Patient Profile

Patient background and medication list

Reason for selecting profile

Heart Failure is a topic we have studied this semester and I would like to apply my learning to this area. I found this particular patient interesting due to his recent diagnosis. His condition has rapidly progressed and he is now being assessed for a heart transplant.

Patient's details

Initials AW	*Age* 55 years	*Gender* Male
Weight 76.5kg on admission 59.2kg on discharge	*Height* 1.8m	*BMI* 18.2 kg/m^2 (based on discharge weight)

Patient history

Presenting complaint
Admitted from HF clinic with increased SOB and oedema

Past Medical History
Newly diagnosed severe LVSD (August 2015), Osteoarthritis, Vitamin D Deficiency, T2DM

Social History
Lives with wife
Manages own medication
Smoker (<10/day)
Occasional Alcohol

Impression/Diagnosis
Decompensated heart failure

Plan IV Diuretics Fluid restriction 1.5L Daily weights and U&Es Commence spironolactone Up-titrate ACE inhibitor and beta blocker Review for transplant work up	
Medication list	
Treatment	*Indication and evidence*
Bisoprolol 5mg OD	Beta blocker licenced for use in heart failure. As recommended by NICE and ESC as first line for management of chronic heart failure (1,2) (Recently increased form 3.75mg OD 3/11/15)
Furosemide 80mg BD	Loop diuretic for relief of congestive symptoms and fluid overload as recommended by NICE and ESC (1,2) (Recently increased from 40mg BD 3/11/15)
Ramipril 5mg OD	ACE inhibitor licenced for use in heart failure. As recommended by NICE and ESC as first line for management of chronic heart failure (1,2) (Recently increased from 3.75mg OD 3/11/15)
Metformin 500mg BD	An option for first line therapy of T2DM in patients who are not overweight as recommended by NICE (3) NB. Contraindicated in acute cardiac failure (see drug related problems)
Recent Acute: Vitamin D3 40,000units daily for 10/7 then 20,000units weekly (26/6/15)	Vitamin D3 replacement NB. Loading regimen is not as recommended by GMMMG or National Osteoporotic society who recommend a loading regimen to give 300,000 IU followed by maintenance one month after loading if indicated (4)(5) (Patient states he is no longer taking – see later discussion)
OTC: Occasional ibuprofen for headaches	NSAID for acute pain as per WHO pain ladder (6) (NB. Contraindicated in severe heart failure (7) – see later discussion)
Drug sensitivities	
NKDA (confirmed with patient and GP)	

Medication changes

Treatment	*Route*	*Dose & frequency*	*Indication*	*Start date*	*Stop date*
Furosemide	IV	240mg/24hours	Loop diuretic for fluid overload IV administration increases vasodilation as well as increasing fluid loss therefore helping with acute symptoms (2)	18/11/15	22/11/15
Bisoprolol	Po	5mg OD	As above	Pre-admission	23/11/15
Ramipril	Po	5mg OD	As above	Pre-admission	24/11/15
Metformin	Po	500mg BD	As above	Pre-admission	Cont.
Spironolactone	Po	25mg OD	Aldosterone antagonist licenced for use in heart failure (8) Recommended by NICE and ESC as add on therapy when treatment with ACE inhibitor and beta blocker is insufficient (1,2)	18/11/15	23/11/15
Enoxaparin	SC	40mg OD	LMWH for VTE prophylaxis as per NICE and trust guidelines for medical patients (9)	18/11/15	30/11/15
Nicotine 14mg patch	Top	14mg OD	Nicotine replacement. NICE recommend the promotion of licenced nicotine replacement therapies to support abstinence in all patients in a secondary care setting (10)	19/11/15	Cont.
Furosemide	IV	120mg/24hours	Loop diuretic for fluid overload as above (reduced dose – see later)	22/11/15	27/11/15
Sando K	Po	2 tablets TDS	Potassium supplementation (see later)	22/11/15	27/11/15
Bisoprolol	Po	7.5mg OD	As above (increased dose – see later)	23/11/15	Cont.
Spironolactone	Po	50mg OD	As above (increased dose – see later)	23/11/15	Cont.
Ramipril	Po	6.25mg OD	As above (increased dose – see later)	24/11/15	Cont.
Fortisip Compact Protein	Po	125mL TDS	Nutritional supplementation as recommended by dieticians due to low weight and MUST score 1. To be continued on discharge	27/11/15	Cont.
Bumetanide	Po	2mg BD	Loop Diuretic (oral route) for fluid overload. Equivalent dose to admission dose of furosemide although may have better absorption in an oedematous gut. Diuresis is achieved over a shorter time period compared with furosemide (11). To be stabilised on oral diuretic dose for 48 hours prior to discharge as per ESC recommendations (2)	27/11/15	Cont.

Monitoring plan

Parameter	*Justification*	*Frequency*	*Result/s or plan*
BP & JVP	To facilitate titration of beta blocker and ACE inhibitor. As an indicator of fluid status	Minimum Daily (BP 4 hourly in practice as per ward observations policy)	O/A BP 110/70 mmHg JVP not recorded in notes BP steadily reduced with up titration of beta blocker and Ramipril (see progress notes) Patient asymptomatic of reduced BP – nil action required BP 96/61 mmHg on discharge
HR	To facilitate titration of beta blocker As an indicator of fluid status	Minimum daily (4 hourly in practice as per ward observations policy)	O/A HR 70bpm HR steady with up titration of beta blocker (see progress notes) – nil action required HR stable on discharge (71bpm) Patient counselled on possible symptoms of reduced heart rate, expected resolution with time and to see GP if problematic
Weight	To monitor response to diuretics and to indicate if dose increases/decreases indicated. Aim for a weight loss of approx. 1kg/day to avoid over-diuresis and excessive strain on the kidneys (2) Also as an indicator of nutritional status as indicated by NICE (12)	Daily	**Date** | **18/11** | **19/11** | **20/11** | **21/11** **Weight (kg)** | 76.5 | 75.6 | 73.9 | 72.2 **Date** | **22/11** | **23/11** | **24/11** | **25/11** **Weight (kg)** | 68.9 | 66.5 | 65.4 | 62.7 **Date** | **26/11** | **27/11** | **28/11** | **29/11** **Weight (kg)** | 62.2 | 61.1 | 60.2 | 59.5 Over-diuresis initially – discussed with team and diuretic dose reduced (See progress notes) On discharge (30/11): 59.2kg
Fluid Balance	To assess response to diuretics and monitor hydration status. Patient commenced on fluid restriction on admission – need to carefully monitor input and output. Aiming for a negative balance	Daily	Patient engaged at recording all inputs. Daily input/output sheet completed by nursing staff and patient. Negative fluid status recorded. (Key results noted in progress notes)
ABGs	Need to monitor oxygen saturation to ensure patient does not become hypoxic in view of acute heart failure	On admission then as indicated by results	ABGs normal. Patient not displaying signs of hypoxia. To repeat if indicated during admission otherwise nil action required.
Blood glucose & HbA1c	Patient has T2DM. Glucose can increase due to change in diet as inpatient and acute illness HbA1C as an indicator of long term glucose control	BMs Twice daily; HbA1C one off	Blood glucose and HbA1C within range.

Monitoring plan and outcomes cont.

<table>
<tr><th>Parameter</th><th>Justification</th><th>Frequency</th><th>Result/s or plan</th></tr>
<tr><td>U & Es</td><td>Especially creatinine and urea as an indicator for dehydration and over-diuresis and to monitor renal response to treatment. Further, NICE indicate monitoring of these parameters with each dose increase of ACE inhibitor (1). Loss of electrolytes can be profound with IV diuretic use. Deranged electrolytes can increase risk of arrhythmias (especially potassium) and supplementation may be required. Maintain potassium in the range of 4.0-5.0mmol/L (as per SIGN recommendations) (13) NB. This differs from local reference range (see right).</td><td>Daily (and regularly on discharge)</td><td>
<table>
<tr><th></th><th>Range</th><th>18/11</th><th>20/11</th><th>21/11</th><th>22/11</th><th>24/11</th><th>27/11</th><th>29/11</th></tr>
<tr><td>Creatinine (µmol/L)</td><td>60-120</td><td>104</td><td>109</td><td>104</td><td>85</td><td>90</td><td>84</td><td>71</td></tr>
<tr><td>Urea (mmol/L)</td><td>2.5-7.8</td><td>9.4</td><td>8.7</td><td>7.4</td><td>5.0</td><td>5.2</td><td>3.9</td><td>6.2</td></tr>
<tr><td>Potassium (mmol/L)</td><td>3.5-5.3</td><td>4.1</td><td>3.1</td><td>3.2</td><td>3.3</td><td>4.0</td><td>3.8</td><td>3.7</td></tr>
<tr><td>eGFR (mL/min)</td><td>>90</td><td>72</td><td>64</td><td>72</td><td>81</td><td>76</td><td>82</td><td>>90</td></tr>
</table>
Urea raised initially – resolved during admission – nil action required
Potassium low with IV diuretics – discussed with team (see progress notes). Commenced on Sando K.
Spironolactone and Ramipril doses increased prior to discharge. GP to monitor potassium on discharge as remaining below SIGN reference range. Not for further supplementation at present to await response of dose increases
Creatinine, urea and eGFR within range on discharge – nil action required</td></tr>
<tr><td>Leg oedema & SOB</td><td>Symptoms of fluid overload; to monitor response to diuretics</td><td>Daily</td><td>Significant oedema in thighs and lower legs on admission. SOB resolved within 48 hours. Oedema resolved slowly during admission. Some slight pitting oedema remained on discharge – GP and HF clinic to monitor and adjust diuretic doses accordingly.</td></tr>
<tr><td>Pain</td><td>Patient occasionally uses ibuprofen PRN for headaches. Advised to stop. Need to ensure monitor pain management and to review for paracetamol as first line if required</td><td>Daily</td><td>Patient did not report any pain during admission. Counselled on discharge to use paracetamol first line if required</td></tr>
<tr><td>FBC</td><td>To assess suitability for VTE prophylaxis and monitor for HIT
Anaemia can aggravate HF and would require correction pre-transplant (2)
Nb. ESC guidelines state that Hb <130g/L in men should be treated.</td><td>On admission then every 2-3 days during admission</td><td>
<table>
<tr><th></th><th>Range</th><th>18/11</th><th>21/11</th><th>24/11</th><th>27/11</th><th>30/11</th></tr>
<tr><td>Hb g/L</td><td>115-165</td><td>128</td><td>135</td><td>135</td><td>132</td><td>123</td></tr>
<tr><td>Platelets x10^9/L</td><td>150-400</td><td>157</td><td>146</td><td>147</td><td>150</td><td>153</td></tr>
</table>
Hb on the lower end of normal as per ESC guidelines and at times below threshold for treatment. GP to monitor in community and consider iron studies and treatment with oral iron if indicated.</td></tr>
</table>

Monitoring plan and outcomes cont.

Additional investigations: BNP, LTS, TFTS, PFTS	BNP as a measure of myocardial damage and prognosis, LFTs and TFTs to detect any underlying cause of HF/ alternative diagnosis. Thyroid disease can also aggravate HF (2)	One-off on admission	BNP3920 (poor prognostic indicator) LFTs, TFTs, PFTs - no abnormalities detected To continue assessment for heart transplant
ECG	To identify any conduction abnormalities that may aggravate or be responsible for HF	On admission	Nil abnormalities detected – nil action required
Urinanalysis	To identify proteinurea (in view of diabetes and as part of HF assessment)	One-off on admission	Results were normal (Urine albumin <5mg/L). Nil action required.
Exercise tolerance	To assist severity grading for HF and monitor impact on daily living. This will aid any decisions on urgency of stepping up treatment.	In outpatient setting	To be undertaken in outpatient setting. Results not yet recorded
Echo and CMR	To assess cardiac structure and function to aid decisions on management of HF	One off as inpatient	LVEF: 11% - For heart transplant
Imaging: CXR CT thorax & Abdo, USS abdo	To identify pulmonary oedema or a respiratory cause for SOB To assess for any other co-morbidities and any signs of liver disease (part of transplant workup)	One off as inpatient	Hepatic veins prominent due to decompensated HF; Otherwise normal No contraindication to transplantation
Mood	Any patient with a chronic health condition should be monitored for signs of depression (14) This patient has had a very recent diagnosis with rapidly progressing disease.	During admission and on discharge	Patient appeared in good spirits. Patient counselled about support available from heart failure team as outpatient. Provided with leaflets.

Progress notes and drug related problems
Analysis of Drug Related Problems

Drug related problem	*Assessment*	*Priority (high / medium /low)*	*Action taken/outcome*
Risk of over-diuresis with high dose diuretics	Aiming for 1kg/day weight loss as per ESC guidelines (2) Monitor daily weights and fluid balance	High	Daily weights and fluid input/output recorded (see above monitoring) Over-diuresis with initial furosemide dose – discussed with team and dose reduced 22/11. Weight loss remained at upper end of target however renal function remained stable. Team decision to continue to drive diuresis due to excessive fluid overload.
Risk of hyperkalaemia with ramipril, spironolactone and sando K	Daily monitoring of potassium	High	Sando K discontinued when potassium in range Potassium remained normal-low – nil action required. GP/HF clinic to monitor potassium and consider re-starting supplementation if required
Smoking cessation as recommended by SIGN, ESC and NICE for HF patients (1,2,13) Patients should be offered pharmacotherapy to support smoking cessation as per NICE (10)	Patient is a light smoker. He has already reduced significantly since his diagnosis of HF. Currently smokes 7-8/day. Suppy of NRT may help reduce cravings and support smoking cessation. Discuss use of NRT with patient and refer to smoking cessation	High	Counselled patient and discussed use of NRT (see progress notes). Declined use of a quick acting product. To trial patches. Discussed with team – commenced on nicotine patch (14mg/step 2 as per smoking history) (15). Referred to smoking cessation as inpatient and GP to continue support in community on discharge
Patient is slightly underweight (BMI 18.2kg/m^2) Optimal nutritional status is important as part of the transplant work up	Referred to dieticians as inpatient	High	Provided diet and lifestyle advice to maintain a healthy weight. Also provided exercise advice in line with HF guidelines (2) Commenced on nutritional supplements – GP to refer to community dieticians to continue on discharge Referred to cardiac rehabilitation (will cover nutrition and exercise)
Check compliance with diuretics / other medication (Recent diagnosis, previously few regular medications)	Discuss medication with patient and family	Medium	Patient counselled with wife present. He is managing well with his medication. I signposted him to his community pharmacy for medication reviews if he feels this would be of benefit at home.

Analysis of Drug Related Problems Cont.

Drug related problem	*Assessment*	*Priority (high / medium /low)*	*Action taken/outcome*
NSAID use may contribute to renal impairment (especially in combination with ACE inhibitor & diuretics)	Review if NSAID use can be avoided. Explore indication. If required to continue increase monitoring of renal function and for regular review of ongoing need	Medium	Patient using occasionally for headaches. PMH includes OA however patient says rarely requires analgesia. Counselled patient. Advised to use paracetamol first line for self-management of acute pain. Patient is happy with this and was previously unaware of the risks with ibuprofen or other NSAIDS.
Metformin related problems: Metformin not recommended in diseases that cause tissue hypoxia incl. HF as per licence Metformin can further contribute to weight loss (patient is already slightly underweight) Metformin in combination with an ACE inhibitor pre-admission can further reduce plasma glucose (as per SPC) (16) Patient takes metformin morning and night	Good BM control is essential for the management of his T2DM and prevention of complications but also as part of a transplant workup Use of metformin in patients with HF without significant renal impairment is accepted practice and considered safe (2) Monitor renal function, glucose control and weight loss (see monitoring) Council patient that metformin should be taken with meals to reduce GI effects (GI upset could further contribute to dehydration along with diuretics)	Medium	Renal function stable throughout admission – appropriate to continue Patient counselled on timings of metformin. He said he had difficulty remembering with his evening meal – I suggested keeping a small supply in the kitchen to help him remember when he is preparing his meals. He said he would try this as previously did not understand the importance of taking with food. Discussed monitoring glucose either with GP or at home. He has a home BM meter which he does like to use as he feels it increases his compliance. Advised to continue to use and discuss with GP if BMs consistently out of range. Will require discontinuing 48 priors prior to transplant surgery (to be reviewed at a future date in pre-op once transplant confirmed)
Risk of uncorrected vitamin D deficiency Prescribed vitamin D treatment by GP. Patient states no longer taking. GP unable to confirm intended course length. Patient at increased risk due to dark skin colour as noted by National Osteoporosis Society (4).	Vitamin D status should be checked to assess need for further treatment and/or maintenance	Low	Unfortunately levels not taken as inpatient. Appropriate to manage in community as not related to acute admission. NB. July 2015: 25-OH-VitD2 <10nmol/L 25-OH-VitD3 <15nmol/L Above results consistent with deficiency. Treatment with colecalciferol commenced however unknown if completed and unable to assess normalisation of vitamin D on this admission. GP to review in community (see discharge)

Progress notes

Date	*Notes*
18/11/15	Patient admitted from HF clinic with worsening exercise tolerance, SOB and bilateral pitting oedema to the upper thigh. NYHA class III. Mild orthopnoea Commenced on IV diuretics and Po spironolactone Fluid Restricted Plan as above
19/11/15	Weight loss 1kg. To continue IV diuretics and current management MR completed by pharmacy. Patient questioned on smoking – he currently smokes 7-8/day. NICE recommend the use of combination therapy with a quick acting product such as a spray or inhalator and a patch (10) Discussed the use of NRT with the patient and the benefits of smoking cessation. Patient is keen to stop smoking completely in view of recent diagnosis and prognosis. He understands the benefits of stopping smoking. He would like to try using a patch however at this stage he declined the use of an inhalator/gum/spray but will consider again when he is back home if he is struggling with quitting. Discussed with team and patch prescribed in line with current smoking status (Step 2) (see above). Referred to smoking cessation. When questioned on OTC products patient states he occasionally uses ibuprofen for headaches (rarely for OA). Discussed the risks of ibuprofen in heart failure and the risk of worsening renal function along with ramipril and diuretics. Advised paracetamol as an alternative for occasional use and to see GP if he needs stronger analgesia. Discussed timings of metformin administration (see above). Advised patient that it is best to take with food.
20/11/15	Weight 73.9kg Continue current management BNP 3920 (poor prognostic indicator) Begin transplant work up
22/11/15	Diurising well. Weight: 68.9kg, Output 5780mL/24 hours Total weight loss since admission: 7.6kg (over 4 days) Over diuresis however still significant oedema – diuretic dose reduced to 120mg/24 hours Potassium low (3.2mmol/L) – discussed with team (aiming for 4-5mmol/L) - for repeat U & Es; Commenced on Sando K for oral supplementation Eating and feeling well

Progress notes Cont.

23/11/15	Weight 66.5kg Potassium remains low (3.3) – continue Sando K Creatinine stable BP 107/65mmHg (non-symptomatic) HR 70bpm Increase spironolactone to 50mg OD Increase beta blocker by 2.5mg to 7.5mg OD and monitor response of BP and HR Complete transplant workup including arranging CMR scan, dental review, PFTs, US abdomen, LFTs
24/11	Weight 65.4kg Continuing to lose weight, 1kg weight loss from yesterday (in line with target daily weight loss) Still significant fluid in lower limbs RHC to measure heart pressures LVEF 11% BP 101/60mmHg HR 69bpm; U&Es stable Ramipril increased to 6.25mg OD
26/11	Weight 62.2kg BP 91/58mmHg HR 68bpm Not for further titration of ACE inhibitor or beta blocker at this stage Likely some residual pedal oedema LFTs and US liver/abdomen ok
27/11	Breathing and peripheral oedema improved; Small amount of pitting in feet only Patient mobilising and feeling well BP 96/61mmHg HR 71bpm RR 14rpm Potassium normalised – Sando K discontinued Dietician review – commenced on fortisip compact protein TDS due to MUST score 1 and for continuation of supply on discharge (5/7) For Po diuretics. IV furosemide discontinued. Commenced on Po bumetanide (N.B ESC recommend patients are stabilised on an oral diuretic regimen for at least 48 hours prior to discharge after an admission due to heart failure (2) Po Furosemide not to be restarted (came in on)
30/11/	Discharge counselling – smoking, lifestyle (diet and exercise), diabetes control, diuretics (see below) Patient discharged For Heart failure clinic follow up in 2/52 Transplant work up to continue as outpatient

Discharge / ongoing planning and follow up

Discharge requirement	*Action taken / forward communication*
Vitamin D (see above for justification)	GP to repeat vitamin D level and re-treat or initiate maintenance if indicated in line with GMMMG (5)
Patients with heart failure should be offered annual influenza and one—off pneumococcal vaccinations as recommended by NICE (1)	Discussed with patient (not yet had influenza vaccine) – GP to review in community to give influenza vaccine
Advice on regular physical activity	Counselled on discharge and referred for cardiac rehabilitation
Advice on nutrition and diet	Provided with advice from HF nurses and pharmacist about regulating salt intake and to avoid “low salt” substitutes which can have a high potassium content (increased risk of hyperkalaemia with ramipril and spironolactone). Commenced on nutritional supplements as inpatient. Dieticians to organise ongoing follow up and to communicate with GP regarding specific dietary needs and monitoring.
Advice on using diuretics	Patient counselled about -how to adjust timings of diuretics to fit in with daily tasks -holding diuretics in the event of a dehydrating illness such as severe N&V and to seek medical attention to avoid excessive dehydration Patient also counselled by HF nurses on reducing diuretics at home if indicated, although at present to continue on same dose until reviewed in clinic
Close monitoring of BP and HR in community & titration of ACE inhibitor and beta blocker to maximum tolerated doses Monitoring of U&Es in community (in view of increased diuretics and titration of ramipril). Need to avoid over diuresis which could potentiate renal impairment and cause hypotension	GP to review within a week of discharge (and regularly thereafter). GP to monitor HR, BP and U&Es (in view of recently increased bisoprolol and ramipril) HF clinic to review at outpatient appointment (to be seen within 2/52 of discharge as per NICE quality standards) (17) ACE inhibitor and beta blocker should be titrated to maximum tolerated doses as per the BNF (18)
Patient to monitor own weight regularly	Patient advised to weigh himself daily at the same time each day. Patient advised to report to GP or contact HF nurses if he gains more than 1.5-2kg in 2 days (as per SIGN and ESC recommendations (13) (2)

Discharge / ongoing planning and follow up cont.

Discharge requirement	*Action taken / forward communication*
Monitor for side effects of newly started spironolactone such as gynaecomastia (18)	Patient informed of possible side effects and advised to discuss with his GP if become problematic. GP and HF team to monitor at regular reviews. Review to eplerenone if problematic side effects specific to spironolactone (13)
Signposting to support groups and further information	Patient informed of information on the British Heart Foundation website and directed to patient information leaflets on the website Patient provided with Medicines Information advice line on discharge.
Ongoing support for smoking cessation: Patient should have at least 7 days supply of NRT and be offered face to face support for at least 4/52 post discharge (10)	Supplied with NRT on discharge and GP/smoking cessation team to continue support in community.
Monitor Hb and review for further investigations +/- treatment if consistently <130g/L (see above re justification)	GP to monitor and to undertake iron studies if indicated to assess if there is a need for oral iron. Monitoring of tolerability and response to oral iron will be required

Continuing Professional Development

Learning plan and record

Learning need identified	*Action taken*
I would like to understand more about the requirements for transplant work up. This includes the decision criteria involved in assessing the suitability of patients for heart transplant and optimisation of co-morbidities such as diabetes	Discuss with cardiology pharmacist and transplant liaison team. Next time I am managing a patient who is being considered for a transplant I will discuss the case with the HF nurses as they regularly visit the patients on the ward.
Use of medication in heart failure	Read directed reading as part of diploma learning Discussed the use of diuretics with specialist pharmacist on heart failure study day who explained bumetanide is often chosen to replace furosemide in very oedematous patients as it may have a better absorption profile, as was the case for this patient. Attended heart failure medication talk and discussed with patients their experiences of heart failure and managing symptoms with medication. Discuss interesting patients with HF specialist nurses Completed CPD cycle on medication use in heart failure in the acute setting & associated patient counselling.
I was previously unaware of the contraindication for metformin in cardiac failure and would like to understand more about the risk vs benefit of using this medication in this patient group	Discuss with diabetes nurses Discuss with cardiology and diabetes pharmacists After this patient's admission I discussed this with the diabetes specialist on the study day for the diploma. I have learnt that it is only contraindicated in the acute phase of heart failure. It would normally be held while actively treating fluid overload to reduce additional load on the kidneys if you were concerned about renal function. I have since completed a CPD cycle and been able to apply this learning to the care of other heart failure patients and discussed this learning with my diploma tutor.
I would like to understand more about the communication between dieticians and the GP including how and when they write to the GP and what the GP is asked to do to support nutrition. I frequently have patients who are referred to the dieticians and commenced on nutritional supplements and it would be beneficial to understand their requirements post discharge so I can explain this to the patients when supplying their supplements with their TTO.	Discuss with ward dieticians and nutrition pharmacist

RPS Foundation Framework Mapping

Cluster 1 Patient and Pharmaceutical Care	Cluster 2 Professional Practice	Cluster 3 Personal Practice	Cluster 4 Management and Organisation
Standards met:	Standards met:	Standards met:	Standards met:
1.1 Patient Consultation 1.2 Need for the Medicine 1.4 Selection of the Medicine 1.5 Medicine Specific Issues 1.6 Medicines Information and Patient Education 1.7 Monitoring Medicine Therapy 1.9 Transfer of care	2.1 Professionalism 2.3 Effective Communication Skills	3.1 Gathering information 3.2 Knowledge 3.3 Analysing Information 3.4 Providing Information	

Assessment							
A. Patient background and med list	*B. Progress notes and medication changes*	*C. Monitoring plan*	*D. Identific-ation of DRPs*	*E. Action plan*	*F. Evidence for drug usage*	*G. Discharge planning and follow up*	*H. CPD*
/5	/5	/5	/5	/5	/5	/5	/5
Total / 40							
First assessor's signature and comments							
A. Patient background and med list	*B. Progress notes and medication changes*	*C. Monitoring plan*	*D. Identific-ation of DRPs*	*E. Action plan*	*F. Evidence for drug usage*	*G. Discharge planning and follow up*	*H. CPD*
/5	/5	/5	/5	/5	/5	/5	/5
Total / 40							
Second assessor's signature and comments							
Agreed mark / 40……							

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Assessor Feedback:

As ever, this is an excellent care plan. You comprehensively and systematically demonstrate your deep understanding of CCF as applied to your individual patient. This ability to analyse and synthesise information, and apply this in your clinical decisions, is sustained and exceptional.

Some areas were vague i.e. what exactly did you say or recommend? And your profile raised a few questions in my mind: should this patient not have been reviewed for statin therapy given T2DM and significant CCF? At least lipid profile? Could you appraise the use of spironolactone above eplerenone? Issues with beta blockers in diabetes? Did we titrate enough, how do we know? Shall we switch to an alternative antidiabetic - sulphonylurea or gliptin? BP was 96/61 at discharge - discuss? This chap is only 55; what potential issues can we foresee? Fluid restriction at home? Transfer of care info to GP?

Note drug names do not need capital letters mid-sentence.

Mapped well to the RPS Framework.

A Mawdsley

MARK = 38/40