteriorate if renal artery stenosis is present. One has to be alert to possible hypotension and ace inhibitors should be used with caution in the elderly, peripheral vascular disease and generalised atherosclerosis.

Clarithromycin and Ciprofloxacin are useful second line antibiotics but locally we are advised against routine use due to the issue of Clostridium Difficile infection. Locally we have “an antibiotic man” which guides us as to which antibiotics should be used and when. The “C” drugs are very much discouraged. I used them in the above cases as the patients were unable to tolerate the more recommended antibiotics.

Diazepam and Zopiclone - neither should be used long term. As a hypnotic, Zopiclone is only indicated for short term use as dependence will become a problem. It should be used with extreme caution in the elderly due to persisting drowsiness and confusion. As an anxiolytic, diazepam likewise should only be used short term as dependence can become a huge problem.

Ezitimbe is an option for hypercholesterolemia. It however should be use with caution in hepatic impairment, pregnancy and breast feeding. If it is used in combination with a statin, there is increased risk of rhabdomyolysis.

Fluconazole – a useful anti fungal, however, use with caution in renal impairment and breast feeding. Liver function needs to be monitored with high doses or extended courses.

Metronidazole – used for anaerobic infections. The patients need to be told they must not drink alcohol with this or they will have a very bad reaction. It has to be used in caution in hepatic impairment and pregnancy. There needs to be clinical and laboratory monitoring if the treatment exceeds ten days.

Trimethoprim is a first line treatment in UTIs but should not be used in the first trimester of pregnancy.

List the four most commonly prescribed drugs used

<table>
<thead>
<tr>
<th>List of four most frequently prescribed drugs used</th>
<th>Number of times each was prescribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simvastatin</td>
<td>A x times</td>
</tr>
<tr>
<td>Naproxen</td>
<td>B x times</td>
</tr>
<tr>
<td>Metformin</td>
<td>C x times</td>
</tr>
</tbody>
</table>
### Amlodipine

**Comment on the cost effectiveness of the four most frequently used drugs**

Simvastatin is an effective low-cost statin and is my preferred choice. Over 80% of statin prescribing in the practice is in the form of simvastatin. Being inexpensive, it allows otherwise overstretched NHS prescribing budgets to treat more patients than if alternative high potency statins were used.

Naproxen is a useful, low cost NSAID, which is now preferred to diclofenac. It is slightly more costly but has a better safety profile from the point of view of cardio-vascular disease. It is useful if ibuprofen is not strong enough.

The 250mg tabs cost 93p and the 500mg £1.42

I do not usually prescribe the trade name drugs as they are usually more expensive and the combinations with esomeprazole and misoprostol are very much more. It is better to use a cheaper PPI such as omeprazole with Naproxen where needed.

Metformin is also a low-cost drug. It is routinely prescribed in the form of 500 mg tablets and it is the first-line of oral hypoglycaemic agents. I rarely use modified release preparations, as these are about three times more expensive than standard preparations, although it can occasionally help a patient to tolerate the drug. In that case the MR version would be cost effective. I am aware that Metformin liquid is extremely expensive. I am the GP responsible for the running of the diabetic clinic and this could explain why metformin is in my top four drugs.

Amlodipine is also a cost-effective drug. It is my preferred choice of calcium channel blockers and most of my patients with hypertension will be on this drug. I routinely prescribe it generically so that the cheaper Amlodipine maleate can be dispensed instead of the branded preparation Amlodipine besilate, which is much more expensive.

### Comment on the clinical effectiveness of the four most frequently used drugs

Simvastatin has been established as clinically effective and with an ample evidence base. The 4S clinical trial (Scandinavian Simvastatin Survival Study) revolutionised the management of hyperlipidaemia. The most effective dose of simvastatin is 40 mg. I no longer use simvastatin 10 mg tablets, as they have no evidence base. New patients are now routinely initiated on simvastatin 40 mg, as per the NICE guidelines (updated 2008), and I am gradually switching patients from simvastatin 20 mg tablets to 40 mg tablets. Many patients still have a reluctance to increase the dose for fear of increasing side effects. Managing side effects is always difficult, especially as many age-related aches and pain are wrongly attributed to statin therapy. Measuring creatine-kinase is useful to reassure patients and exclude a serious problem although some patients’ aches do resolve on stopping the drug, even with a normal CK.

Unlike diclofenac, naproxen is neutral for MI risk (Ref. Kearney PM et al. “Do selective cyclo-oxygenase-2 inhibitors and traditional non-steroidal anti-inflammatory drugs increase the risk of atherothrombosis? meta-analysis of randomised trials”. BMJ. 2006;332:1302-1308), although it is more expensive. My preferred option is still ibuprofen but I rarely prescribe it as patients often buy it over the counter. When patients do not find ibuprofen potent enough, Naprosyn or the cheaper diclofenac can be my next choice for short term use. For medium to long-term analgesia, I favour paracetamol-based preparations.
Metformin has been recommended by NICE as the first-line drug in type 2 diabetes mellitus. It is effective in reducing glucose levels primarily by inhibiting gluconeogenesis at hepatic level and by increasing peripheral uptake of glucose. UKPDS 34 proved that intensive treatment with metformin decreases the risk of diabetes-related complications in overweight diabetic patients. It produces less weight gain and fewer hypoglycaemic attacks than insulin and sulphonylureas.

Amlodipine is not only effective as an anti-hypertensive medication but it also has an anti-anginal effect. The ASCOTT trial also changed the therapeutic approach to the treatment of hypertension. Amlodipine, as my preferred choice of calcium channel blocker, is one of the two drugs prescribed first line for hypertension. It does not affect the cardiac rate. Ankle oedema is the most common side effect and the main reason for discontinuation of the drug.

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### Comment on possible safety issues of the four most frequently prescribed drugs

The top four prescribed drugs, providing correct doses are used and contra-indications excluded, are well recognised safe drugs to use. I have discussed relative patient safety issues above, and in particular this analysis has prompted me to think again about possible consequences of NSAIDs and the risk of cardiac and renal toxicity. As ever, in all prescribing, many of the patients are often elderly and on more than one drug and it is always important to ensure patients understand their medications, why they are taking them and the doses to take at appropriate times.

### Learning points or discussion points identified

As documented above, I have refreshed my memory in the starting dose of simvastatin, cautions with NSAIDs especially in the elderly, the protocols for oral hypoglycaemic prescribing, and the appropriate prescribing of amlodipine in hypertension.

### Where appropriate, any changes made or action taken

No huge changes, but reflecting on prescribing is always a worthwhile exercise.

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### Assessor Comments

Reflective and comprehensive comments on cost, clinical effectiveness and safety of drugs used. You may wish to further reflect on the following:

- What guides your choice of an ARB (ref. your comments on Telmisartan)?
- What guidance do you use in uptitrating the dose of BBlockers (Bisoprolol 1.25mg)?
- Which SSRI do you use first line and why (Citalopram/Sertraline)?

**NB**

This is a submission which would be considered to be of a good standard. (a "G" score was awarded). Candidates would normally only be expected to state “Y” or “N” in the table at the start of the proforma and then comment on all departures from cost/clinical effectiveness and all safety issues for the items in the relevant boxes which immediately follow the table.

The additional information provided in the first table is, in part, one of the reasons which moves this submission from a score of “Satisfactory” to “Good” according to the definition of MAP grades.
<table>
<thead>
<tr>
<th>Pass</th>
<th>X</th>
<th>Resubmit</th>
<th>Score</th>
<th>G</th>
</tr>
</thead>
</table>
Case Study 1 (of 2)

**Therapeutic area**
(i.e. pain management / high risk drugs / polypharmacy and /or de-prescribing / higher risk patient / treatment of infection / palliative care / other [candidate’s choice, please state]):

Pain management / personal choice

**Context**
Briefly describe the patient, relevant past and current medical history, and the prescribing situation (e.g. medication review, hospital discharge summary, acute presentation, initiating a dossett box) including dates.
Please include, if applicable, interactions, safety, monitoring, concordance, legal issues, polypharmacy/de-prescribing/alternatives to pharmaceuticals, and personal circumstances.

This is a 56 year old gentleman with chronic lower back and knee pain, diabetes, hypertension, central obesity, mental health problems – EUPD and depression.

The prescribing situation is a patient with chronic pain who is increasingly requesting analgesia, and refusing to see pain clinic due to previous negative experiences. He had been able to reduce opioid dependence for one year from March 2017 to April 2018. Since then every month he is requesting stronger analgesia and reports little improvement in symptoms. Ideally I wish to reduce analgesia and opioid dependence however the patient’s mental health and sleep problems results in difficulty with doing so.

**Medication prescribed (all current medications with dosing instructions for each drug) and reason for each prescribed medication**

<table>
<thead>
<tr>
<th>Medication including dose</th>
<th>Reason for prescription</th>
<th>Cost effective (Y / N)</th>
<th>Clinically effective (Y / N)</th>
<th>Safety issues (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium valproate 200mg BD</td>
<td>Mental health – EUPD and depression</td>
<td>Yes</td>
<td>To be seen</td>
<td>No</td>
</tr>
<tr>
<td>Olanzapine 15mg daily</td>
<td>EUPD and depression</td>
<td>Yes – weaning off</td>
<td>N</td>
<td>Y- has DM and high BMI</td>
</tr>
<tr>
<td>Reletrans 20mcg/hour</td>
<td>Chronic pain</td>
<td>Y</td>
<td>N</td>
<td>Y – opioid tolerance</td>
</tr>
<tr>
<td>Metformin 1g MR BD</td>
<td>DM</td>
<td>Y</td>
<td>Y</td>
<td>Y – renal function monitor</td>
</tr>
<tr>
<td>Clenil 100mcg/ dose TT BD</td>
<td>COPD</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Braltus 10mcg T OD</td>
<td>COPD</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Pregabalin 225mg BD</td>
<td>Chronic pain</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Indapamide 2.5mg OD</td>
<td>Hypertension</td>
<td>Y</td>
<td>Y</td>
<td>Y – renal function monitor</td>
</tr>
</tbody>
</table>
Changes made / action taken / reasons for change
(Please copy and paste the box below as necessary)

Change type
(new / dose change / removal / nil)

Dose change
Morphine sulphate oral solution 5mg/10ml PRN

Reason for change / prescribing decision including references and / or record of discussions with prescribing lead
‘NICE Guidance – Medicines optimisation in long-term pain’ advises against using increasing doses of opioids and also high doses of gabapentin which can result in misuse and tolerance. The focus of chronic pain management should be less on medication and more on non-pharmacological methods such as physio and CBT. The challenge with this patient is that he does not engage with non-GP services and does not attend appointments.

Safety issues including interactions
Increasing opioid dependence; does not drive or look after young children so this is not a safety concern.

Monitoring details
Review pain levels monthly with GP, morphine and reletrans patches are not on repeat medication

Cost effective (Y/N)
Y

Clinically effective (Y/N)
N

Patient specific prescribing advice
Advised to take top up oral morphine only when pain is severe and not able to manage without, not to use more than once daily (try to minimise tolerance).

Discuss your learning about prescribing from this case. Describe any future actions or changes that you may make.

This case has proved to me the validity of the NICE guidance, that increasing analgesia does not result in increased benefit and relief of pain. The patient has also tried amitriptyline up to 50mg without benefit so stopped taking this. I intend to stop increasing the patch doses with the rationale that there is unlikely to be additional benefit, the difficulty I will have is in conveying this to the patient so that they accept this plan.

I have now referred to MSK clinic in an attempt to have a second opinion regarding the causes of pain and non-pharmacological options for management. I hope that I can then persuade him to engage with the pain management service.

I intend to discuss the patient in the practice clinical meeting for advice regarding further
medication options including increasing gabapentin doses.
Case Study 2 (of 2)

**Therapeutic area**
(i.e. pain management / high risk drugs / polypharmacy and /or de-prescribing / higher risk patient / treatment of infection / palliative care / other [candidate’s choice, please state]):

High risk drugs - warfarin

**Context**
Briefly describe the patient, relevant past and current medical history, and the prescribing situation (e.g. medication review, hospital discharge summary, acute presentation, initiating a dosset box) including dates.
Please include, if applicable, interactions, safety, monitoring, concordance, legal issues, polypharmacy/de-prescribing/alternatives to pharmaceuticals, and personal circumstances.

This patient is an 85 year old lady with a history of hyperparathyroidism, CKD4, DM, hypothyroidism, hypertension, AF, fragility fracture -NOF (2016 + 2017) with hip hemiarthroplasty, DVT and vascular dementia. The prescribing situation was medication review.

She is taking warfarin with regular hospital monitoring of INR and warfarin dosing by them. The two main issues are the risks with warfarin of bleeding, as this lady has had two falls in the last two years with #NOF. This in combination with dementia and other health problems suggests she continues to be a fall risk. In addition she is a care home resident, and staff dispense medication. The positive is that compliance is good, compared to if she was self-dispensing. However there has been a history of problems with medication dispensing with staff, sometimes omitting dosing if not sure of the plan, or asking GP for the next dose rather than continuing the previous plan until the anti-coagulation feedback arrives.

**Medication prescribed (all current medications with dosing instructions for each drug) and reason for each prescribed medication**

<table>
<thead>
<tr>
<th>Medication including dose</th>
<th>Reason for prescription</th>
<th>Cost effective (Y / N)</th>
<th>Clinically effective (Y / N)</th>
<th>Safety issues (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warfarin – variable dose</td>
<td>AF</td>
<td>Y</td>
<td>Y</td>
<td>Y - as above</td>
</tr>
<tr>
<td>Colecalciferol 800 units daily</td>
<td>Osteoporosis</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Lansoprazole 30mg OD</td>
<td>Reflux</td>
<td>Y</td>
<td>Y</td>
<td>Y – increases risk of osteoporosis and fractures</td>
</tr>
<tr>
<td>Paracetamol 1g PRN</td>
<td>Pain</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Senna 7.5mg nocte</td>
<td>Constipation</td>
<td>Y (although bisacodyl is cheaper)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Mirtazapine 15mg nocte</td>
<td>Low mood</td>
<td>Y</td>
<td>Y – to be reviewed</td>
<td>N</td>
</tr>
<tr>
<td>Levothyroxine</td>
<td>Hypothyroidism</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>
### Changes made / action taken / reasons for change

(Please copy and paste the box below as necessary)

<table>
<thead>
<tr>
<th>Change type</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>(new / dose change / removal / nil)</td>
<td>Apixaban 5mg BD (or 2.5mg depending on weight and creatinine)</td>
</tr>
</tbody>
</table>

**Reason for change / prescribing decision including references and / or record of discussions with prescribing lead**

The initial reason for change is the local guidance to change from warfarin to NOAC where appropriate, after assessing for bleeding risk with HASBLED, checking creatinine clearance rate. The second reason is the context given above regarding problems with warfarin dispensing. This was discussed in the clinical practice meeting and the change was agreed.

**Safety issues including interactions**

The change to apixaban was trialled a few months ago however this caused confusion for staff - INR needed to be below 2.0 before giving the medication, and whilst waiting for the results staff continued to give warfarin. The test needed to be repeated, staff were not confident to stop warfarin for a few days and then start apixaban, and eventually the changeover was abandoned.

**Monitoring details**

Apixaban does not require regular monitoring, other than routine eg 6-12 monthly renal function and weight check for creatinine clearance. Do to her health problems the patient will have these check regardless so there is no additional monitoring requirement.

**Cost effective (Y/N)**

Y

**Clinically effective (Y/N)**

Y = statistically

**Patient specific prescribing advice**

Staff to ensure medication is given BD with no missed doses (which can be a problem).

Discuss your learning about prescribing from this case. Describe any future actions or changes that you may make.

This case highlighted the need to give clear instructions to care home staff in order to ensure instructions are handed over from person to person effectively, and reduce confusion.

Due to the previous events the patient has been referred to haematology to oversee the changeover if appropriate to NOAC, as they will be able to coordinate with anti-coagulation clinic and hopefully the changeover will be successful. In addition lansoprazole dose and efficacy is to be reviewed, ideally to be reduced and potentially stopped, although this is to be balanced with the need for gastro-protection due to other medications. Mirtazapine dose and efficacy is also to be reviewed.
Assessor Comments

The doctor is to be commended for undertaking this exercise. The candidate’s choice of patients has complied with the requirements and has allowed the candidate to demonstrate their decision-making processes regarding prescribing for complex patients.

The work demonstrates safe, clinically evidenced and patient centred prescribing. The reflection is appropriate and will trigger a change in practice in future.

Areas requiring clarification:

Case 1 – There is no information regarding the dose and frequency of use of oral morphine.
Case 2 – It's not clear if the changeover from warfarin to apixaban taken place. How will the doctor be assured that apixaban would be dispensed as advised with the described staff issues in the care home? Specifically, is there a risk that doses likely to be missed?

<table>
<thead>
<tr>
<th>Pass</th>
<th>Resubmit</th>
<th>X</th>
<th>Score</th>
<th>B</th>
</tr>
</thead>
</table>
2. Quality Improvement Programmes

Use only ONE proforma (samples are provided for each programme type)

1.1) Case Review or Discussion

Describe the cases that you discussed (including dates and the linked theme)

I decided to discuss the management of those patients who, in the last year, I had referred urgently to secondary care, via the suspected cancer pathway. There were 3 cases.

A- female aged 62. This patient presented to me with a breast lump on 12/11/XX. She had a long history of multiple previous breast lumps and had had 3 previous fibroadenomata excised. She presented with a 4 weeks history of a new lesion in her breast. She felt that it was another benign lesion. On examination she had a freely mobile smooth, but firm, lesion lateral to the nipple with no other abnormalities. She was not anxious about it and we both felt that it was most likely to be benign. I did however tell her that we needed to be 100% sure and that I suspected that the breast surgeons would want to remove it- as they had done with other similar lesions. She told me that she was going on holiday for 3 weeks and I told her that it was fine to do this but that I’d refer her urgently, with a note to the surgeon that she was away. She was seen 1 week after her return and the letter from the surgeon said that clinically, and on ultrasound, this lesion could be malignant so removal was arranged. She had a wide excision, with lymph node sampling, and histology confirmed breast cancer. She had deep x-ray therapy and is currently well.

B- male aged 52. This patient was a very infrequent attender at the practice. He saw me on 3/5/XX with an 8 weeks history of an upper abdominal discomfort and a feeling that he was not opening his bowels properly. I saw from his notes that he had seen a GPST registrar in the practice 4 days before and had been given a laxative. It was a difficult consultation, because he started by telling me that he was not happy with the doctor that he had seen previously and ‘this can’t just be constipation’. I spent some time trying to develop a rapport and established that he thought that he had a cancer. I examined him and found him to be mildly jaundiced with suspicion of a palpable liver. I told him that I shared his concerns and we discussed at length what my findings might indicate. I was unsure about the quickest way to help this man and offered him admission that day. He told me that he didn’t ever want to go into hospital and agreed to my alternative suggestion that we could do some blood tests and organise an urgent abdominal ultrasound scan. These were done within one week and confirmed likely metastatic disease in the liver. He agreed to an urgent referral but, unfortunately, the surgeon who saw the letter decided that he should have a CT scan of his abdomen before being seen. This took 3 weeks to be done and another week before the appointment came through to go to see the surgeon. The patient had become increasingly anxious during this time and, because we had openly discussed his prognosis, he decided to visit his children in Spain to personally tell them the bad news. I was able to get the CT scan result prior to his visit and it showed widespread metastatic disease with unknown primary. He was referred, by the surgeon, to
the palliative care team and I was able to help keep him at home during the terminal phase of his illness. He died there 8 weeks after his first consultation.

C- male aged 84. He presented to me on 24/8/XX with a 6 weeks history of cough and sob. He was known to have COPD but hadn't been seen in the practice for 6 months. On presentation he looked awful and had clubbing. Examination revealed r sided consolidation/collapse. I treated with antibiotics and organised an urgent CXR. He came for the result with his wife and we discussed openly that it showed a probable primary lung cancer. I referred him urgently and he was seen within 2 weeks. A bronchoscopy was organised but before it happened, I saw him as a house-call when he had severe back pain. His wife could not nurse him so, after a discussion that this might be a due to bone metastases, we all agreed to admit him under the medical team. He died 4 days after admission.

Why did you choose to discuss these cases and who did you discuss them with?

There has been a lot of recent publicity, in both the lay and medical press, about the diagnosis and management of cancer in the UK. Although I feel that I practice safe medicine, and have had no significant cases where I felt that I had caused delay in the diagnosis of malignancy, I recognise that the management of individual patients is far more complex than bare statistics and I wanted to see if I could learn from a discussion with a colleague. I am aware that, even though I work in a large and supportive practice, we all make decisions and management plans in isolations in most cases. I was keen to see if I could identify any ways in which my management could be improved, by reflecting with a trusted colleague.

I chose one of the GP partners in the practice. She is someone whose opinion I value and I knew that she would be prepared to be honest and help me to reflect. I thought deeply about who I should ask, as this is crucial for the value of the exercise. Other partners might be less reflective or less prepared to discuss areas for development.

We sat down over lunchtime in the practice. I had previously given her an outline of what I wanted to discuss and what I wanted to get out of the process.

Describe the areas of good practice that you identified.

All the cases that I referred as suspected cancer turned out to have cancer. We reflected on my threshold for referral down this route and we concluded that it was quite high compared to some of my colleagues. We discussed that the word 'suspected' means different things to different doctors but I feel that there would be huge implications for patients, and resources, if we interpreted this to mean that we used this referral route if there was any possibility whatsoever that a patient might turn out to have cancer. We discussed that I had looked at all our cancer diagnoses in the previous year and had identified no other patients on the list that I had seen prior to diagnosis. It would appear that I use this route appropriately.

We discussed that I appear to try to manage patients holistically and do not
'just refer' them. I've always felt very strongly that GP's should be the patients advocate and, particularly in the case of B, I spent a lot of time helping him navigate his way through his cancer journey. These are roles that are not easy to quantify but are very important to patients.

We discussed that I appear to have made sound diagnostic decisions, on all these patients, by taking an appropriate history, examining competently, and investigating as needed. I am very aware that good clinical knowledge and acumen are crucial to safe medicine and we discussed that these cases appear to demonstrate this.

We spent a lot of time discussing patient B and particularly that he had been seen by one of the GP trainees just before me. We discussed how it easy it would have been to have made an immediate assumption that this patient was, in some way, just anxious and perhaps to have felt slightly frustrated that he had returned so soon. I always try to see things from the patients' perspective and recognise the importance of being non-judgemental and we discussed that these qualities were important to the management of this patient.

Describe areas for improvement

I definitely need to look critically at my “threshold” for referral of patients with potential cancer, as one diagnosis in the differential diagnosis in the patient’s presenting symptoms/signs. There is a suggestion in this review of cancer patients that my threshold may be higher than my colleagues’. I need to try and “tease” this out and see if I may be at risk of disadvantaging these patients.

What learning or developmental needs did you identify?
We discussed some areas in which I might have done things differently

In case A we discussed my concern about whether I had become slightly de-skilled at breast examination. I have not seen a new breast cancer for about 5 years. We discussed that I could have asked one of my colleagues, or the Nurse practitioner, for their opinion. I recognise that I generally don't do this often and, perhaps in this case, it might have helped.

In case B my colleague said that she would have referred the patient on the first visit, despite his reluctance, and would have done the tests that I did at the same time. We discussed that this might have saved some time. We discussed that I generally like to get a clinical answer, before referring the patient, so that I can prepare them for what might be the outcome. We discussed that this might come from my desire to help, but also is something about my reluctance to delegate to others and is this because I think that I can do it better myself? This is a trait that I have recognised in the past and I'd never thought of it in this context. It is also a reflection on my desire to be their advocate and we discussed that some of this comes from bad previous experiences. I need to be more self-aware about this.

We also identified in this case that I need to think more about my choice of investigation, as the USS only confirmed what was clinically pretty obvious and did not move the management much further forwards. We talked about whether discussing the case with a radiologist might have helped me make a better decision.

What changes have you made to your practice as a result of this review or discussion?

I will be more prepared to ask for the help of colleagues in the assessment of clinical findings- particularly in those areas of medicine where I see patients less frequently. The discussion clearly identified to me that I am less likely to do this than other colleagues and I recognise that perhaps my patient care could, at times, be enhanced.

I have discussed with a friend, who is a radiologist, about the best ways to initially investigate certain symptoms with imaging. I learned about the fact that the local Radiology Department always has a senior radiologist to look at urgent requests and that they were available and keen to speak to GP's wanting to discuss cases. I am aware that I have become less likely to do this, than earlier in my career, and will try to do it more.

I need to try to delegate more. This discussion made me realise that I do this less than colleagues. I have reflected on this and have vowed to consider whether there are ways in which I can do this more readily, without losing the holistic care and continuity that I think that patients value.

How will you ensure that the changes are maintained?
I intend to do this type of exercise in each appraisal year. I really enjoyed it and both of us felt that it was something that could enhance the care of patients in our practice.

We intend to discuss with the other partners how we might practically manage this.

Whilst cancer diagnosis is an important area, and one that interests me, I realise that there are other areas that could equally be discussed. As part of my PDP I will look at some emergency admissions next year. By maintaining a willingness and understanding of Quality Improvement Programmes I can ensure that any changes are maintained and new learning needs identified.

Assessor Comments

This is an excellent piece of work. Evidence of careful consideration of who these cases were discussed with and very useful reflection during that interaction. The review of all cancer diagnoses during the preceding year was a good check on candidate’s management of cancer patients. Increased self-awareness of factors motivating management and evidence of sustainable change in agreeing to incorporate this activity into annual appraisal and extending this to consider other areas of clinical activity.

Pass X Resubmit Type Major/Minor Score G
2.2) Clinical Audit

<table>
<thead>
<tr>
<th>Title</th>
<th>An audit of the practice use of Calcium and Vitamin D supplementation in the treatment and prevention of osteoporosis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification of subject</td>
<td>The purpose of the audit was to optimise calcium and vitamin D supplementation in the treatment, and prevention, of osteoporosis in patients receiving bisphosphonates or risedronate.</td>
</tr>
</tbody>
</table>

I became aware of this issue when I saw a letter that arrived in the practice from a local Physician; they suggested that one of our patients should be taking this supplementation with their bisphosphonate treatment. I discussed this with the partners in the practice and identified that we were not all aware of how we should be managing this and that our approach to this was likely to be inconsistent. I decided to check the guidelines and then to audit our performance.

The Royal College of Physicians osteoporosis clinical guidelines states "Unless clinicians are confident that women who receive treatment have an adequate calcium intake and are vitamin D replete, calcium and/or vitamin D supplementation should be considered."

Patients already diagnosed with osteoporosis should aim for 1200 mg daily calcium intake as recommended by National Osteoporosis Society. However national nutrition surveys show that many people consume less than half the amount of calcium recommended. The Drugs and Therapeutics bulletin April 2006 states “the prevalence of vitamin D insufficiency in adults is as high as 55% and more common in patients with an osteoporotic fracture.”

BNF 66- Page 496- also suggests that Supplementation with 1200 mg daily of calcium and at least 400 u of Vitamin D is appropriate.

NOGG Guidance 2017- also confirmed that, despite some recent concern expressed about the use of supplementation, it was still considered appropriate to use them when using bisphosphonates and risedronate.

I discussed the audit proposal with the local rheumatology consultant who agreed that based on existing evidence on the treatment of osteoporosis and our local population; optimal osteoporosis treatment/prevention should include calcium and vitamin D. This should be at least 1200mg of Calcium and 400U of Vitamin D.

<table>
<thead>
<tr>
<th>Criterion / criteria</th>
<th>Patients currently taking bisphosphonates or raloxifene for osteoporosis treatment or prevention should be offered Calcium and Vitamin D in a therapeutic dose</th>
</tr>
</thead>
</table>
| Standards with justification | 80% patients receiving bisphosphonates for osteoporosis treatment or prevention should take Calcium and Vitamin D.  

80% patients in this group should receive a therapeutic dose (as defined above).

We discussed this audit at a clinical meeting and I presented the evidence. We could
not find any local examples of similar audits so we decided that an 80% for both standards would be a realistic target. We felt that it was an important issue but also recognised that some patients may find the supplement unpleasant, some may not wish to pay the prescription charge or may refuse an additional tablet. In addition some patients may resist the change in dose and brand that they were already taking. Patient preference and compliance means that we would be unlikely ever to achieve a standard of 100%.

**Preparation and planning**

I discussed the proposal and rationale at a practice meeting. All staff members were made aware of the principle of the audit, and why it was important. We also told them information to allow them to answer patients’ questions.

Patients were identified who were taking bisphosphonates and had already been diagnosed with osteoporosis, or had been started on it because they were high risk.

A list of patients was compiled who were taking bisphosphonates or raloxifene using an EMIS search. The office manager, who is trained in computer searches, undertook this. The list of patients not receiving a supplement was circulated to clinicians to ensure suitability for inclusion. No patients were excluded.

A list was also compiled of patients who were receiving inadequate doses of calcium and vitamin D.

**First data collection, including dates, comparison with standards set, analysis of data**

August 20XX

105 patients taking bisphosphonates. None taking raloxifene.

Of these 66 patients were receiving calcium and vitamin D supplements

62% patients on bisphosphonates were taking calcium and vitamin D supplements. This is below the standard of 80%

Only 33 patients taking bisphosphonates with calcium and vitamin D were receiving an adequate dose

2 patients were non compliant with their prescription

31% of patients on bisphosphonates were receiving a therapeutic dose of calcium and vitamin D. This was below the standard of 80%.

We were disappointed, but not surprised, at the result of the first data collection exercise. We discussed this as a team and decided that we needed to take some proactive action to improve the results. We felt that our increased awareness of the issue would lead to a natural improvement in the results, as we changed treatment opportunistically, but felt that we needed to do more to improve the treatment of all our patients.

**Proposals for changes and actions taken**

Patients who were not receiving a calcium and vitamin D supplement in addition to their bisphosphonate, and those that were receiving an inadequate dose, were identified and contacted with a view to offering them optimal therapy.

A letter was sent to these patients explaining the rationale behind the change. Prescriptions were added to their medication list or amended if dosage inadequate.
Patients were invited to phone the office manager or myself or make an appointment if they required further clarification.

We saw some patients, who wished to discuss our change, and most were happy with our explanation.

I also produced a simple laminated sheet for all clinicians to remind them of the dose and the need to consider supplementation when starting new patients.

Re-audit in 3 months.

Second data collection, including dates, comparison with first data collection and standards set, analysis of data

Second data collection after 3 months in Nov 20XX.

A search was undertaken to establish how many patients had their prescription issued and collected:
107 patients receiving biphosphonates none taking raloxifene
of these 105 patients receiving calcium and vitamin D supplements

98% patients on bisphosphonates taking calcium and vitamin D. This exceeds our standard of 80%.

103 patients were receiving an adequate dose

96% patients on bisphosphonates taking a therapeutic dose of calcium and vitamin D. This exceeds our standard of 80%.

This suggests that our interventions have been successful in improving our performance.

Discussion of results

The results were very pleasing, as we did not expect to reach such uniformity of prescribing. Few patients resisted the change and most found the preparation tolerable with minimal side effects. One patient declined the medication due to perceived side effects however, after gentle encouragement; she persisted and is now tolerating the preparation well.

One patient that had not collected the prescription and the two still receiving inadequate doses have been sent a letter inviting them to pick up the prescription, have it sent or make an appointment to discuss the intervention. Their notes have been alerted to check registration details are correct. The other patient was given the prescription in an appointment following discussion of the prescribing rationale.

Fractures caused by osteoporosis, estimated at 200,000 per year in the UK result in mortality, morbidity and loss of independence, and cost around £1.8 billion per annum in the UK. (Arthritis research campaign 2007)

The practice team is more aware of current guidance on osteoporosis treatment and prevention as a result of our audit and related discussion. This includes advice on diet and exercise.
The audit has increased the whole team’s awareness of osteoporosis and we hope to optimise treatment for our whole population. We have an increased understanding of the need to be aware of osteoporosis risk in our 50-85 yr old patients – for example:

- those taking at least 3 months of any dose of oral steroid
- those with a recent or previous low trauma fracture (a fracture sustained by a fall from standing height or less) after the age of 50
- The frail, housebound elderly or those in care homes. (ARC Feb 2007)

We will offer treatment and/or referral for DEXA scanning as appropriate.

I would like to repeat the audit in a year or so to ensure that we have maintained our evidence-based practice.

Final conclusions

This audit both heightened an awareness of osteoporosis within the practice and optimised the treatment of those already identified. The audit should improve the care of patients and could potentially reduce the burden of osteoporotic fracture for our population.

Assessor Comments

This audit has provided a worthwhile sustainable change to practice in an important area of disease prevention. The Criterion is clearly stated and evidence based and the standard set with good justification. It was nice to see the reasons laid out as to why the standard was not set at 100%! All the Practice were involved leading to an increased awareness in this area.

NB. Ensure you are clear about the definitions of standards and criteria.
2.3) Evaluation of the impact of a health initiative

| Describe the health initiative, including dates, and how it was evaluated. |
| My health initiative for the practice was to try to reduce teenage pregnancy as this has been a major political agenda and is an issue for my practice. It was evaluated by looking at the uptake of LARC and the number of discussions about LARC and leaflets distributed during the study period from July 20XX to July 20XX compared with the 12 months before. |
| Factors which have been identified affecting this issue include accessibility to the practice, perceived approachability of the doctors and reception staff and nurses, confidentiality. |
| Our initiative was intended to try to improve the teenage pregnancy situation in our practice. The factors we saw as important were to make the practice as ‘teenage friendly’ as possible. We put up posters in the waiting room about contraception, detailing our service and reassuring that consultations would be confidential, provided there was no risk of serious harm. |
| Leaflets were available, not only in the waiting room but in the toilets, where they could be obtained out of the view of friends, relations and neighbours. The LARC (long acting reversible contraception) service was extended considerably as I undertook the DFSRH and LoCs in contraceptive implants and IUDs. |
| All clinicians were asked to discuss LARC whenever contraception was asked for, as it is much less user dependent than oral contraception. All clinicians were asked to read about and offer emergency contraception, including the emergency IUD which was now available in the practice. |
| The initiative was evaluated by measuring the uptake of LARC in proportion to COC and by the uptake on information leaflets, which also gave information about local CaSH clinics, in case the patients preferred to go elsewhere for their contraception. |
| It was not practical to measure the teenage pregnancy rate over the period of the initiative. |

| Describe why you chose this initiative and its relevance to your work |
| My health initiative for the practice was to try to reduce teenage pregnancy as this has been a major political agenda. It is also a particular issue for my practice (and consequently for me personally) because of the Practice’s demography. We have a large student population in our Practice area which also includes two large secondary schools in an area of deprivation. It was evaluated by looking at the uptake of LARC and the number of discussions about LARC and leaflets distributed during the study period compared with the 12 months before. |
| See below, quote from a FPA fact sheet. |
| • The UK has the highest teenage birth and abortion rates in Western Europe |
Rates of teenage births are five times those in the Netherlands, double those in France and more than twice those in Germany(2).

In 2006 the teenage pregnancy rate in the USA increased for the first time in 10 years to 71.5 per 1,000 15–19 year olds. Around a third of these ended in abortion (3).

Groups who are more vulnerable to becoming teenage parents include young people who are: in or leaving care, homeless, underachieving at school, children of teenage parents, members of some ethnic groups, involved in crime, living in areas with higher social deprivation(4).

Young women living in socially disadvantaged areas are less likely to opt for an abortion if they get pregnant (5).

Dr Mike Pringle published papers on teenage pregnancy, this quote is from the BMJ: "After adjustment for other confounding factors, practices with a female doctor had 91 per cent of the teen pregnancy rate found in other practices. Practices with a doctor under the age of 36 had 84 per cent of the rate, and those with a doctor who was both young and female had 75 per cent of the rate. Surgeries with more practice nurse time also had significantly lower rates. The availability of local family planning clinics did not affect the rates, but deprivation and fundholding status were associated with higher numbers of teen pregnancies."

The social disadvantage factors apply to quite an extent to my practice and I see quite a few very young mothers whose lives have been affected in a major way by pregnancy. Unfortunately it is no quick or easy to alter the demographic of the medical staff involved but there are other factors which can be improved.

The initiative was evaluated by measuring the uptake of LARC in proportion to COC and by the uptake on information leaflets, which also gave information about local CaSH clinics, in case the patients preferred to go elsewhere for their contraception.

It was not practical to measure the teenage pregnancy rate over the period of the initiative.

This initiative was undertaken because the UK has the highest rate of teenage pregnancy in Europe. This has a massive impact on the teenager themselves, their boyfriends and the children when they are born, as well as on the entire family and society.

Describe your analysis of the outcome of the initiative

During the 12 months before the initiative started no IUDs were inserted at the surgery. 20 implants were inserted, 10 of them in teenagers, i.e. 50% of insertions.

During the 12/12 of the initiative:
2 IUDs were inserted in teenagers, 1 as emergency contraception. 2 IUS were inserted partly to help with severe dysmenorrhoea. This was 20% of all the
30 Implanon contraceptive implants were inserted, 20 of them in teenagers, this was 66% of all the insertions.
Consultations in which a leaflet was given and LARC was discussed increased from 150 to 324.
A large number of leaflets were taken from the dispensers on the toilet doors, thus disseminating information to patients and their friends.
We therefore considered that a contribution had been made to reducing teenage pregnancy.
Although it is hard to quantify, an increasing number of young teenagers came for contraception, sometimes bringing school friends with them for support.
This allowed us to extend knowledge to some extent beyond the practice. It seemed that our practice was seen to be supportive to the teenagers’ efforts to protect themselves. We of course had to observe safeguarding principles such as checking the age of the partner and checking no coercion was involved. Also we had to raise awareness about STDs.

Describe any barriers to successful implementation of the initiative and effects on patient care

The reasons for teenage pregnancy are multiple and involve social situations and deprivation in the main. Access to, and how comfortable teenagers feel, in consulting GPs may be a barrier. Despite this initiative in trying to disseminate information discreetly and appropriately, the next step that the teenager takes in “plucking up the courage” to make an appointment to discuss contraception with an older person (the GP), is for some individuals very difficult. We need to continue to engender an accessible, open and teenage friendly environment if we are to improve this. As GP life is so busy, time taken for one initiative inevitably takes time from other priorities. It is therefore a question of deciding which ones have highest priority.

Describe any changes that you made as a result of this evaluation.

Because of the positive results of the initiative we, as a Practice, decided to continue the efforts after the 12 months of the experiment had elapsed. We also decided to look into joining a scheme for distributing condoms to girls and boys.

What have you learned about managing change as a result of this evaluation?

I learned that it is essential to have support from all sections of the practice, reception staff and managers as well as clinicians. Everyone has to “buy in” to what we are trying to achieve. I’ve learned we need to set clear objectives and that introducing even simple changes into a process (e.g. as here the provision of leaflets in a discreet place) can have dramatic effects on changing better provision a service.
I’ve learned the importance of having time to collate, analyse and feedback outcomes to all involved and then collectively decide what works well and what doesn’t in helping to achieve our aim and continuing to improve on what was achieved. I’ve learned that it is wise not try to take on unrealistic amounts of work in attempting change in practice.
Assessor Comments

A worthwhile initiative in reducing teenage risk with increased uptake of LARC. It would have been useful to see how all clinicians were alerted to discuss LARC when patients presented for contraceptive advice. You state clinicians "were asked to" consider this. Might computer generated flags have helped? Your decision to place leaflets in toilets (and the reasons why) is commendable with evidence of good uptake.

Developmental suggestion:-
Consider factors that influence good uptake of health initiatives by all members of the Practice Team.
2.4) Review of clinical outcomes

<table>
<thead>
<tr>
<th>Describe the data that you reviewed, including dates, and outline how it reflects on your own practice.</th>
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<tbody>
<tr>
<td>I looked the number of patients in the nursing homes we care for in the practice who had been admitted to hospital in the last three months (1 Apr 20XX – 30 Jun 20XX). There had been 15 admissions for Nursing Home patients under our care to hospital. I looked at these 15 sets of notes and checked to see if they had a DNAR form, whether there was an Enduring Power of Attorney covering health decisions and whether any conversation about the patient’s wishes had been recorded at any stage. When these conversations take place, even if a legal document is not completed, they should be recorded in the notes and notice should be taken of them. I found that of the 15 patients admitted 6 had a DNAR form, 8 had some recorded conversation about their future wishes but none had enduring Powers of Attorney.</td>
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<tr>
<th>Why did you choose to evaluate this data and its relevance to your work?</th>
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<tr>
<td>I chose this area to look at because I am the lead GP in my practice for two of the local nursing Homes (and therefore this issue is very relevant to my day to day work). We have a total of 42 patients in these homes who I’m mainly responsible for. I have been saddened repeatedly when very frail elderly people are taken into hospital urgently at night and weekends, only to die soon afterwards. I feel that they would have had a more peaceful death in their own familiar surroundings. Also there was a change in the law in 2005 which allowed ‘Lasting Power of Attorney’ which was more than the previous financial Power of Attorney. This allows the patient, while they have capacity, to give authority to someone they trust to take health decisions if they have later lost capacity. Setting this up requires the relative, friend or trusted professional to have conversations with the patient about their wishes for resuscitation, admission to hospital and how far treatments should be taken.</td>
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<table>
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<tr>
<th>Describe and reflect on the results of your evaluation</th>
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<tr>
<td>The evidence of good practice was that 6 patients had DNAR forms and 8 had recorded conversations about their wishes (of course some people will have expressed a wish to be resuscitated). This is clearly far short of the need to have this matter documented in all 42 patient records and we need to take steps to ensure that as many as possible have completed DNAR forms in their record.</td>
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<tr>
<th>Describe the steps you identified that may help to improve outcomes</th>
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<tr>
<td>A proactive initiative to ensure DNAR is discussed with each patient under my care in the Nursing Home. When the patient does not have capacity, to discuss this with the patient’s relative who holds Power of Attorney. To ensure that this matter is brought to the attention of the Officer in Charge in each Nursing Home and make him/her aware of the importance of this.</td>
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<tr>
<th>What change(s) have you made to your practice as a result of this review?</th>
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</table>
I have arranged meetings with the Manager of each Nursing Home under our care and also arranged to make a presentation on the topic at the practice meeting.

My aim is that everyone in the Nursing Homes should have a brief assessment of capacity, preferably on admission and if they have capacity a conversation on these topics should be recorded. It is important that this is done before capacity is lost. Then if the patient wishes, DNAR and Powers of Attorney can be set up.

I hope by these means to reduce the number of frail elderly people who are admitted to hospital fruitlessly by offering documented back-up to staff who have to make decisions about calling an ambulance etc, often in the middle of the night.

**How will you ensure that the changes are maintained?**

I will ensure that a DNAR form is included in all new admissions to Nursing Homes and (with agreement with each officer in charge identify who will be responsible for doing this. In my initial admission assessment of the patient I will now complete that form for each patient.

### Assessor Comments

This is a worthwhile review of an important issue in the care of the Elderly in Nursing Homes. However the changes in your practice in this area are aspirational rather than having been demonstrated to have taken place.

Please resubmit with more information about what you are covering in your discussion with the Manager in each Nursing Home and the important points you wish to communicate in your Practice meeting please? You have not mentioned DOLS and how you plan to address these so please include reflection on this. How will you ensure that all patients have documented discussion of these issues and where exactly will these discussions be documented in the patient’s record?
2.5) Review of the effectiveness of a teaching activity

<table>
<thead>
<tr>
<th>Describe identified needs of learners</th>
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<tr>
<td>£8.81 billion were spent on drugs in the NHS last year. The most frequently used tool for treating our patients in General Practice is a drug. Therefore the learning need for potential GPs to prescribe well and responsibly is great. I was asked to give a day of teaching to a group of about 25 GP trainees, repeated for a second similar sized group. I chose this topic as it extremely important for them.</td>
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<table>
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<tr>
<th>Describe teaching activity or programme, including dates</th>
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<tbody>
<tr>
<td>During their training GP trainees spend 18 months doing hospital jobs and these trainees are taught as one group, for one full days training each fortnight, to fit in with their work rotas. This is the programme I organised.</td>
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PREScribing DAY 4TH AND 11TH JULY 20XX
9a.m. Coffee and Registration
9.15 Flip chart trainees’ learning needs. Talk by XXX, PCT Pharmacist on the Practical aspects of Prescribing
10.15 Coffee
10.45 groups 5*5
The groups will be assigned a laptop and a BNF drug group each. They will also need a BNF and drug Tariff or appropriate apps on mobiles or computer access. We will try to mix the groups for GP experience and speciality they are currently in.
Each group will be asked to produce a formulary of a few drugs in each section, considering cost effectiveness, clinical effectiveness and safety.
12.45 Lunch
1.30 Quiz—XXX
2pm Each group presents the results of the morning’s work*
3pm Four trainees will present a Hot Topic- a drug issue which is current (will need to be decided nearer the time). E.g. a drug which has just been withdrawn, a new drug, recent news about a side effect. Sources of info will MIMs, D&TB the Press etc.
4pm All group members will be asked to talk about a prescribing issue which has arisen in their department recently. LEA to discuss reasons behind the problem.
4.30pm Close
*this may happen before lunch, depending on how long the task takes.

The ideas behind this plan were to get the trainees to think for themselves as much as possible about their prescribing and have a list of drugs which they commonly prescribe. This is much safer than picking from a long list of possible drugs as it means the doses and side-effects are well known and there are fewer possibilities for error. We also covered the nuts and bolts of prescribing and possible pitfalls and the law surrounding controlled drugs. This was done by a former PCT pharmacist. Later we covered hot topics, most of which were presented by the trainees, things which had been in the Press or in
medical journals recently. Last we had a discussion about problems and errors which the trainees themselves had experienced at work, the reasons behind them and improvements to safety which could be made.

Describe the evaluation or assessment of teaching activity

Evaluation was done using the electronic evaluation form which is routinely sent to trainees after all teaching sessions.

Provide the feedback from learners or other teachers

The feedback from the trainees was pleasing with most rating it very good, some as good. Comments included appreciation of the Pharmacist's talk and her good knowledge, liking of the group work and the Hot Topic presentations done by trainees. Things to improve included more BNFs and links to guidelines and web-sites for the group work and perhaps shortening the trainee Hot Topic presentations.

The Programme director who organises the whole programme has recently done the planning for the next 6 months and let me know that the trainees are very keen to have this session again, which is very pleasing.

What changes have you made to your teaching activity as a result?

I plan to do some of the same programme again as I only have half a day this time. I will have hot topics but give the trainees a firm time limit and limit the number of slides. I would like to give more time to the trainees’ own accounts of errors etc. and a resulting learning event analysis as we ran out of time last year and could only do a few.

<table>
<thead>
<tr>
<th>Assessor Comments</th>
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<tbody>
<tr>
<td>There needs to be a more detailed analysis of the teaching evaluation. Please outline exactly the questions that the trainees were asked on this form, then comment in detail on the aggregate responses made and include exactly the verbatim free text responses on the evaluation form, that the trainees gave, and any of your reflective comments on this. How will you “include more BNFs and links to guidelines and websites” as the trainees have requested? I understood there was access to the internet on your teaching day.</td>
</tr>
<tr>
<td>It would be helpful to see your actual proposed timetable of your next half day teaching session and how that changes materially as a result of what you have learned in this whole day session. Please outline how you will ensure you have enhanced your role as an educator and ensure that any changes are maintained.</td>
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<tr>
<th>Pass</th>
<th>Resubmit</th>
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Resubmit
3. Learning Events Analysis (LEA)

EVIDENCE/PROFORMA

<table>
<thead>
<tr>
<th>Title:</th>
<th>Missed abnormal results</th>
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</thead>
<tbody>
<tr>
<td>Date of learning event:</td>
<td>14/1/XX</td>
</tr>
<tr>
<td>Date of learning event meeting:</td>
<td>21/XX</td>
</tr>
<tr>
<td>Date report compiled:</td>
<td>2/2/XX</td>
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</tbody>
</table>

What happened including your role?

A 62 yr old patient that I had not seen for some time consulted me about a finger injury. However, I was struck by her evident weight loss and, after examination, advised her to have bloods taken. The results were consistent with hyperthyroidism TSH <0.02, T4 98 & T3 8.7. I intended to phone the patient to speak to her but the phone number in her notes was incorrect so I had to visit to explain the results to her. The next day, on checking her previous results I found that 17 months previously (Aug XX), she had had bloods taken which showed hyperthyroidism (TSH <0.03, T4 40.3 & T3 5.2) but we had failed to act on this result. I felt I had to explain this to the patient but, fortunately, she was just pleased we had found a cause for her weight loss & fatigue.

Subsequently I started her on carbimazole and beta blockers and she is now under the care of the local endocrine team (although her hyperthyroidism is not quite under control yet). It is likely she will have radio-iodine soon. She has also now developed thyroid eye disease and is attending the ophthalmologists for this aspect of her problem.

Why did it happen?

The original result in September 20XX was noted by one of my partners but the patient had an appointment for review in a few days (with the doctor who took the blood sample) and so was not contacted directly. The result was scanned but a clinical note was not entered in the patient record. The patient then cancelled her appointment (at the last minute) oblivious of the results and had assumed, as she had not heard otherwise, that the result was normal. The doctor (our registrar) who took the bloods did not follow up the results and had assumed that someone else had seen and dealt with them. The normal policy of contacting a patient with abnormal results had not been followed, there was a breakdown of communication within the practice and also a clinical note had not been recorded in the medical records. All three of these contributed to this significant event.

As well as this error, there was also the problem of there being no up to date phone number for the patient and so no method of communication other than letter or visit.

Who was involved in the discussion of the event?

The event was discussed at our weekly practice meeting attended by the partners, practice nurses, training doctors and practice manager.

What have you learned?

Several issues arose from this case but the main issue relates to breakdown of
procedure and lack of communication within the practice. None of the partners are in the surgery every day of the week and we are very dependent on each other in order to work as a safe and effective team. Abnormal results are acted on immediately by the doctor who sees them (usually the doctor on call) and the patient contacted as soon as possible. Normally we would then pass the result to the doctor who requested the blood test.

In this case this seems not to have happened as the doctor checking results had noted that the patient already had an appointment arranged, no safety net had been made for the unexpected eventuality that the patient might cancel their appointment.

Additionally that lack of an up to date contact phone number hindered the ability of myself (and by implication others potentially involved in this patient’s care) to quickly and effectively contact her about the results.

I have learned that

• It is very important to have a robust mechanism to deal with abnormal results

• It is also important (particularly for patient safety) to communicate with colleagues, to pass on important information; and when dealing with abnormal results, to ensure that the doctor who initiated the test is aware of the results and what action has been taken.

• Finally it is essential to keep good, accurate medical records – in particular coding new diagnoses as soon as they are noted.

Within this same case, I have learned how important it is to keep the patient's phone number and demographics up to date in the records.

What have you changed in the Practice as a result of the review or why have no changes taken place?

After our meeting we reviewed our procedures for dealing with abnormal results.

• When an abnormal result arrives in the practice, the doctor who sees it must act by either requesting the patient be contacted to make an appointment or else by communicating directly with the patient by telephone (or visit if necessary) should it be urgent.

• After this, the result should be passed on to the doctor who initiated the test. This would be via the workflow but as an extra measure, a printed copy of the result would be placed in the doctor’s ‘pigeonhole’- their paperwork box. For significant new diagnoses (and where feasible), there should also be direct verbal communication from the doctor who dealt with the result as soon as possible.

• Any letter or result that confirms a new diagnosis should be entered as a ‘problem’ in the medical record. A plan of action or present management should also be noted at this stage

• The training of our new registrars now includes all of these points when dealing with mail/results.
Should there be any future problems or mail/result related errors, then this should be discussed as a ‘significant event’ at a future practice meeting.

Keeping patient demographics up to date is always challenging as it is dependent on the patient keeping us informed. We have agreed to display a new notice in the waiting room and in our quarterly newsletter reminding people to inform us if they move house or have a new phone number. Patients are asked as they attend the surgery if they have changed any of their details, if a visit is requested the details are checked and new letters are checked against address. There is now a facility on the computer to record the date the details were last checked – ideally it should be annually. As yet we have no method of flagging this up annually but we shall discuss further with the system supplier to see if it is possible to add an annual reminder.

What went well and what went less well?
I am pleased that I was able to make the correct diagnosis in this patient and that I picked up the non-verbal cue of her weight loss during a consultation about an unrelated matter. Clearly in this case there was an avoidable delay in diagnosis and the practice is lucky that this did not result in a more serious clinical outcome.

What have you changed in your personal practice as a result of the review?
The changes in the practice apply to us all and so I continue to follow the practice procedures that we instigated following our meeting. I am now more likely to check that we have up to date phone numbers and addresses and am careful also to ensure that I personally follow up any significant abnormal results that I am involved with.

I felt that it was important to be honest with our patient about the delay in diagnosis and am grateful that she seemed understanding about this.

Assessor Comments
Clear description of event with multidisciplinary involvement and change made to systems to minimise recurrence.

You may wish to further reflect on how you as a Practice decide what is an abnormal result (eg Serum Na just below normal range?) and what might be acceptable not to follow up?
4. Managing acute Illnesses

**EVIDENCE/PROFORMA**

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Age</th>
<th>Sex</th>
<th>Problem &amp; working diagnosis</th>
<th>Brief presenting history and examination findings</th>
<th>Management/outcome including prescription issued if any</th>
<th>Justify actions taken and comment on any learning points identified</th>
<th>Tick if telephone triage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7/1/XX</td>
<td>22</td>
<td>F</td>
<td>Rash; Herpes Zoster, left cervical dermatomes</td>
<td>H: Rash- left forearm for 1 week. Itchy, mild discomfort only, using calamine lotion. E: patch left inner forearm, C6 dermatome; typical patch of vesicles on erythematous base, some starting to crust over.</td>
<td>Explanation; - Typical shingles, starting to heal. - Infectious until scabbed over. Discussed concern about her 7-month-old baby being exposed.</td>
<td>This was a relatively late shingles presentation – too late to justify prescription of antiviral therapy, which is most effective when initiated within 72 hours of onset of rash (ref. BNF). I didn’t print a PILS (patient information leaflet) for this patient, which I often do during such consultations; I think this would have been useful for her.</td>
<td></td>
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<tr>
<td>2</td>
<td>7/1/XX</td>
<td>28</td>
<td>F</td>
<td>Chest pain; Musculo-skeletal chest pain.</td>
<td>H: Right lower anterior chest wall stabbing pain over the weekend. Pleuritic+, worse with movement. No specific injury, but active job in kennels. No relief OTC ibuprofen. Concerned it is her gallbladder. No other symptoms. E: well, tender++ lower anterior chest wall, in discomfort on movements. BS-clear</td>
<td>Prescription; - ibuprofen tablets 400mg (tds, after food, 24 tablets) - co-codamol 8/500 tablets (1-2 qds prn, 30 tablets) Advice; NSAIDS, analgesia, heat. See if not settling over 1-2 weeks. Reassurance; definitely muscular pain, not gallbladder.</td>
<td>On history and examination, I clearly felt this was a musculo-skeletal pain, and I felt justified in standard advice for such a diagnosis. This patient needed reassurance it was not her gallbladder causing her symptoms- and, as she had no dyspeptic symptoms, I felt comfortable with my diagnosis. I always give patients an opportunity to re-attend should symptoms fail to settle as expected, so the case can be reviewed and diagnosis and treatment adjusted if necessary.</td>
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<td>No.</td>
<td>Date</td>
<td>Age</td>
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<td>Problem &amp; working diagnosis</td>
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<td>--------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>19</td>
<td>7/1/XX</td>
<td>17</td>
<td>F</td>
<td>Otalgia; URTI.</td>
<td>H: awake last night with right otalgia. URTI few days, sore throat, anorexia+. No fever, otherwise OK. (patient was telephone triaged by me and asked to come down for an appointment which she attended 2 hours later) O: Alert, well hydrated. Rt TM-blocked with wax. Lt TM – nad. Throat- large red tonsils+, but no exudates. Small LNs neck.</td>
<td>Reassurance; viral illness, should settle over next few days. Advice; re fluid intake, analgesia, warm olive oil drops to clear wax, review if not settling. Although the right tympanic membrane was blocked with wax, it is unlikely that there was an acute otitis media requiring antibiotics, as the patient had no fever, and had symptoms for a short time only. (Update 17/5/XX- patient not been seen in practice since, so no further treatment was required).</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>20</td>
<td>7/1/XX</td>
<td>2</td>
<td>M</td>
<td>Vomiting; Viral illness</td>
<td>H: unwell 3 days- anorexia, vomited 2 days ago –not since. Taking clear fluids OK but no food. Intermittent fever, now rash on trunk. No URTI. O: alert, active, well hydrated. TMs-nad, chest-clear. Skin- fine pink viral rash on front of trunk.</td>
<td>Advice; viral illness , advice re fluids/fever/should settle over next few days/ sos advice. (Update 17/5/XX- no further re-attendance was required). Learning point- I did not record this child’s temperature, and recent NICE guidance (Feverish illness in children, May 2007, CG47), suggests temperature should be recorded in all children presenting with a febrile illness. We discussed these guidelines at one of our practice clinical meetings –most of us, if presented with a child who appeared clinically well, were not actually recording the temperature. This generated much discussion between us! I do agree with the guidelines for assessing hydration and perfusion of the febrile child, and always try and record these details during a consultation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assessor comments on the cases presented:
The candidate may wish to reflect on the following points as part of ongoing learning from this criterion.
Case 1 Why did you decide that no antiviral treatment was required? Any reflection on age of patient with this condition?
Case 2 Did you measure this patient’s temperature?

NB This is a sample of the format of information required. You are required to provide the full number of 20 cases indicated in the MAP Handbook and Portfolio for this section.
If more than 4 patients have been sub-optimally managed in the opinions of the Assessors you may be asked to submit 20 new cases
### 5. Urgent referral to secondary care

**EVIDENCE/PROFORMA**

<table>
<thead>
<tr>
<th>Number:</th>
<th>1 (of 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>F</td>
</tr>
<tr>
<td>Age</td>
<td>24</td>
</tr>
<tr>
<td>Date / time patient contacted surgery</td>
<td>23/11/XX 09.10</td>
</tr>
<tr>
<td>Mode of communication</td>
<td>Mum phoned for ‘on the day’ appointment</td>
</tr>
<tr>
<td>Date / time assessed by doctor</td>
<td>23/11/XX 10.05</td>
</tr>
</tbody>
</table>

**History (including psychological and social factors) and examination**

23/11/XX 10:06. Patient presented complaining of dysuria, increased frequency for the last 48hrs. She denied any haematuria, abdominal pain or pv bleeding. She was otherwise well, drinking plenty and passed a motion that morning. She advised she was on the COCP and had never missed any, and she had a normal period one week prior.

Examination of her abdomen revealed no tenderness and no guarding with good bowel sounds. She advised she had just passed urine before attending and was unable to provide a further sample.

As she had no abdominal pains, I followed SIGN Guidelines 88 advice and prescribed her 3days of trimethoprim, advised her of warning signs and to return for follow-up if her symptoms do not settle or if they worsen.

23/11/XX. 14:50. Her mum called saying she was much worse, so I advised them to immediately return to the surgery for review.

23/11/XX. 15:01: patient entered doubled over in pain and looked very pale. She says she developed abdominal pains over the last hour. She had also vomited three times during this period. She says the dysuria had increased significantly and she was not having any haematuria or pv bleeding.

She had brought along a MSSU, which showed blood ++ and nil else. I carried out a pregnancy test, which was positive. Abdominal examination revealed Left iliac fossa pain, with guarding. Her observations were stable.

I made a diagnosis of an ectopic pregnancy, instructed Reception Staff to arrange an immediate, ‘Blue Light’ ambulance, inserted two venflons, gave rectal diclofenac, and O2 therapy. The patient was then transported to ‘Resus’ at the local hospital.

**Reason for seeking urgent secondary care opinion**

For management of an Acute Ectopic Pregnancy

**Reflection on the involvement of other agencies including communication with patient, carers, hospital, and appropriateness of mode of transport, if applicable**

The initial contact was with the patient’s mother and then the patient. I believe I did safety net adequately initially as they re-contacted us immediately when her symptoms worsened.

We arranged immediate transfer with the Ambulance Service. The Reception Staff interrupted the other GP that was in Surgery that afternoon, who checked if further help was needed, and when he realised that his help was not required, he instead began to see my patients as well.

Once the patient left for hospital, I contacted the ED and advised them of a Stand-by attending and gave details. I also contacted the Gynaecology Registrar and referred the patient on to her.

**Full text of medical record for the event including date**
O/E Obs N. systemically well. No anaemia. ABDO- soft, non-tender, no masses, bs=N. Apyrexial. Unable to provide MSSU.
Dx- ?UTI
Plan. Encourage fluids+ paracet prn. NKDA- trimethoprim 200mg bd(6). Side FX discussed. Warning signs discussed + f/u if worsens/ not settling in 3/7. (To bring along MSSU then).
Dx Acute Ectopic.
Plan. ABC, O2 therapy. Iv access x2. Immed Ambulance. Refer Receiving Gyn. Contacted ED for 'Stand-by'.

Outcome, including the final diagnosis and reflection
The patient underwent a diagnostic laparoscopy \(\rightarrow\) left salpingectomy for a left tubal ectopic pregnancy. She has now returned to work and recently attended to discuss contraception with myself. She was keen for a Mirena IUS as she felt this would have a lower failure rate, and her friends have this. I expressed my concern with this as if she did become pregnant with this device in-situ, there would be an increased risk of ectopic pregnancy, and she already has a predisposing factor for ectopic pregnancy due to already having one. She has since commenced on Implanon, and is back to normal health.
I was initially concerned that I may have missed something at the initial consultation, and I presented this case at the next Practice Meeting. The outcome was reassuring in that the consensus was that as she did not present with any abdominal pain or pv bleeding initially, it would not have featured in a differential diagnosis. On reflection, her urinary symptoms were probably due to local irritation of nearby structures.
Although I have not made any major changes to my management following this case, I now have a lower index of suspicion and will consider ectopic pregnancy in any woman of reproductive age.

Assessor Comments
Assessor comment on sample case:
You may wish to further reflect on:
What warning signs did you advise the patient to look out for?
What evidence informed your concerns about inserting a Mirena IUS?

NB This is a sample of the format of information required. You are required to provide the full number of 5 cases indicated in the Handbook and Portfolio for this section.
6. Long term patient care

**Complete ONE of the following templates (That not used should be deleted)**

**EVIDENCE/PROFORMA -A**

| Description of case including clinical details and diagnosis, and proposed care plan |
| Mrs XX is a 78 year old lady whose husband (a retired City Accountant) died following a stroke in 2016. In November 20XX she presented with a change in bowel habit and rectal bleeding. I referred her to the GI surgeon at our local hospital within the 2 week rule and investigation revealed a sigmoid carcinoma Duke’s Stage C. She underwent resection followed by a course of radiotherapy and subsequently adjuvant chemotherapy with Oxaliplatin. She had a past medical history of hypertension (treated for 10 years with Losartan 100mg and Amlodipine 5mg) and a depressive episode in 2004 following the tragic death of her son in a road traffic accident. She lived about one hour from a major city by train and her married daughter lived in the same village within walking distance. Mrs XX was a retired Primary School Teacher. She was on regular review at Oncology decreased to 6 monthly by August 20XX. |

<table>
<thead>
<tr>
<th>Appropriate medication &amp; symptom control</th>
<th>Involvement of other health / social care workers</th>
<th>Provision of psychosocial support for patient and carers</th>
<th>How continuity of care was achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/8/XX</td>
<td>Presented with nausea upper abdominal ache and dark urine. Clinically icteric with palpable liver. Bloods for FBC CEA and LFTs. Domperidone 10mg TDS</td>
<td>Urgent letter to Oncology expressing concern that she had developed metastatic disease</td>
<td></td>
</tr>
<tr>
<td>27/8/XX</td>
<td></td>
<td>Joint consultation with Mrs XX and her daughter. Investigations had confirmed widespread intra abdominal disease including liver metastases. She had been offered further chemotherapy but having considered the marginal benefit (as she saw it) had decided she wished no further treatment. Mrs XX’s daughter, Mrs YY wished to discuss any potential symptoms</td>
<td>I was due to go on holiday in two weeks but assured Mrs XX and Mrs YY that I would let my partner Dr A and Practice Nurse B (who my patient knew well for BP follow up) that either might contact if they required help during my absence on annual leave.</td>
</tr>
</tbody>
</table>
that her mother might encounter and what services were available to her. I outlined both “in house” support via the District Nursing Team and services such as Macmillan Nurses.

<table>
<thead>
<tr>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/8/XX</td>
<td>Discussed Mrs XX case at Practice Weekly meeting. Dr A agreed to be her named doctor whilst I was on holiday and our DN arranged to visit her to introduce herself and to ensure there were presently no District Nursing needs.</td>
</tr>
<tr>
<td>17/9/XX</td>
<td>Planned review. Mrs XX FBC showed Hb of 9.2 g/dl with low serum Fe and Ferritin. Ferrous sulphate 200mg TDS commenced. She seemed to have lost significant weight and appeared despondent and was not sleeping well. She had some upper abdominal discomfort but no swallowing difficulties. Clinical exam revealed no findings. I had a long discussion with her as to her feelings, her worries about her condition and how she was coping knowing the ultimate outcome. She expressed a wish to be cared for and to die at home if that were at all possible.</td>
</tr>
<tr>
<td></td>
<td>Contacted the Macmillan Nursing Service to arrange a visit by them, to introduce their service to Mrs XX. Nurse agreed to visit on 19/9/XX. Patient asked about a “Parking badge” since she was finding it hard to walk far and wanted her daughter to be able to get her close to the supermarket etc by car. I gave the necessary supporting letter for a Parking badge.</td>
</tr>
</tbody>
</table>
I prescribed Paracetamol 1G QID to be taken regularly for pain along with Ensure plus as a food substitute.

Outcome, with reflection on care provided and suggestions for improvements in practice

<table>
<thead>
<tr>
<th>Assessor Comments</th>
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</thead>
<tbody>
<tr>
<td>This is an abbreviated example of how the care of a patient with a long term condition might be presented in diary form, showing episodic contact with the patient over the course of an illness. It is a sample only and far from complete - the story would continue over this patient's palliative and terminal care describing medication and symptom control, involvement of other health / social care workers, psychological support for the patient and for carers, how continuity was achieved and finally a reflection on this patient's care and suggestions for improvement as a result of the lessons learned.</td>
</tr>
</tbody>
</table>

If the diary was continued to a similar standard as this sample, and if suitable outcome, reflection, and suggestions for improvements are noted, the assessors would score it as an “S”.

NB. It is essential that all submissions also include outcome, reflection and suggestions for improvements in the box provided.

<table>
<thead>
<tr>
<th>Pass</th>
<th>Resubmit</th>
<th>Type</th>
<th>Major/Minor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>S</td>
</tr>
</tbody>
</table>
6. Long term patient care

**EVIDENCE/PROFORMA - B**

Please ensure that you include dates in the supporting evidence

<table>
<thead>
<tr>
<th>Description of case, including clinical details and diagnosis, and proposed care plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I was a locum in a local surgery September 20XX, I received a letter in the daily mail from the local Consultant in Psychiatry of Old Age, asking the practice to commence Mr. X aged 85, on Aricept and Sertraline. He had been assessed by the Consultant Psychiatrist the week previously in response to a referral from Dr. A, one of the partners in the surgery. Mr. X had been becoming increasingly confused and withdrawn, refusing to go out with his daughter at weekends, and eating little, even when taken hot meals by his neighbour who pops in daily. Mr. X lives alone in a small privately owned bungalow on the outskirts of our town.</td>
</tr>
</tbody>
</table>

His diagnosis was that of moderate dementia and low mood. The surgery was being asked to commence treatment and follow up was to be in 2 months by Old Age Psychiatry.

Mr. X had been seen at home, in the presence of his daughter, by the Psychiatrist and I thought the best way forward would be for me to contact Mr. X and ask if I could contact his daughter and arrange for her to be present when I visited. This I did, and we agreed to meet at Mr. X’s home in her lunch hour that day.

When we met, I explained the content of the letter with Mr. X asking pertinent questions re when he was to take his tablets, how would they affect him, and would they give him more energy? - all leading me to believe he understood most of what I was saying.

Mr. X already had a compliance device, so I explained to both patient and daughter I would get the Aricept and sertraline added to the device which was due to be made up by the pharmacist in 3 days time.

Two concerns were raised by the daughter - she was soon to be going on holiday, and Mr. X was frequently wet at night, necessitating her calling by most days to change and wash his sheets.

<table>
<thead>
<tr>
<th>Describe appropriate medication / symptom control</th>
</tr>
</thead>
<tbody>
<tr>
<td>The usual medications - ramipril 10mg, bendrofluazide 2.5mg, and paracetamol 500mg 2 qid were to continue in the compliance device.</td>
</tr>
</tbody>
</table>

I arranged for our surgery to send a script to the pharmacy for donezepil 5mg at night and sertraline 50mg in the morning to be added to the device. I organized for Dr. A the usual GP to re-visit in 2 weeks time to review the situation.

<table>
<thead>
<tr>
<th>Involvement of other health / social care workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>I liaised with the local pharmacy re the compliance device.</td>
</tr>
</tbody>
</table>

I responded to the daughter’s concern re her forthcoming holiday, and gave her the
“first contact” number for the social services in order that a care manager be arranged, and carers involved for the time the daughter was on her week’s annual leave, and hopefully for support thereafter.

Incontinence- On my return to the surgery I spoke to the District Nurse and asked her to call and assess, and also wrote to the local Continence Service to ask for a review (the daughter had said she would be able to get time off work to take her father for an appointment).

I contacted the CPN re visiting, she had already had the referral from the psychiatrist, and was planning on a visit the following week.

Provision of psychosocial support for patient and carers

The involvement of the Social Services and carers, and the District Nurses will be of immense support for both patient, daughter and the helpful neighbour. I also gave the daughter the contact number for the local Princess Alexandra’s Trust – the organisation which supports carers.

How continuity of care was achieved

I personally liaised with all the above health care professionals.

I wrote a note for Dr. A re the patient for his perusal on his return from holiday.

I entered the patient in the house call column in the computer for a visit 2 weeks hence.

I made a thorough documentation of all of the above in the case records on the computer.

Outcome, with reflection on care provided and suggestions for improvements in practice

I am a locum in this surgery fairly regularly and have spoken subsequently to Dr.1 re Mr. X.

He now has a care package with carers going in twice daily. His medication has been increased a little in that he is now on sertraline 100mg daily and donepezil 10mg nightly. Both the daughter and the neighbour think his memory is slightly better, and Mr. X is taking more interest in life and participating in local trips out for lunches. The CPN is visiting fortnightly, appreciated by both Mr. X and his daughter. There is a possibility of Mr. X getting a place at a day care centre once a week which he is looking forward to.

The District Nurses have organised pads for the bed at night and the daughter found the appointment at the Continence Clinic both helpful and supportive.
You have demonstrated holistic care for this patient in fulfilling all the parameters of this Criterion, despite the fact you have no long-term responsibility for the patient.
7. Reflection on educational activities

EVIDENCE/PROFORMA

The certificate should be sent to the MAP office when the portfolio is submitted as a separate attachment in the email.

*Complete one proforma for each separate learning activity – below is a single example you must complete all FOUR templates in the portfolio.*

1 (of 4)

<table>
<thead>
<tr>
<th>Reflection on areas where you have performed well and less well in the Essential Knowledge Update Programme (EKUP). If data on comparison with peers is available, reflection on this would be advisable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I found there were 5 areas I need to improve in: asthma and COPD, practice management, prescribing issues (side effects of some psychiatric drugs), heart failure, and ophthalmology.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of learning and names of learning tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.19</td>
</tr>
<tr>
<td>RCGP EKU January 2019</td>
</tr>
<tr>
<td>Heart failure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why did you choose this topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>I chose to do this topic on heart failure as there has been recent guidance from NICE on this and I wanted to update my knowledge in this area as I have patients on my own patient list with this condition and am responsible for their prescribing.</td>
</tr>
</tbody>
</table>

| In the challenge I performed well in questions about the management but not so well in types of heart failure and diagnosis. |

<table>
<thead>
<tr>
<th>What did you learn? (for your own selected learning need please write a few sentences to put the need and how it arose into context)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learned the referral thresholds depending on BNP blood test result. I also refreshed the management of heart failure with medications and how to titrate them. The most interesting learning point for me was about patients with an implantable cardioverter defibrillator and how if end of life we should deactivate this and how we can do this using a magnet if for example if end of life approaches and needed doing asap. This was something I had not really thought about before and I will make sure I check for this in any patients who are end of life in future.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What will you do differently in the future?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will make sure I diagnose and manage heart failure according to the NICE guidelines. I will check for patients at end of life who have an ICD and make sure it is deactivated if necessary.</td>
</tr>
</tbody>
</table>

| What further learning needs did you identify? |
I will check my list of patients with heart failure and see if they are being managed according to guidelines.

How and when will you address these?
I will search for my list of patients on the heart failure register and review their medication. I aim to try do this within the next few months.

What will you do to ensure that your learning changes your practice?
I will recheck my register of heart failure patients in 6 months after my initial review to see if there has been improvement.

4 (of 4)
Date of learning and names of learning tool
15/5/XX Literature search, identifying key published papers on mammary ductal candidiasis

Why did you choose this topic
Clinical encounter with a patient.

Mrs XX, who is a Psychiatrist in training, had a baby on 5/5/XX. She was breastfeeding and one week post confinement developed a painful L breast. She was pyrexial with a temperature of 38 degrees and an obvious red flare extending from the areola into the upper outer quadrant of the breast. She was commenced on Flucloxacillin 1G QID and was encouraged to continue breast feeding.

One week later she complained of deep left breast pain and having discussed this with her Health Visitor attended me stating she felt she had developed “candiasis of the breast ducts” and wished treatment with oral antifungal agents. On this occasion she was apyrexial with normal appearance of the areola and nipple, no breast tenderness and no identified swelling or mass. I was confident this was a normal breast.

In discussion with my patient I expressed an opinion that generally thrush infection of the nipple and areola rarely caused pain and that I was not aware of ductal candiasis as a clinical condition. Her view, supported by her Health Visitor, was that this was an increasingly recognised condition and she would be grateful for treatment with an oral antifungal agent. Having considered the risks and benefits of agreeing to this treatment I decided to prescribe oral Fluconazole.

I recognised a need to learn about mammary ductal candidiasis as a clinical condition.

What did you learn? (for your own selected learning need please write a few sentences to put the need and how it arose into context)
In informal discussion with medical colleagues when doing an out of hours session I was told that they had become aware of their own Health Visitors raising this clinical condition and that the key symptom was deep breast pain.

I started with accessing GP Notebook:-

**GP Notebook**
An ongoing deep, burning, throbbing or shooting breast is an indication of an infection of the mammary ducts.
- pain occurs during and/or after feedings
- clinical signs are variable
  - erythema, induration or tenderness is not present
  - nipple and areolar complex may appear normal or may reveal redness, flakes, shininess, fissures, crusts or scabs
  - in some there can be whitish, creamy caseous exudates (usually associated with yeast) or yellow, honey-colored exudates (usually associated with bacterial infection)
  - patients generally do not have fever and feel well

And subsequently some examples of key articles that I accessed in the literature:


**Source**
Department of Pediatrics, Texas Tech University School of Medicine, 1400 Coulter Boulevard, Amarillo, TX 79106, USA

There was no significant difference in (1 --> 3)-beta-D-glucan levels between the control and symptomatic group. No Candida species were culturable either before or after the addition of iron to stimulate growth, with the exception of one patient. The addition of pure C. albicans to milk samples suggested that milk does not inhibit Candida growth.

**CONCLUSION:**
These data suggest that C. albicans is not present in milk ducts and may not be associated with this syndrome.

**Journal of Midwifery & Women’s Health**
Diagnosis and Management of Candida of the Nipple and Breast Sharon Wiener, CNM, MPH. Disclosures J Midwifery Womens Health. 2006;51(2):125-128.

**Treatment of Ductal Candida**
Persistent cases of nipple yeast or presumptive ductal yeast are frequently treated with oral fluconazole (Diflucan). However, without clinical trials that document the efficacy and safety of fluconazole for mammary yeast, it is especially important to have a very high suspicion prior to treatment.

The nursing mother should be informed about the lack of data prior to prescribing this medication and weigh the benefits and risks of breastfeeding and weaning when using this medication.

**What will you do differently in the future?**

This learning has given me greater confidence in managing patients who are breastfeeding and subsequently develop pain in the breast (particularly deep breast pain) but with no clinical signs.

I will be able to discuss the lack of data in the literature either for or against this condition existing and the options there are for treatment. Clinical decision as to whether to prescribe oral antifungals need to be an individual decision with each individual patient.

**What further learning needs did you identify?**
I need to have an open discussion with Health Visitor colleagues as to whether their learning has raised awareness of this possible clinical condition. That will enhance my own understanding.

I realise that because the care of the pregnant mother and subsequent post natal care is now largely conducted by midwives and Health Visitors, I have become deskilled and lack some knowledge in this area despite, of course, having to make clinical decisions for these patients.

How and when will you address these?

I have arranged to meet with the line manager of our own Health Visitors for a discussion of this clinical topic on 21 November.

I am currently seeking an appropriate study session in my locality on the health of women in pregnancy and the postnatal period. I hope to have accessed this by the Spring of 20XX.

I intend to perform a PubMed search of mammary ductal candidiasis in six months time to see if there have been any new developments in the understanding of this condition.

What will you do to ensure that your learning changes your practice?

I intend to conduct a review in six months time of all patients in my Practice who have had a baby in the preceding six months. I will review the records and identify patients presenting with breast pain in the post natal period and reflect on their management.

<table>
<thead>
<tr>
<th>Assessor Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessor comments:</td>
</tr>
<tr>
<td>You have explained your reason for choosing the topics from the EKU and have discussed things you have learned from them. However we would like you to resubmit giving more detail about what you learned about the medical management of heart failure, the changes you have made for these patients, and how exactly you are going to carry out your further learning needs and make sure changes have occurred. Have you considered sharing this learning with colleagues in the practice to ensure that everyone is aware of the latest guidance and can review their practice?</td>
</tr>
<tr>
<td>Your self-directed learning is an unusual but worthwhile piece of learning about a defined clinical problem. We like your idea of discussion and perhaps joint learning with Nursing colleagues and your openness to learn about new (or newly defined) clinical conditions.</td>
</tr>
<tr>
<td>NB This is a sample of the format of information required. You are required to complete one proforma for each separate learning activity. You will need to complete 4 in total; three from the EKUP and one self-directed learning session.</td>
</tr>
<tr>
<td>Pass</td>
</tr>
<tr>
<td>------</td>
</tr>
</tbody>
</table>

Sample MAP Portfolio
8. Complaints and Compliments

EVIDENCE/PROFORMA

*Use only one proforma: (the other should be deleted)*

8.1) Complaints

<table>
<thead>
<tr>
<th>Please describe succinctly the complaints procedure at the practice where this complaint/dissatisfaction occurred and reflect on the strengths and weaknesses of the policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have a practice complaints procedure that complies with the handling of complaints approach that was introduced across health and adult social care in April 2009.</td>
</tr>
</tbody>
</table>

To ensure that patients are aware of the complaints procedure, we have a patient information leaflet. This is available from the reception desk. There is also information regarding the complaints procedure in our practice leaflet and on the practice website.

Our practice manager is the nominated complaints manager.

All our complaints are recorded, and our practice manager maintains these records. If the complaint is a written complaint then the practice manager acknowledges this, by letter within three working days offering the patient an opportunity to discuss the matter in person, and detailing what the patient should expect to happen. For a verbal complaint, a written record is produced and a copy of this is given to the patient.

It is the duty of the complaints manager to make sure that the complaint is properly investigated. If it involves more than one organisation then she liaises with the complaints manager of the other organisation(s), between them they decide which organisation is to lead the investigation.

Our practice standard is to try to provide the patient with a written response within ten working days. If this isn’t possible, the practice manager makes sure that the patient is updated and given an estimated timescale.

The final written response includes a statement of the issues, investigations and findings. If errors have occurred, then these are explained fully, how the errors have been rectified, and what procedures have been changed to ensure the error doesn’t happen again. The response would also include an apology or an explanation as appropriate. The patient would also be informed in the response how they can take the complaint further if they wish to do so, along with the relevant contact information.

The strength of our complaints procedure is that it is based on National Guidance and is generally used in Practices across our region. Our Practice Manager regularly reviews this and ensures we are following the most up to date advice. We advertise this widely to our patient population, both on the Practice website and in
Newsletters. We regularly discuss all complaints or dissatisfaction at our weekly Practice Meeting (open to all the Team). This is done in as anonymous way as is possible and we aim to learn and improve service by this procedure. A weakness is that it's not readily apparent to a casual visitor to our Practice that we have a complaints procedure and perhaps also does not allow sufficient confidentiality in making a complaint or dissatisfaction. We will take steps to ensure a prominent poster is placed where all may see on entering/leaving the building and place a box where a patient may leave a written complaint discretely. In addition we will make it clear in the building who a patient may approach on the day if he/she wishes to speak to a responsible person about an issue.

Please describe a complaint / dissatisfaction that was reported at this practice, including how the complaint / dissatisfaction was considered and dates

As duty doctor on the afternoon of 2 April 20XX I was asked to return a call to the father of one of our patients. The father had handed a letter in to the practice earlier in the week, detailing a new medication for his son who has newly diagnosed epilepsy. He was angry that the prescription wasn’t ready.

The letter was on the system in his son’s notes and had been read by another doctor. However, although the suggested new medication was detailed in the letter, a prescription hadn’t been issued.

I apologised to the father and issued the prescription. He was so angry that I asked him if he would like to make a formal complaint. He said that he didn’t. I said that we take these issues seriously, that his dissatisfaction had been noted and that I would take it forward.

I brought the dissatisfaction to our next practice meeting which was the following Monday. We decided that it was a significant event. We had a half day closing for practice training coming up soon and so it was decided to perform a significant event audit based on the dissatisfaction and the wider issue of the systems the practice uses for handling letters, at the upcoming training session.

The practice manager who is our nominated complaints manager wrote to the patient, outlining the dissatisfaction that he had raised and detailing what was going to happen next along with the likely timescale.

The learning event audit took place on 5 May 20XX.

What response was made, including the final outcome?

The initial response was by telephone as that was the way the patient had contacted the surgery. I advised him that he could make a complaint in writing if he wanted to do so, but he declined this. I assured him that we take dissatisfaction seriously and that I would follow this up.

After the LEA meeting the practice manager wrote a letter to the father thanking him for bringing the matter to our attention and advising him that we have looked into the matter and improved our protocol for handling letters so that hopefully it won’t happen again to him or to another patient.
### What changes were put in place?

A protocol was produced which clarified what happens to correspondence once it enters the practice. This detailed the responsibilities of the doctors, the administration team and the receptionists.

**Protocol for handling of correspondence through docman (document management system)**

- When doctors read through the letters they can:
  - If no action is required mark it as such
  - Highlight something significant then workflow back to ‘READ coding’
  - If an action is required then
    - they can do it and inform the patient themselves
    - they can do it e.g. amend prescription and workflow to receptionists to inform the patient
    - they can workflow to the receptionist and ask the patient to make an appointment
    - they can workflow to the secretaries for a letter

- Doctors should workflow through to reception and not to 'READ coding' when a patient needs to be informed about something

- Receptionists will check their workflow daily and try to contact patients as per the ‘informing patients of their results’ protocol. If the patient hasn’t been contacted then a letter will be sent the next day. They will annotate the records accordingly

### Describe your personal involvement

As the duty doctor that day I handled the telephone conversation with the angry father. The next day I discussed the problem with the doctor who had originally seen the letter. We agreed that it highlighted an inconsistency with the way that letters are handled within the practice and that I would take it forward to the practice meeting.

I led the significant event audit. With the help of the deputy practice manager I devised the protocol following the LEA meeting. I also did some further training with the administration team as a development of the LEA meeting.

### What have you learnt from this complaint/dissatisfaction?

I learned that although dealing with an angry patient is an uncomfortable experience, it can lead to improvements in the way the practice is run. I also had to discuss the issue with the doctor involved. This was also uncomfortable as initially he was quite defensive. During the LEA meeting we were able to devise the protocol so that it took account of the way different doctors work.
8.2) Compliments

Please describe a compliment / appreciative feedback including the context in which it was received, how it was considered, and dates

I received a letter on 5/7/XX from a 54 year old lady, whom I normally see in the Practice. In it she praised the skill of our locum who had injected her shoulder with intra articular steroid (he had told her that he had done some training in Orthopaedics before becoming a GP) and the joint was now remarkably better, having given her some trouble over some months. She wished me to pass on her thanks to him.

This lady normally consults me. During my absence on holiday in June this year she consulted my locum doctor, having seen me twice in the past 6 weeks for a painful stiff shoulder. I had recommended some exercises (including the provision of a patient information leaflet) along with analgesia and NSAIDs. On the last consultation her symptoms were not greatly improved. I had said to her that if the joint was not settling I might need to refer her to the Orthopaedic Physiotherapist.

On receipt of this letter I discussed it with my Practice Partner. We decided to put this on the agenda for the Practice Meeting On 30/7/XX to be more fully discussed with the whole Team. Meanwhile I undertook to pass on the letter to my locum and to personally write to my patient thanking her for the letter and assuring her I’d pass this to the locum. I would also indicate what the Practice were considering doing in response to her letter. The letter to the patient was sent on 7/7/XX.

What response, if any, was made?

On receipt of the letter I did wonder if this was a gentle rebuke (as well as thanks to the locum) for not personally injecting her shoulder joint as a definitive treatment. I realised that I was not confident in joint injection. Unlike the locum I had not had any formal training in this area as far as I remember!

I replied to my patient thanking her for her compliments to the locum and assured her that I’d already contacted him and passed on her good wishes. I also told her that her clinical problem had made me realise I did not have the same skills in this area as Dr X (the locum) and I had decided to acquire these skills and that her experience would benefit other patients in the Practice. I also said I’d be happy to see her if her joint had not settled completely.

What have you learned from it?

There are common clinical problems which patients present, which require appropriate access to procedures in Practice that should be available to all. My partner was as lacking in confidence in joint injection as I, and it therefore was a
definite gap of service within our Practice and a personal learning need for me.

Describe your personal involvement

My patient had written to me. I personally responded and discussed the letter with my Practice partner as well as our Practice Nurse. The outcome of that discussion was that I agreed to undertake a course in joint injections. I attended a day course at X hospital on 4/9/XX

Reflection on the background to the compliment

The lack of provision of this particular skill within our Practice has led us to consider whether there are other services in clinical care that we are not providing, and which we should, to meet common presenting conditions that patients might rightly expect to be available. We have decided to look at this systematically and in systems. We’ve already looked at women’s health and feel the Team provides comprehensive services here. I am responsible (along with our Practice Nurse) to look at Respiratory and Cardiovascular Care and bring that back for discussion at our full Team meeting in November.

What was the change in practice which led to the compliment or what changes have you put in place as a result?

Although we did not create a formal joint injection clinic in the Practice, I now have skills in this area and my partner has agreed to refer any appropriate patients to me for this. Our Practice Nurse is also aware it’s a service we can provide. A systematic review of all clinical services provided to patients in the Practice.

Assessor Comments

This was an excellent response and consideration of a clinical issue as a consequence of a complimentary letter received by the Practice. An important new skill is available to all patients with suitable joint problems that could benefit from intra articular steroid injection.
9. Good medical records

**EVIDENCE/PROFORMA**

**10 Consecutive single note entries**

<table>
<thead>
<tr>
<th>Clinical entry</th>
<th>1 (of 10)</th>
</tr>
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<tbody>
<tr>
<td><strong>Text</strong></td>
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<td>Age</td>
<td>59</td>
</tr>
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<td>Sex</td>
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5.12.XX G.P.Surgery  
First E:Prostatism  
S: for about the last 5 years. Nocturia x3 + poor stream, some hesitancy and freq. No recent changes in symptoms- but dad has ca prostate and he's started to get worried. Urinalysis neg. Discussed- written info on PSA given- would like it+ check UE/RBS and see for PR with result and action accordingly

<table>
<thead>
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<th>Clinical entry</th>
<th>2 (of 10)</th>
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<td>Age</td>
<td>71</td>
</tr>
<tr>
<td>Sex</td>
<td>M</td>
</tr>
</tbody>
</table>

5.12.20XX G.P.Surgery  
Review E:Hypertensive disease  
P: not well controlled- add ACE I now and check UE (already on bendroflumethazide+ lercanidipine 10mg)  
1/12 and see me in 6w . BP 160/90  
First E:Anterior knee pain (L)  
S: for about the last 2 weeks- no trauma. Medial; side. Feels like it might let him down( but hasnt) breast stroke also makes it worse. No stiffness. No other joint involvement. Feels well  
O: OA changes. No effusion. No J/L tenderness- equiv McMurrys- rest NAD  
P: may have some meniscal degeneration- discussed- . Physio leaflet given+ advice re analgesia  
> see sos

<table>
<thead>
<tr>
<th>Clinical entry</th>
<th>10 (of 10)</th>
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<tbody>
<tr>
<td><strong>Text</strong></td>
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<td>Age</td>
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</tr>
<tr>
<td>Sex</td>
<td>M</td>
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</tbody>
</table>

6/12/XX G.P.Surgery  
Review E:Screening- health check  
P: adverse family history (Dad MI age56-smoker remains
Reflection on the above records and how, if possible, they might be improved

I feel that using a problem-oriented framework does facilitate a structure to my records and I believe does make it easier for colleagues to follow my management plan.

In record 1 I should have included a timescale for review, something I don’t always record but I understand the importance of this, not least from a medico legal point of view!

I’m also not always clear about follow up arrangements eg knee problem in record 2 and this review of my records has highlighted this as an issue which I hope to improve.

Assessor Comments

Assessor comments on the cases presented:

These three medical records meet the standard for an "S" grade. All essential elements are there including a documented management plan and also reasonable reflection.

The assessors would encourage the candidate to avoid unusual abbreviations, e.g. “J/L” in record 2.

These records would allow the next doctor who sees the patient to continue the care of the patient based on the information provided.

*NB.* This is a sample of the format of information required; you are required to provide the full number of 10 cases as indicated in the MAP Handbook and Portfolio for this section.

Please note that clinical content is not being assessed in this criterion but Assessors may comment on it if care is felt to be inadequate.
10. Ethical Principles

EVIDENCE/PROFORMA

<table>
<thead>
<tr>
<th>Brief description of clinical situation including the ethical issue and dates</th>
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<tr>
<td>I was asked to visit an 86 year old man who lives in one of our residential homes by my colleague on 14 Jul XX. My colleague was about to go on holiday and realised that the patient was probably going to need several visits over the next few days. That morning, my colleague had had a conversation with the carer at the home and as the patient's condition was deteriorating, they thought that he was probably at the stage where he needed a syringe driver setting up.</td>
</tr>
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</table>

I did not know this patient. I had become involved in his care the previous week. As duty doctor I had been asked to telephone his next of kin, who was his stepson. His stepson was concerned that more should be done for his stepfather, and perhaps it would be more appropriate if he was admitted to hospital for more intensive treatment. He had been diagnosed as having a chest infection but was refusing oral intake and seemed agitated. After discussion with the stepson and the matron at the home we decided that I would arrange his hospital admission. However, he refused to be admitted and so he remained at the home. I discussed this later with the stepson and we agreed that he was expressing his autonomy and his right to decline more intensive treatment. |

When I visited him on the Friday following the request from my colleague, he was conscious but not responding to any questions, he was obviously dehydrated and cachectic. The concern of the carers was that they were unable to care for him properly as he became very agitated whenever they approached him, and he would hit out at the staff. My dilemma was that I was not sure that he was at the end stage of life, and therefore if he had intravenous antibiotics and fluids his condition might improve. Also, my concern was that in commencing a syringe driver I would be hastening his demise. |

What guidance was used (including advice sought)

Because I was uncertain of how to proceed, I returned to the practice and discussed the case with a couple of my colleagues, including the one who had originally asked me to do the visit. One colleague felt that he should really be admitted, but my other colleague had been looking after him for the last few months and knew him best. He had a poor quality of life, confined to bed, not verbally communicative and had a sinus from a previous total hip replacement that was continually draining. He felt that the patient was at the end stage of life and that we had a duty to give him a good death. |

The ethical framework I used was based on the 'four principles plus scope' approach described by J Gillon in the BMJ. The four principles are respect for autonomy, beneficence, non-maleficence and justice. The scope is how these four principles are applied. |

How the ethical framework was used in considering the clinical problem

Respect for autonomy – we have a moral obligation to respect the autonomy of others as long as this respect is compatible with equal respect for the autonomy of
all those potentially affected.

The patient had declined medical intervention recently and had expressed a wish not to receive further intervention. Sending him to hospital would not have respected his autonomy. Furthermore, it is likely that he would have died anyway.

**Beneficence and non-maleficence.** We have a moral duty to act in the patient’s best interests and to do so with minimal harm.

By commencing a continuous subcutaneous infusion via a syringe driver I was potentially causing harm. On the other hand, it might control his agitation and restlessness, allowing the residential home staff to care for him and maintain his hygiene, thus making him more comfortable.

**Justice** – is the moral obligation to act on the basis of fair adjudication between competing claims. Gillon divides justice into three categories, distributive justice (fair distribution of scarce resources); rights based justice (respect for people’s rights) and legal justice (respect for morally acceptable laws).

I think this principle was not as important in this case, as the balance between beneficence and non-maleficence and the respect for the patient’s autonomy. However, sending the patient to hospital would have involved much more cost to the health service. It could be argued from a distributive justice point of view that this scarce resource would be better spent on a patient who is more likely to recover and be able to lead a better quality of life and therefore possibly contribute more to society. Having said that, had the patient expressed a wish for more intensive treatment then I would have respected his decision.

What the outcome was

I returned to the residential home with one of our district nurses and a syringe driver was set up containing Midazolam 20mg in 24 hours.

The patient settled and the staff members were able to care for his oral hygiene, change his bedding and move him appropriately. He died peacefully four days later.

An overall reflection on how the problem was resolved

I was in a situation where I felt that I was being asked to do something that could potentially accelerate someone’s death, and I wasn’t sure, mainly because I wasn’t very familiar with the patient, that this was the right course of action. On the other hand, this was a man who was agitated and refusing intervention and this meant that he was not allowing the staff to care for him adequately.

The patient was refusing to take any medication orally; according to the BNF in the advice on palliative care, a continuous subcutaneous infusion can be appropriate when a patient does not wish to take regular medication by mouth.

He did not seem to be in pain, but he was agitated and restless and so therefore I decided against an opiate infusion, I was concerned that this would suppress his respiratory rate. However midazolam is appropriate as an infusion for restlessness and agitation.
Discussing the case with my colleagues, his main carer and his next of kin helped me clarify the situation in my own mind and helped me by supporting the decision I made.

References
1. BMJ 1994; 309: 184 (16th July) R. Gillon, Medical ethics: four principles plus attention to scope

Assessor Comments
The candidate is knowledgeable of and applies ethical principles in coming to a decision here.