Delivery sheet 1

Session Background

General practice is often seen as a speciality in which doctor's work in isolation and make decisions about patient care independent of other health care professionals. To a certain extent this is true with general practitioners (GPs) consulting patients alone and without the immediate availability of investigations and expert advice. However, GPs have a plethora of resources on which they can draw in order to best treat their patients.

The main aim of this session is to highlight the role of GPs in the multidisciplinary team and to develop the team working skills of those taking part.

Any names used in this session are entirely fictitious and any similarities to factual names are coincidental. The scenarios described within this session do not portray any real patients. The outcomes from clinical interventions are not necessarily current recommended practice and are written as such to illustrate learning points but therefore should not be taken as medical advice.

By the end of this session, participants should be able to:

- 1. List examples of secondary care resources to which GPs can refer patients
- 2. Communicate ideas to members of a team clearly and concisely
- 3. Describe the importance of teamwork within general practice and provide examples of roles within the general practice team
- 4. Have an appreciation of working within competencies and the importance of this in clinical practice
- 5. Describe the pathway a patient presenting in general practice might follow to receive specialised treatment and discuss the relationship between primary and secondary care

Session Instructions

Part 1 - 10 Minutes

- Divide the group into teams of 4-5 participants. Try to allocate participants to random teams so they may not necessarily be working with friends
 - This will require them to work harder in achieving the objectives as a team and provide a more challenging environment
- Provide each team with worksheet 1. This outlines a scenario in which the team will act as
 GPs to which the hypothetical patient is presenting. A short description of the patient's
 presenting complaint is included.
- Teams should also have access to the glossary of terms to define unfamiliar words or phrases.
- The teams have 5 minutes to work together and write down a list of questions they want to ask the patient in order to work out what might be wrong. Each team should produce three questions which should be in language that the patient will understand, and should be focussed around eliciting information to establish a differential diagnosis.
- Once the participants are clear on their task, start a timer in clear view of all teams such that they can make themselves aware of the time remaining.
- When 5 minutes have passes, ask each team in turn to share their three questions with the rest of the group, along with the reasoning behind each one.

Delivery sheet 2

Below are a list of suggested questions to complete part three of the session. Space has been left for the session leader to provide answers to the questions, guided from the discussion of the participants during the session.

1.	Why is it important to ask about a patient's social situation?
2.	What is the difference between primary and secondary care?
3.	Give three examples of healthcare professional roles which might work as part of the primary care multidisciplinary team.
4.	Give two examples of resources from which a GP can receive advice about patient care.
5.	Why is it important to ask a patient about their medication history including prescription and non-prescription medication?
6.	What are the risks to the GP when taking a blood sample from a patient?
7.	Why might a GP obtain a qualification in an area of specialist interest if GPs are trained to work in all areas of medicine?
8.	What is the role of a healthcare practitioner such as a practice nurse triaging patients over the telephone before they are seen in the GP surgery?

- Try to ask three different participants from each team to give one question each in order to maintain participants attention and allow more participants to practice articulating ideas to a larger group
- For larger groups, the session lead may decide to ask half the teams to present their questions in part one and the other half to present their next-steps in part two.

Part 2 – 10 minutes

- Now provide each team with worksheet 2. This contains the transcript from a consultation with the patient from worksheet 1 and a GP, showing examples of questions which the GP might ask the patient, along with the patient's responses.
- Each team should now decide what they wish to do next to inform their differential diagnosis in light of the new information. Worksheet 2 contains a list of for-next steps available to the teams.
- Teams should decide on the three most appropriate next-steps to take and rank them in the order in which, as GPs, they would act them out.
 - Participants should think about the information each next-step may provide, and how this might help in narrowing their differential diagnoses.
- Once the participants are clear on their task, start a timer (for 5 minutes) in clear view of all teams such that they can make themselves aware of the time remaining.
- When this time has elapsed, ask each team in turn to tell the rest of the group their three next-steps and the reasoning behind each one.
 - Try to ask three different participants from each team to give one question each in order to maintain participants attention and allow more participants to practice articulating ideas to a larger group
 - o If some participants didn't speak to the group in part 1, they should be encouraged to speak in part 2.
 - Be aware that each next-step may inform future steps but for this exercise ask the participants to assume each step would be conducted independent of each other.
 - For larger groups, the session lead may decide to ask half the teams to present their questions in part one and the other half to present their next-steps in part two.

Part 3 – 10 minutes

- Each team should now be provided with the next-steps folder. This should contain worksheet 3 which outlines the next task, and a copy of each of the next-steps listed in part 2, with the outcome of each described.
- Teams should take out the three next-steps which they decided upon in part 2 and read each outcome in turn.
- They should now evaluate their work using worksheet 3.
 - Did their decisions lead to a diagnosis for the patient?
 - O Does the patient have a treatment plan?
 - Are there any social concerns which are left unaddressed?
- Teams should now make one final decision on which is the most important action to take to benefit the patient most, using the list on worksheet 2.
- This decision should be backed by reasoning which the teams are able to describe.
- Once the participants are clear on their task, start a timer (for 5 minutes) in clear view of all teams such that they can make themselves aware of the time remaining.

- Once the 5 minutes are up, each team should be asked to turn all of their worksheets facedown.
- The group will be asked a question from the list provided on delivery sheet 2 by the session leader. These questions do not have suggested answers as this will depend upon the depth of discussion during the session. It I advised that the session leader makes note of potential answers during the session.
- The participant to raise their hand first and answer the question correctly (as deemed by the session leader), without hesitation, will be given 1 point. After asking 4 questions, the team with the most points will be announced as the winners and be provided with the certificates provided. The remaining teams will be provided with certificates of participation.
- Should two or more teams remain on equal points after the first four questions, one final question should be asked to these teams. The team which answers first, without hesitation will win another point.
- The session leader should now summarise the learning objectives (above) and take any questions from the group.

Worksheet 1

Welcome to Grove Place Surgery. You have been asked to see Mrs Royal today who booked an emergency appointment this morning after speaking with the triage nurse on the telephone.

This is the note which the triage nurse left on the computer system. The abbreviations have been explained underneath:

74 \bigcirc Pt c/o 2/52 Hx of "funny turns". LOC this morning after pt climbed stairs; husband caught her w/o injury.

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74 = Patient's age

$\times = \text{Patients sex; female}$

Pt = Patient

$c/o = complaining of

2/52 = 2 weeks (e.g. 3 weeks = 3/52; 2 months = 2/12; 2 days = 2/7)

Hx = history

LOC = loss of consciousness

$w/o = \text{without}$
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As a team you have <u>5 minutes</u> to work together and produce <u>three questions</u> which you would like to ask Mrs Royal when you see her today. Each question should be focussed at gaining information from Mrs Royal in order that you may be able to come up with potential diagnoses or explanations for her symptoms. Your questions should be in a language which Mrs Royal, who does not have a medical background, will be able to understand, and you will need to explain your reasoning for each question.

Three people from your team will be required to tell the rest of the group one question each, and give an explanation as to why you want to ask it to Mrs Royal. Write your questions in the spaces below:

Question 1	
Reasoning	
Question 2	
Reasoning	
Question 3	
Reasoning	

Worksheet 2

Having thought about the questions you might ask Mrs Royal as her GP, below is the consultation she had with her real GP. Read the transcript and make note of any key information which the GP obtains from their questioning. Then, working as a team, choose from the list below, the https://doi.org/10.2016/jhts.com/html. These should aim at identifying the cause of Mrs Royal's symptoms in order that she may potentially receive some treatment if necessary. Rank these three next-steps in the order in which you would act them out as her GP and write down your reasoning for each choice in the space provided; you have 5 minutes to complete this task.

The consultation:

GP: "Good afternoon Mrs Royal, please come in and take a seat."

Mrs Royal: "Thank you for seeing me doctor, I just don't understand what's been

happening."

GP: "Well I'm sorry to hear you've not been feeling to well. Could you tell me a

bit about how you've been feeling recently?"

Mrs Royal: "Well doctor, it all started a fortnight ago and I was getting these funny turns,

you know. And my head was all spinning around the room."

GP: "Hmm and do you have any other feelings during these turns? Any nausea or

headache? Or any blurred or double vision?"

Mrs Royal: "No I just feel unsteady and sometimes my eyes go a little bit black over, so I

have to stand still until it stops. It doesn't last long, only about 5 seconds or so. It just really panicked me when I fell over this morning. See, I'd only gone upstairs and it was lucky Fred was there to catch me else I'd have been in the

back of an ambulance I reckon."

GP: "Ok, well I'm glad we're not having this conversation in the hospital too. Have

you ever had anything like these episodes before Mrs Royal?"

Mrs Royal: "No, I'm fitter than most 30 year olds! I watch my weight and we go for a 5

mile walk every day. Apart from my high blood pressure there's not a scratch

on me."

GP: "Well that's good to hear Mrs Royal. I can't see anything on the computer

system but do you or does anyone in your family suffer from any heart

problems?"

Mrs Royal: "No, I don't think so. I definitely don't doctor. My mother passed away with

cancer of the womb and my father had a heart attack but that was the first and last time he had anyone say anything about his heart. I guess you would

count that then, aye doctor?"

GP: "We could do yes. Now, let me have a think about what we need to do now."

- A. Refer Mrs Royal to an ear, nose, and throat specialist at the local hospital.
- B. Take Mrs Royal's blood pressure and pulse rate readings.
- C. Call 999 and send Mrs Royal to A&E via ambulance for treatment under the emergency medicine consultants.
- D. Let Mrs Royal go home and ask her to return to see you at the surgery in two weeks' time before deciding what to do next.
- E. Ask Doctor James in the room next door for some advice. He is a more experienced GP with a specialist qualification in dermatology.
- F. Call NHS 111 and ask them what they think is the best next-step to take.
- G. Examine Mrs Royal's heart, lungs, and abdomen to see if any more clues arise.
- H. Ask Mrs Royal to be seen by the practice nurse immediately for an ECG to be taken.
- I. Ask Mrs Royal some further questions about her current medication, how she feels at home, if she has any idea as to what might be causing her symptoms and what she would like from the GP.
- J. Take a sample of blood from Mrs Royal to test for anaemia, diabetes and vitamin deficiencies.

Your choices:

1 st next-step
Reasoning
2 nd next-step
Reasoning
3 rd next-step
Reasoning

Worksheet 3

This folder contains descriptions of the next-steps listed on worksheet two. Remove the three sheets describing the three next-steps which your team chose in part two.

Each sheet lists positive and negative statements about the next-step and also the outcome of taking such action when Mrs Royal experienced it following the initial consultation with her GP.

As a team, read your three sheets and try to evaluate your decisions. Use the questions below to guide your thinking; you have <u>5 minutes</u> to complete this task:

•	Does Mrs Royal now have a diagnosis?
•	Was Mrs Royal at risk of further harm as a result of any of your next-steps?
•	Is Mrs Royal now receiving appropriate treatment?
•	Are there any social needs which need addressing?
•	Any other thoughts?

Glossary of Terms

ECG Electro cardiogram; a method of assessing the electrical activity of

the heart using electrodes placed onto the patient's chest.

Primary care Healthcare provided in the community.

Secondary care Healthcare provided by a specialist or facility upon referral by a

member of the primary care healthcare team.

Diagnosis The identification of the cause of an illness using information

obtained from the patient's history and various investigations

performed.

Differential diagnosis A list of potential diagnosis compiled by the doctor from their initial

assessment of the patient. This list is gradually shortened as the

doctor performs further investigations.

ENT Ear, nose and throat. This is a specialist are of medicine in which

doctors usual see and treat patients in a secondary care

environment.

Symptom A feature, either physical or mental, which is usually identified by

the patient and is indicative of a health condition.

A&E Accident and Emergency. The department at a hospital which

receives patients suffering from life threatening and serious

conditions.

Blood pressure (BP) The force of the blood within a patients vessels, pushing against

the vessel wall. This usually refers to the pressure within an artery.

Systolic pressure The blood pressure in a patients artery during the contraction of the

heart muscle.

Diastolic pressure The blood pressure in a patients artery during relaxation of the

heart muscle.

Pulse The vibration of an artery caused by the rhythmic contraction of the

heart.

Pelvis The butterfly shaped bony structure which joins the spine to the

legs.

Scalp The skin overlying the skull from which hair grows.

Laceration A cut to a tissue, usually skin.

Stiches Pieces of medical thread sewn into a tissue, such as the skin, in

order to close an opening in its structure.

Dermatology The medical speciality dealing with conditions of the skin.

Abdomen The cavity below the lungs and above the legs ("tummy").

Over the counter medication
Medication not prescribed by a doctor but acquired from a

pharmacy under advice from a pharmacist.

Human error Errors which can occur due to a human making a mistake when

performing a task.

Blood borne virus A virus which is transmitted via contact with infected blood.

Needle stick injury An injury obtained due to the penetration of a contaminated needle

into someone else.

B. Take Mrs Royal's blood pressure and pulse rate readings

Positives:

- These measurements are easily obtained and can be done immediately
- The information obtained can provide important indicators to make a diagnosis
- These readings are routinely recorded and so the results can be compared to past recordings to assess for any recent changes

Negatives:

- A high degree of human error exists when assessing such parameters
- If the readings are abnormal, the cause of their abnormality may still be unknown
- XXXXXXX

Outcome:

The GP took a reading of Mrs Royal's blood pressure manually and found this to be: systolic: 142mmHg, diastolic: 98mmHg (the average of her previous three recordings was 140/94). When the GP felt Mrs Royal's pulse, they found it to be fast at 122 beats per minute. The GP also thought Mrs Royal's pulse was irregularly irregular meaning the "lub-dub" rhythm of her heart beat did not have a recognisable pattern and seemed to randomly beat.

The GP began to think that Mrs Royal was suffering from atrial fibrillation, an irregular rhythm of her heart. They ordered an urgent ECG to be conducted by the practice nurse which confirmed the diagnosis. The GP called their senior colleague to come and assess Mrs Royal for a second opinion before interim treatment was commenced.

C. Call 999 and send Mrs Royal to A&E via ambulance for treatment under the emergency medicine consultants

Positives:

- Mrs Royal would receive immediate care by emergency medicine specialist doctors
- If Mrs Royal required assessment by another specialist doctor, they would be called to the emergency department to see her straight away
- If Mrs Royal was suffering from a life-threatening problem, A&E would be the best environment for her to be cared within

Negatives:

- Mrs Royal does not appear to immediately unwell and calling for an ambulance in a non-emergency situation could be seen as a misuse of NHS resources
- When Mrs Royal arrives at A&E a diagnosis still has to be made as the GP has not yet made one, thus delaying her treatment
- If Mrs Royal's funny turns are caused by something which only happens spontaneously, the visit to A&E may be wasted if the doctors there don't observe her experiencing one whilst she is there

Outcome:

An ambulance arrived at Grove Place Surgery in 35 minutes as Mrs Royal was not experiencing any symptoms suggesting her life was in immediate danger. The paramedics performed an ECG on Mrs Royal and discovered that the electrical activity of her heart was abnormal and suggested she was suffering from atrial fibrillation: an abnormal rhythm of her heart. They transported her to the hospital where a heart specialist doctor assessed her and commenced some oral medication.

She is to be seen by the heart consultant in 3 days' time as an out-patient in order that the consultant may further explain Mrs Royals diagnosis, as well as outline the plan for future treatment.

A. Let Mrs Royal go home and ask her to return to see you at the surgery in two weeks' time before deciding what to do next.

Positives:

- Mrs Royal would be able to return home and care for her husband who has recently been diagnosed with Alzheimer's disease
- The time between the two GP appointments may allow for nature to take its course and for Mrs Royal's symptoms to spontaneously resolve
- This intervention does not require the use of any further NHS resources and so may allow other patients to receive more care

Negatives:

- Mrs Royal may collapse again at home and this could result in her sustaining serious injuries
- Should Mrs Royal experience another "funny turn", this could be seen as preventable if the GP had intervened at the first appointment
- Mrs Royal is already very anxious about her symptoms and asking her to wait two weeks without a diagnosis may increase this anxiety

Outcome:

On the bus journey back to her home, Mrs Royal experienced another funny turn. Unfortunately she was standing awaiting the bus to stop to allow her to exit. She lost consciousness and fell backwards onto a metal step, banging her head ad landing on her hip. She was taken to hospital via ambulance where it was discovered she had a fractured pelvis requiring surgery, as well as a deep laceration to her scalp requiring stiches.

A. Ask Dr James in the room next door for some advice. He is a more experienced GP with a specialist qualification in dermatology.

Positives:

- Dr James' experience could provide Mrs Royal's GP with knowledge gained through experience, enabling a diagnosis to be made and potentially benefitting future patients of Mrs Royal's GP
- This would be a quick and simple way for Mrs Royal's GP to obtain the opinion of a senior colleague
- Should Dr James agree with Mrs Royal's GP's diagnosis, Mrs Royal may feel more confident that the diagnosis is correct and thus more reassured

Negatives:

- It appears to be unnecessary in this situation to draw upon Doctor James' qualification in dermatology
- Dr James has not assessed Mrs Royal herself and so any advice she gives Mrs Royal's
 GP could be poorly informed
- This interruption could distract Dr James from treating her own patients and could lead to her making an error

Outcome:

Dr James is given a summary of Mrs Royal's GP's findings. Dr James is concerned that Mrs Royal may have a serious problem with her heart, confirming the thoughts of Mrs Royal's GP. They decide to obtain an ECG recording of Mrs Royal's heart, conducted by the practice nurse. This identifies electrical activity indicating Mrs Royal is suffering from atrial fibrillation. The two doctors agree on a management plan and consult a specialist heart doctor over the telephone for advice on when to refer Mrs Royal.

F. Call NHS 111 and ask them what they think is the best next-step to take.

Positives:

- The GP would be able to speak with potentially a nurse and another GP to discuss Mrs Royal's case
- Advice could be obtained from this service whilst Mrs Royal was within the surgery thus potentially accelerating her access to treatment
- Mrs Royal may be reassured by the GP seeking advice from a recognised and respected source

Negatives:

- NHS 111 is aimed at members of the public and so it may be seen as inappropriate for a qualified GP to be using this service for advice
- The advice provided by NHS 111 would be done so given the information provided by Mrs Royal's GP alone and thus may be poorly informed
- Whilst Mrs Royal's GP occupies the time of NHS 111 staff, other patients who may not be able to see their own GP may be forced to wait longer to receive advice

Outcome:

Mrs Royal's GP called NHS 111 and spoke with a call handler. They referred the GP to a senior nurse who explained that the NHS 111 service was not designed to provide advice to GPs and that Mrs Royal's GP should speak with senior colleagues within Grove Place Surgery or call 999 if Mrs Royal's life was in immediate danger.

G. Examine Mrs Royal's heart, lungs and abdomen to see if any more clues arise.

Positives:

- This can be performed immediately and may provide important information in order to make a diagnosis
- Performing these examinations may reassure Mrs Royal that her GP is being thorough and therefore she is more likely to trust her GP's conclusions
- If these examinations are unable to determine the cause of Mrs Royal's symptoms, the GP would have reasonable grounds to refer Mrs Royal for specialist assessment

Negatives:

- Mrs Royal may not feel comfortable being examined by the GP
- If the GP does find something abnormal, further testing may be require to confirm the diagnosis, increasing Mrs Royal's anxiety about her symptoms
- As these are such important steps in diagnosing a patient, should they be performed incorrectly, Mrs Royal's treatment may be severely delayed which could have adverse consequences on her health

Outcome:

The GP performed examinations of Mrs Royal's major organ systems and found no abnormalities of her abdominal organs or her lungs. However, they did find Mrs Royal to have an irregular pulse and when listening to Mrs Royal's heart, discovered her heart to be beating abnormally.

The GP decided to conduct an ECG before they sort any further advice. The ECG showed Mrs Royal's heart to be in an abnormal rhythm: atrial fibrillation. Mrs Royal's GP decided to speak with a senior colleague to advise on how best to manage Mrs Royal's new diagnosis.

H. Ask Mrs Royal to be seen by the practice nurse immediately for an ECG to be taken.

Positives:

- The ECG will provide an assessment of Mrs Royal's heart and its electrical activity which could enable a diagnosis to be made
- This can be performed immediately and the results will be available for the doctor to interpret straight away
- If Mrs Royal requires specialist assessment, having an ECG already conducted will save valuable time in this secondary assessment

Negatives:

- This test only provides information about the heart and so may not inform diagnoses of other problems involving other organ systems
- If the ECG isn't conducted correctly, or the results interpreted appropriately, treatment decisions may differ from those required by Mrs Royal
- Mrs Royal may have a heart problem detectable via ECG which is asymptomatic and not linked with her recent "funny turns". The GP would then have to decide if they needed to investigate further and treat this newly identified condition

Outcome:

The practice nurse, who is very experienced at conducting ECGs, performs a 12 lead ECG on Mrs Royal immediately after her consultation with her GP. The GP assess the results and the electrical activity displayed indicates Mrs Royal is suffering from atrial fibrillation: an abnormal heart rhythm.

The GP discusses the results with a senior colleague to develop a treatment plan for Mrs Royal.

 Ask Mrs Royal some further questions about her current medication, how she feels at home, if she has any idea as to what might be causing her symptoms and what she would like from the GP

Positives:

- Spending longer discussing Mrs Royal's symptoms and how they may be affecting her quality of life may uncover wider social issues which the GP would then be able to attempt to address
- Asking Mrs Royal what she thinks might be causing her symptoms potentially provides the GP with the opportunity to ease Mrs Royal's concerns if they are obviously misinformed
- Medication, both prescribed and over the counter, can have many side effects and interactions with other medications. Therefore this could be a cause of Mrs Royal's symptoms

Negatives:

- Mrs Royal may feel that asking questions about her quality of life is wasting time and unrelated to her immediate needs
- Asking Mrs Royal what she thinks is causing her symptoms could make her think that the GP doesn't know what is causing her symptoms and reduce Mrs Royal's confidence in her GP's abilities
- The time spent trying to obtain further information may not yield any further useful information.

Outcome:

Mrs Royal's GP continued to ask questions in an attempt to further assess Mrs Royal's situation. The GP discovered that Mrs Royal had been struggling to care for her husband who had recently been diagnosed with Alzheimer's disease; a condition causing memory loss and difficulty talking and thinking. In fact, this had prevented Mrs Royal from presenting to the GP earlier and, although she had told the triage nurse that her "funny turns" began two weeks previous, they had actually started 2 months ago and had gradually become more frequent.

Mrs Royal told her GP that she was not on any other medication, other than that prescribed for her high blood pressure, and did not take any over the counter medication.

The GP decided to ask the practice nurse to conduct and urgent EGC of Mrs Royal's heart. Meanwhile, the GP printed off a referral form for a local care agency which may be able to visit Mrs Royal's husband at home and relive Mrs Royal from her care role until her symptoms are controlled.

J. Take sample of blood from Mrs Royal to test for anaemia, diabetes and vitamin deficiencies

Positives:

- This is a definitive method of ruling out multiple causes of Mrs Royal's symptoms
- Taking a blood sample is a simple procedure and can be performed before Mrs Royal leaves the GP surgery
- There is very little room for human error with these tests and so the results can be taken as fact

Negatives:

- This is an invasive procedure and would be uncomfortable for Mrs Royal
- Due to the use of needle, the GP risks suffering a needle stick injury during the procedure therefore putting themselves at risk of contracting a blood borne virus
- The results of the blood test will take several days to return from the local laboratory and be interpreted by the doctor

Outcome:

The GP uses a sterile technique to obtain a blood sample from a vein in Mrs Royal's arm. Whilst Mrs Royal is waiting for the results to come back, she collapses at home and requires an ambulance to transport her to the hospital in order for her head laceration to be treated.

At the hospital she is diagnosed with atrial fibrillation; an abnormal heart rhythm. Mrs Royal is unhappy with the delay in diagnosing her heart condition and requests an investigation of her GP's actions by the local authorities.