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Cardiff and Vale
University Health Board



Cardiff & Vale UHB All Wales Accredited HCSW Clinical Induction Learning Resource Folder



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The following portfolio has been created by the Learning Education and Development department (LED) to assist with your NHS clinical Induction programme. The Clinical induction programme forms part of the All Wales HCSW career pathway. Once successfully completed, you will take this with you throughout your NHS Wales career.

This resource folder should be used to assist with the following areas

- Your Committed to Caring induction programme
- Your Accredited program workbook
- For ongoing development
- As a knowledge resource

This workbook can be accessed electronically via the LED department. There will also be a hard copy within all clinical areas and if we have received your email address via committed to caring we will send an electronic copy to your email address. There will be no or very few handouts during the induction program.

During your committed to caring programme there will be several presentations which are included within this resource book for you. There will be no handouts during the programme and you will be expected to access them here. This will assist you to complete your program successfully and obtain your accredited certificate.

This resource book will also provide you with links or addresses to relevant websites containing information suitable to All Wales HCSW induction.

The All Wales HCSW Induction standards and HCSW career Framework was adopted by Welsh Government on 5th November 2015 and officially came in to force on April 1st 2016 for all new clinical HCSW staff within NHS Wales. Non clinical staff induction standards come in to force April 1st 2018 and are currently under development. It has been designed to provide a core induction for all staff clinical and non clinical in a healthcare supporting role who do not belong to a registered staff group. This resource is intended for clinically based support staff.

The HCSW LED predominately works out of the Academic centre in Llandough. But there is also a LED department based within UHW at the Cochrane building. Should you have any queries please feel free to email the dept on

LED@wales.nhs.uk

Learning, Education & Development (Cardiff and Vale UHB - LED)

Or telephone UHL 029 20 716924 Ext / 26924 interna

The program follows the following format although session times and schedule will vary between programmes depending upon facilitator availability. Each day sessions will normally be attached to the room door for that day.

'Committed to Caring'

Health Care Support Worker Induction Programme

Day One: Monday	
Clinical Skills Suite UHL	
08.45 to 09.00	Course registration and welcome to "Committed to Caring"
09.00 to 10.30	Welcome to the Health Board Course introduction and introduction to course workbooks Accountability and Delegation HCSW Code of Conduct Health and Care Standards for Wales
10.30 to 10.45	Break
10.45 to 13.00	The role of the HCSW Communicating with Dignity and Respect
13.00 to 13.30	Lunch
13.30 to 16.30	Communication with Dignity and Respect (NB to include sensory loss)
16.30 to 17.00	Evaluation and close of day

<p align="center">Day Two: Tuesday</p> <p align="center">Clinical Skills Suite UHL</p> <p align="center">Facilitator: LED Team</p>	
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09.00 to 11.00	<p>Urinary System</p> <p>Continence Promotion & Catheter Care</p>
11.00 to 11.15	Break
11.15 to 12.15	Infection Prevention and Control
12.15 to 12.45	Lunch
12.45 to 14.15	Speech and Language therapy
14.15 to 15.15	Nutrition
15.15 to 15.30	Break
15.30 to 16.30	Diabetes
16.30 to 16.45	Evaluation and close of day

Day three: Wednesday

Clinical Skills Suite UHL

09.00 to 09.15	Nurse Bank	
9:15 - 10:40	Blood Glucose Training Group 1	Recording Observations Group 2
10.40 to 10.55	Break	
10.55 to 12.20	Blood Glucose Training Group 2	Recording Observations Group 1
12.20 to 13.00	Overview of Urinalysis	
13.00 to 13.30	Lunch	
13.30 - 14.30	Recognising the patient in pain	
14.30 to 15.15	Medicines Safety – The role of the HCSW	
15.15 to 15.30	Break	
15.30 to 16:30	Dementia Friends	
	Course Eval	

Day Four: Thursday Clinical Skills Training Suite, UHL	
9.00 - 10.15	Recognition of the sick patient Resus
10:15 to 10:45	Hydration and fluid balance
10:45 to 11.00	Break
11:00 to 11:40	Fire Training Frank Barrett
11:40 to 12:30	Pressure Ulcer Prevention LED
12:30 – 13.00	Lunch
13.00 - 14.15	Bed and Mattress Training LED
14.15 – 16:45	Hygiene Care and Oral Care LED
16:45 to 17:00	Evaluation and Close

<p align="center">Day Five: Friday</p> <p align="center">Clinical Skills Training Suite, UHL</p>
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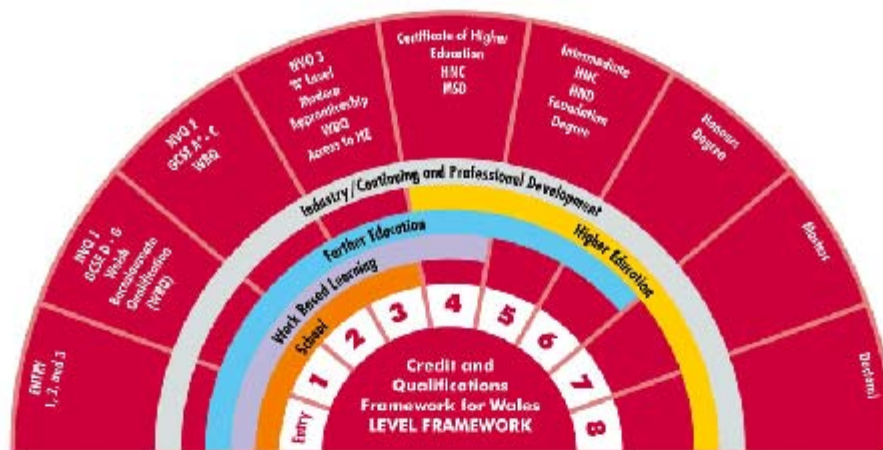
09.00 to 10.00	Bereavement
10.00 to 11.00	Spirituality (C&VUHB Chaplaincy)
11.00 to 11.15	Break
11.15 to 13.15	Basic Life Support
13.15 to 13.45	Lunch Break
13.45 to 14.15	Foot Care
14.45 to 15.15	Break
15.15 to 16.00	Falls Prevention
16.00 to 16.30	Reflective Practice
16.30 to 17.00	Evaluation and close of programme

All staff should attend all days and sessions as part of this programme. Any missed sessions should be negotiated with the LED HCSW development team to ensure continuity of learning.

Accreditation

Accreditation for this programme of learning is at CQFW level 2 and is provided by Agored Cymru. This requires that the workbook is returned within 4 weeks of completion of the induction program. The workbook will then be marked and internally verified before certification is obtained. This process can take several weeks to complete. Should you submit your workbook and it requires further work it will be returned with directions as to any further requirements.

CQFW qualification and credit levels.



The Credit and Qualifications Framework for Wales was introduced in 2009 as a fully inclusive learning framework. The Levels capture all learning from the very initial stages (Entry) to the most advanced (Level 8). The fan diagram illustrates the levels and examples of qualifications and learning provision that are included in it.

For further details contact the CQFW Secretariat:
Tel: 01443 663 663 Fax: 01443 663 653
E-mail: info@cqfw.net Visit: www.cqfw.net

Cyngor Celfio a Chym
Lleoli Cymru
Higher Education Funding
Council for Wales

hefcw

CREDIT & QUALIFICATIONS
FRAMEWORK FOR WALES
FFRAMWYTH CREDYDOL
& CHWYBODAETHU CYMRO



Llywodraeth Cymru/Cymru
Welsh Government/Government of Wales

Agored Cymru

<https://www.agored.cymru/>

Principles of Induction NHS Wales

Enabling support workers to meet the 'Code of Conduct' and ensuring employers have

processes in place that facilitate them to adhere to the 'Code of Practice for Employers' and

thus support their HCSWs.

1) The Code of Conduct for support workers and the Code of Practice for Employers is an

integral part of Corporate or Local induction programmes as appropriate.

2) All HCSWs will undertake the NHS Wales Corporate e-Induction Programme by elearning or an equivalent induction programme to support them in meeting the Code of Conduct.

3) Induction will be completed as close to the start date as possible, in line with local

agreements and will be referenced during the foundation gateway review.

4) All HCSWs will be supported in the workplace by a named workplace supervisor or mentor.

5) KSF outlines will be available for all HCSWs and used as an integral part of the Personal Appraisal and Development Review (PADR) process.

6) All HCSWs will have a regular Personal Appraisal and Development Review (PADR)

which takes place at least annually and their own Personal Development Plan (PDP).

Abbreviations

In Groups discuss the following abbreviations!

Abbreviation	Description (Group 1)
NEWS	?
C.Diff	?
DNAR	?
MRSA	?
MSU	?
PPE	?

Abbreviation	Description (Group 2)
Cardio-	?
Hypo-	?
Gastro-	?
Ophthalm-	?
Haem-	?
Osteo-	?
Hyper-	?
Paed-	?
Pre-	?
Post-	?

Abbreviation	Description (Group 3)
-aemia	?
-oscopy	?
-ectomy	?
-ostomy	?
-itis	?
-otomy	?
-oma	?
-plasty	?

Abbreviation	Description
NEWS	National Early Warning Score
C.Diff	Clostridium Difficile
DNAR	Do not attempt resuscitation
MRSA	Methicillin-resistant Staphylococcus aureus
MSU	Mid specimen of urine
PPE	Personal protective equipment

Abbreviation	Description
Cardio-	Related to the heart
Hypo-	Below, low
Gastro-	Related to the digestive system
Ophthalm-	Eyes
Haem-	Blood
Osteo-	Bones
Hyper-	Above, raised
Paed-	Children
Pre-	Before
Post-	After

Abbreviation	Description
-aemia	Related to the blood
-oscopy	To have a look with a scope
-ectomy	Removal of part of the body
-ostomy	Artificial stoma or opening
-itis	Inflammation
-otomy	Surgical incision
-oma	Related to cancer
-plasty	Surgical repair



All Wales NHS Code of Conduct

States that:-

"Healthcare Support Workers make a valuable and important contribution to the delivery of high quality healthcare [and] describes the standards of conduct, behaviour and attitude required of all Healthcare Support Workers employed within NHS Wales."

All Wales NHS Code of Conduct

"Health Care Support Workers are responsible, and have a duty of care, to ensure their conduct does not fall below the standards detailed in the Code and that no act or omission on their part harms the safety and well being of service users and the public, whilst in their care"

WAG 2011.

The Role of the HCSW and Accountability

- The types of duties include the following:
- Washing and Toileting
- Dressing, Mobility and Repositioning
- Undertaking Observations
- Feeding and Drinking
- Communication and Team Working

Accountability



Accountability

- Is a responsibility to undertake a task or action, and may be stated by the law, regulation, or an agreement.
- You are accountable against measurable national standards of your particular staff group, such as National Occupational Standards (NOS).
- Other standards include ethics guidelines or codes of conduct.

HCSW Code of Conduct (WALES)

1. Be accountable by making sure you can always answer for your actions or omissions.
2. Promote and uphold the dignity, rights and wellbeing of service users and their carers at all times.
3. Work in collaboration with your colleagues as part of a team to ensure the delivery of high quality safe care to service users and their families.

HCSW Code of Conduct (WALES)

4. Communicate in an open, transparent and effective way to promote the wellbeing of service users and carers
5. Respect a person's right to confidentiality, protecting and upholding their privacy
6. Improve the quality of care to service users by updating your knowledge, skills and experience through personal and professional development

HCSW Code of Conduct (WALES)

7. To promote equality all service users, colleagues and members of the public are entitled to be treated fairly and without bias.

Code of Practice for NHS Wales Employers

Have procedures in place so Healthcare Support Workers can meet the requirements of the Code of Conduct.

Any Questions



Delegation



Aims Objectives

- By the end of this session you will have an awareness of Delegation practice in your work.
- You will be able to discuss
- Safe, responsible and effective delegation
- Be aware of the legal position in relation to Delegation.

What is Delegation?

WAG Delegation Definition

Delegation is the process by which anyone (the delegator) can allocate clinical or non-clinical treatment or care to a **competent** person (the delegatee).

The Delegator remains responsible for the overall management of the service user, and is accountable for the decision to delegate.

But is **NOT** accountable for the decisions and actions of the delegatee

(WAG 2010)

Key Message

Not a new concept

Often undertaken as a sub-conscious function

Common sense but not common practice



Give an Example of a thing you may Delegate at Home

When you Delegate at home what principles do you pay attention to?

Delegation

- **Should be:-**
 - Safe
 - Responsible
 - Effective

Legal Position

- Delivering a baby
- Prescribing medicines
- Death Certification
- Contract of employment
- Training
- Vicarious Liability



Any Questions



Continence



Definition of Incontinence

Urine incontinence is defined by ICS as
“Any involuntary leakage of urine”

International
Continence Society

“There is no globally accepted definition, but faecal incontinence is generally defined as the recurrent inability to voluntarily control the passage of bowel contents...”

Prevalence

- More prevalent, **1 in 4 women** and **1 in 8-10 men**
- Affects all ages
- Increases with age
- In U.K est. between 2.5 – 4 million people with incontinence
- Annual cost to health bill £420 million
- Absorbent products cost ^£80 million per year
- Urinary incontinence increases admission to nursing homes
- 25% of nursing time in long stay wards is spent dealing with incontinence

Are you brave enough?



Impact of Incontinence



Attributes which help to promote continence



Assessment for continence

- Medical history
- Symptoms and onset
- Medication
- Bladder & Bowel history
- Mobility and dexterity
- Mental alertness
- Environmental factors
- Aids and appliances




Medical History

- Pre existing health issues:
 - Physiological
 - Psychological
 - Neurological
 - Sociological
- Current Medication:
 - Over the counter medications and recreational drugs
- Parity:
 - Birth weight and delivery outcome




Types of Incontinence

Overflow



- Involuntary release of urine from an overfull bladder

Bowel History



- Show frequency of motions
- Ease / difficulty of passing stool
- Consistency of stool
- Any bowel leakage / soiling
- Bowel urgency
- Any medication used
- Any pain associated with defecation
- Any bleeding

Bristol Stool Chart

Type 1	Separate hard lumps, like nuts (hard to pass)
Type 2	Sausage-shaped but lumpy
Type 3	Like a sausage but with cracks on its surface
Type 4	Like a sausage or snake, smooth and soft
Type 5	Soft blobs with clean-cut edges
Type 6	Fluffy pieces with ragged edges, a mushy stool
Type 7	Watery, no solid pieces. Entirely Liquid

Bristol Chocolate Chart

Type 1	Separate hard lumps, like nuts (hard to pass)
Type 2	Sausage-shaped but lumpy
Type 3	Like a sausage but with cracks on its surface
Type 4	Like a sausage or snake, smooth and soft
Type 5	Soft blobs with clean-cut edges (passed easily)
Type 6	Fluffy pieces with ragged edges, a mushy stool
Type 7	Watery, no solid pieces. Entirely Liquid

Six Shades of Poop



Shades of Poop

- Dark Brown:** Healthy! Your poop is dark brown because it's full of nutrients and fiber. It's the best color for your poop.
- Light Brown:** Your diet may be missing through your large intestine. You may be missing out on some nutrients, so try to eat a variety of fruits and vegetables.
- Yellow:** Looking for something yellow? It could be a sign of a problem. It could be a sign of a problem. It could be a sign of a problem.
- Black:** It could mean that you're missing out on some nutrients. It could mean that you're missing out on some nutrients. It could mean that you're missing out on some nutrients.
- White:** It's not what you're missing out on. It's not what you're missing out on. It's not what you're missing out on.
- Red:** It could be a sign of a problem. It could be a sign of a problem. It could be a sign of a problem.

All Wales Bowel Care Pathway

Patients Name _____ Date started _____

Date	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Bowels open in 24 hrs +							
Consistency Hard/soft/diarrhoea Stool Type*							
Amount Small/medium/large							
Leakage/Soiling +							
Bowel urgency (in mins)							
Medication i.e. laxatives used. Stool type/amount							
Pain on defecation: type/severity of pain before, during or after defecation							
Other Comments							

* Mark each time you have a bowel motion with a tick. + Mark if Bristol Stool Chart score

Skin Care

Do

- Check skin integrity
- Use barrier creams as recommended under current guidelines.
- Be aware that oil based barrier cream may affect the absorbency of the pad
- Mild soap with ph balance of 5.5
- Avoid over washing
- Gently pat skin dry

Don't

- Use talcum powder on bottom/groin area
- Barrier creams should be applied sparingly
- Wear more than one pad
- Apply too absorbent a pad, it can be as damaging as too little absorbency

Moisture Lesions

- A combination of moisture and friction may cause moisture lesions in skin folds.
- A lesion that is limited to the natal cleft only and has a linear shape is likely to be a moisture lesion.
- Peri-anal discolouration / skin irritation is most likely to be a moisture lesion due to faeces.



Moisture Lesions



Aids and Appliances

- Urinals (male & female)
- Sheaths
- Appliances
- Anal plugs
- Commodes
- Catheters

Faecal Containment / I



Peristeen



Range of commodes and Urinals



Containment products



Reasons for Catheterisation

- Investigations/Treatments
- Retention
- Surgery
- Palliation

NOT FOR INCONTINENCE

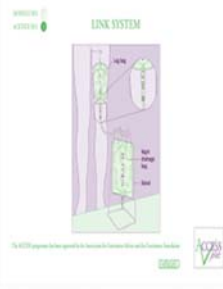
Catheter Care: Your Role

- Hand washing
- Hygiene
- Emptying of bags
- Changing catheter bags
- Securing catheter bags
- Identifying problems
- Documentation
- Liaising with qualified staff
- Catheter specimen of urine (CSU)



Catheter Care

- Drainage bag is positioned below the bladder and off the floor.
- Hand hygiene pre and post catheter care
- Ensure output and empty bag when necessary
- Samples taken from sample port using ANTT
- Leg bag changed every 7 days, night bag daily



Useful contact details

Continence Service Tel: **02921 841590**

Community Nursing Central
Communication Hub Tel: **02920 444501**

Produced by
Ann Yates Director of Continence Service and URB Catheter Group,
Cardiff & Vale UHB.

For further copies of this booklet please contact the continence
service on the above number

First written July 2013
Revised edition July 2015
07134351



Patient Urinary Catheter Passport

Looking After Your
Urinary Catheter

THANK YOU

Question?

Point of Care Testing (POCT):



Urinalysis & Urine Pregnancy hCG



Hayley Miller
POCT Coordinator
Cardiff and Vale UHB



Specialist medical Programme
Coordinated by Hayley Miller
Cardiff and Vale University Health Board

Aims and Learning Outcomes

Aim: To demonstrate basic competence in performing, interpreting and reporting of urinalysis & urine pregnancy testing.

Learning Outcomes:

1. Identify **purpose** of the test
2. Discuss how to obtain a **satisfactory sample**
3. Understand common **sources of error**
4. Explain the significance of the **results**
5. Consider the **limitations** of the devices
6. Understand the importance of **Quality Control** procedures
7. **Understand and perform** a urinalysis and urine hCG test

What is POCT?

Any pathology test performed for a patient by non-laboratory staff outside of an accredited diagnostic laboratory"

Also known as Near patient testing (NPT)/ Bedside testing/ Extra-laboratory testing/ Disseminated laboratory testing.

Benefits of POCT

- ✓ Immediate results
- ✓ Convenience/portability
- ✓ Simple to perform
- ✓ Better patient outcomes
- ✓ Patient satisfaction
- ✓ Connectivity

Examples of POCT

- Urinalysis kits/devices
- Pregnancy testing kits/devices
- Blood glucose/ketone monitoring devices
- Anticoagulation monitoring devices
- Blood gas
- HBA1c
- Foetal fibronectin
- Drugs of abuse
- HIV

Where is POCT used?

- A&E
- ITU
- NICU
- General ward areas
- Clinics
- Outpatients
- Community Care
- GPs and pharmacy services



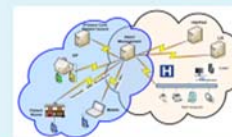
What governance is there?

POCT Regulatory and Professional Guidance



What do we do?

1. Disseminate training across UHB
2. Provide support to POCT users
3. Enforce and monitor Quality Control procedures
4. Evaluate and implement POCT devices
5. WPOCT (connectivity)



Internal Quality Control (IQC)

- Internal quality controls (IQC) are samples with known values.
- IQC are preformed at agreed, regular intervals
- Checks that results are safe before they are issued
- Provides reassurance that the system is working correctly



N.B Control samples only indicate instrument performance, they can not check that the sample collection was correct.

External Quality Assurance - EQA

- It is **mandatory** to participate in the EQA scheme in line with Trust policy and is performed by all departments in UHB
- Every **2 months** a test sample is distributed
- Scores based on accuracy of your result compared with known value and that of peer group
- POCT monitor EQA compliance and performance

Weqas



Urinalysis- dipsticks/urilyzer

- A common investigative procedure
- Provides results within minutes
- May aid the detection of:
 - Diabetes
 - Renal Stones
 - Urinary Tract Infection
- Usually performed by nursing staff
- Important Doctors are aware and able to follow this guidance



Sample Requirements

- Give patient **clear instructions** on urine collection
 - Plain (**white**) universal containers/sterile, dry receptacles **only**
 - **Early morning urine (EMU)** is the preferred sample.
 - **Mid-stream urine (MSU)** is sample of choice.
 - All sample receptacles must be labeled with **patient's ID**
 - **Protect from light**
 - Can be stored **2 hours at room temp**
 - **Mix** prior to sampling
- ✗ Never use coloured universal containers
 - ✗ Urine samples collected via cotton wool balls could introduce contaminants
 - ✗ Urine samples collected via a catheter bag should not be used where possible



Sample Requirements

- Give patient **clear instructions** on urine collection
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Sample Requirements

Catheter sampling

- Clean sampling port with alcohol wipe and leave to dry for 30 seconds
- Use a sterile needle and syringe to withdraw 20ml of urine from catheter tubing
- Transfer urine to specimen container



Paediatric sampling

- 'Clean catch' - The sample is obtained by sitting the baby/child over a sterile receptacle
- 'Bagged sample' - sterile perineal collecting bag is attached to the perineal area ensuring that the urethra is within the sealed area
- 'Emergency, suprapubic bladder aspiration' - **last resort**



Pre-analytical Errors

- ▶ Mis-labelled sample
- ▶ Contaminated sample
- ▶ Sample storage
- ▶ Sample not mixed



Urine Dipstick/Urilyzer



Storage conditions:

- ✓ Room temperature
- ✓ Dry
- ✓ Sealed container
- ✓ Protected from light

Analytes tested:-

- ▶ Glucose
- ▶ Ascorbic Acid
- ▶ Ketones
- ▶ Protein
- ▶ pH
- ▶ Blood
- ▶ Nitrites
- ▶ Leucocytes
- ▶ Specific Gravity
- ▶ Bilirubin
- ▶ Urobilinogen

▶ Pads on dipstick react to molecules within the urine sample

▶ Colour changes depend on the presence and concentration of these molecules

Testing Procedure- Dipstick

1. Wear gloves at all times
2. Ensure strip is intact/unchanged/dry
3. Note the strip expiry date- never used expired strips
4. Use strips immediately after removing
5. Immerse all pads in urine sample for 1 second
6. Remove excess urine by blotting on paper towel
7. Time for 2 minutes.



Analytical Errors

- ▶ Use of expired strip
- ▶ Strip storage/ humidity -importance of dessicator
- ▶ Incorrect dipping procedure e.g. Not all pads were dipped
- ▶ Incorrect timing



Testing Procedure- Urilyzer



1. Same testing procedure applies
2. Once urine has been dipped, dipstick is placed into insert
3. Device times for 2 minutes
4. Reads results via optic module that measures colour changes
5. Printout is automatically printed and send to WCP

Record Keeping

- ▶ This is part of your duty of care to your patient
- ▶ As important as administering treatment
- ▶ Poor record keeping leads to:
 - *Unnecessary claims against NHS bodies*
 - *Difficulty in defending claims made*

Manual Patient POCT Record

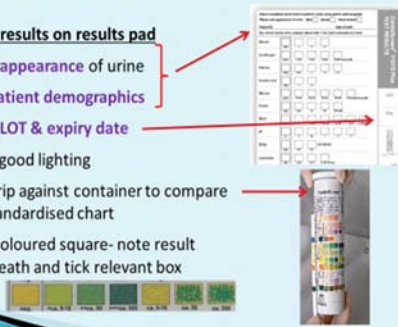


Electronic Patient POCT Record

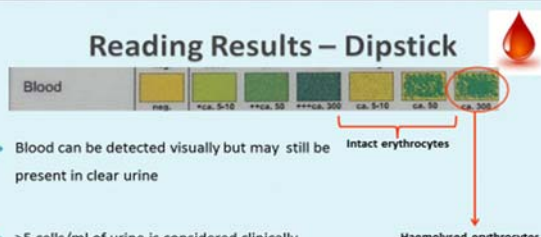


Reading Results – Dipstick

1. Record results on results pad
2. Record appearance of urine
3. Fill in patient demographics
4. Record LOT & expiry date
5. Ensure good lighting
6. Hold strip against container to compare with standardised chart
7. Select coloured square- note result underneath and tick relevant box



Reading Results – Dipstick



- › Blood can be detected visually but may still be present in clear urine
- › >5 cells/ml of urine is considered clinically significant
- › Associated with urological disease and /or infection

Positive results may also be due to **trauma** or **menstruation**

Result Interpretation


- › **General appearance**
 - › A fresh urine sample is **straw coloured, transparent** and free from debris
- › **Odour**
 - › Foul smelling – May indicate an infection or dehydration
 - › Sweet smelling – May indicate ketoacidosis
- › **pH**
 - › Urine is normally acidic (**Normal range 4.5 - 7**)
 - › Increased acidity – high meat diet, dehydration, diabetic ketoacidosis, renal stones
 - › Alkalotic – vegan diet, chronic renal failure, bacterial urinary tract infections
- › **Specific gravity**
 - › Measures the concentration of molecules in urine. (**Normal range 1.003 - 1.030**)
 - › Lower values – urinary dilution in diabetes insipidus, renal failure, excessive fluid intake
 - › Higher values – shock and dehydration

Result Interpretation

- › **Leucocytes**
 - › Usually indicative of UTI or more severe renal problems.
- › **Nitrites**
 - › Also associated with infection
- › **Protein**
 - › May indicate increased permeability due to infection or renal damage.
- › **Ketones**
 - › Prolonged period of vomiting, fasting, starvation, and poorly controlled diabetes mellitus.
- › **Glucose**
 - › Raised- may indicate abnormal blood sugar levels or diabetes mellitus.
 - › Low- can occur during pregnancy and in those taking corticosteroids.

Results Reporting


- › If there is any doubt about the validity of a reading, or if the patient's clinical condition does not correspond to the result, then a sample should be sent to the laboratory for further analysis.



ALWAYS stick results sheet or printout in patient's notes

Post- Analytical Errors

- › Results recorded incorrectly
- › Incorrect interpretation of colour changes
- › Poor lighting
- › Strip read upside down
- › Results not attached to patient's notes



Limitations/Interferences

- Interference - oxidising cleaning agents, ascorbic acid, boric acid.
- Effects of **patients' medication** - antibiotics, captopril, nitrite, salicylate.
- Effects of patient treatment **therapies** - chemotherapy
- Effects of antacids and **diet** (e.g. beetroot, food colourings), vegetarians may have urine pH>8



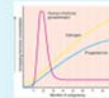
Urine Pregnancy hCG

- Qualitative detection of hCG
- Rapid and reliable marker for early detection of pregnancy.
- Can detect 25 mIU/ml hCG = sensitive
- 99% accurate
- Cannot determine viability of pregnancy or ectopic pregnancy



Human Chorionic Gonadotropin

- A hormone released early in pregnancy
- Stops corpus luteum in ovary from disintegrating
- Detected in the urine as early as 7 days after conception



Sample Requirements

- Give patient **clear instructions** on urine collection
 - Plain (white) universal containers/sterile, dry receptacles **only**
 - Early morning urine (EMU)** is the preferred sample.
 - Mid-stream urine (MSU) is sample of choice.
 - All sample receptacles must be labeled with **patient's ID**
 - Protect from light**
 - Can be stored **2 hours at room temp**
 - Mix** prior to sampling
- ✗ Never use coloured universal containers
 ✗ Urine samples collected via cotton wool balls could introduce contaminants
 ✗ Urine samples collected via a catheter bag should not be used where possible



Pre-analytical Errors

- Mis-labelled sample
- Blood stained/contaminated sample
- Sample storage
- Sample not allowed to get to room temperature

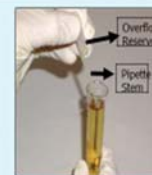


Alere hCG Cassette



Testing Procedure

- Wear **gloves** at all times
- Ensure cassette packet is intact and in date
- Use supplied pipette to take up urine (100ul)
- Dispense full amount of urine into sample well
- Keep flat at all times
- Time for **3 minutes**
- Do not** read before/after this time



Analytical Errors

- › Use of expired strip
- › Cassette storage
- › Incorrect sampling procedure
- › Incorrect timing

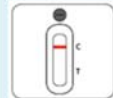


Reading Results

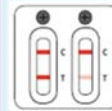
Invalid: Control line fails to appear. The test is invalid, **do not report.**



Negative: One coloured line appears in the control line region (C). No line is present in the test line region (T).



Positive: 2 distinct lines will appear: One in the control line region (C) and another in the test line region (T).
N.B The intensity of the test line may vary but any presence indicates a positive result.



Always record result in patient's notes

Post- Analytical Errors

- › Results recorded incorrectly
- › No result recorded in patient's notes
- › Poor lighting
- › Control line did not appear but result still reported



Limitations/Interferences

- › Microorganisms
- › Leucocytes
- › Erythrocytes.

Do urine dipstick prior to testing.
If detected or urine appears bloodstained urine hCG is **not** recommended.

Always run a serum hCG.

- › Oxidising cleaning agents, ascorbic acid, boric acid.
- › Night Nurse (Promethazine) – prevents control line appearing



False Positives

- A false positive is when a positive result is generated from a sample containing <25 mIU/ml hCG.
- Abortions - hCG may remain in the system for 9 weeks
- Birth- hCG may remain in the system for 3 weeks
- Overfilling of sample well
- Use of a cassette that is too warm
- Fertility drugs
- Menopause

FALSE

False Negatives

- A false negative is when a negative result is generated from a sample containing >25 mIU/ml hCG.
- Dilute urine
- Pre-embryo implantation.
- Under filling of the sample well.
- Using a cassette that is too cold

FALSE

Results Reporting

- As is true with any diagnostic test, clinical diagnosis should not be based solely on a single test result.
- Clinical diagnosis should incorporate all clinical and laboratory data and look at "the bigger picture"
- Ensure the proper sample application steps are being followed and that the recommended controls are being used



Thank You



Hayley Miller
POCT Coordinator
Cardiff and Vale UHB



Speech and
Language
Department

Cardiff & Vale NHS



Helping people to eat and drink



Tuck in!

Amended BS Tachwedd 14

By the end of the session you will have learnt about....

- Normal swallowing
- What can go wrong with swallowing
- Fluid and Dietary modifications
- How you can help
- How to refer to Speech & Language Therapy

Amended BS Tachwedd 14

Think about....

What goes on in your mouth?

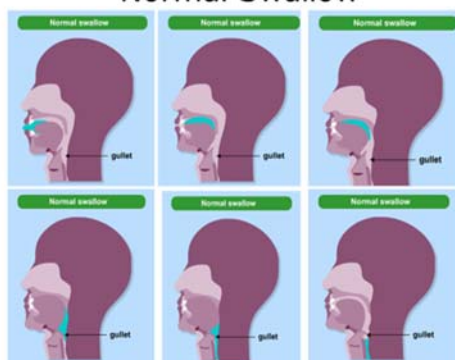
How long it takes to chew/swallow

Are you still breathing?!

What do feel in your throat?

Amended BS Tachwedd 14

Normal Swallow



...and this is how it looks in real time....

Emergency SLT....

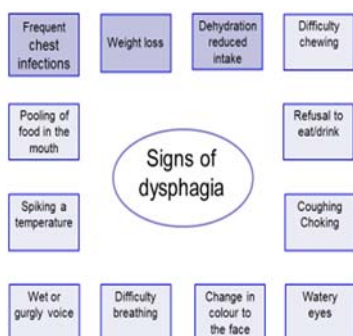
...when swallowing goes wrong.....



Amended BB Tachwedd 14

Think about people you've worked with..

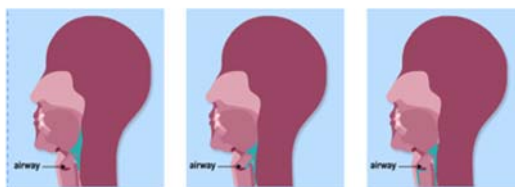
1. What types of patients might have difficulty eating, drinking or swallowing?
2. What difficulties did they have when eating or drinking?
3. How can this affect health in the long term?



Amended BB Tachwedd 14

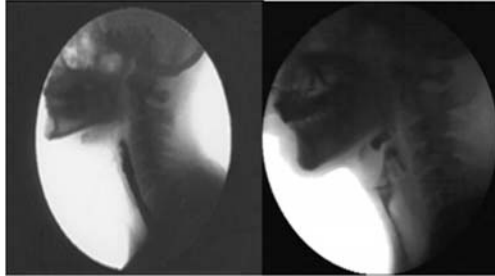
Aspiration - when things go down the wrong way. Food/drink gets past the larynx and into the trachea/wind pipe & towards the lungs.

If this happens and the person does not cough or choke or show any other sign of problems, it is called '**silent aspiration**'.



Amended BB Tachwedd 14

Aspiration on Videofluoroscopy



Amended BB Tachwedd 14

...and this is how aspiration looks in real time....

Helping people with swallowing problems



Amended BB Tachwedd 14

How does it feel to have dysphagia?

- Split into pairs
- Decide who is to be the patient and who is the HCSW.
- Patient to close eyes
- HCSW to give food and drink to patient without talking
- Now give food and drink to patient and explain what you are doing
- Feedback information learnt to group

Amended BB Tachwedd 14

Oral Care is important



- Poor oral hygiene is linked to a higher risk of developing chest infections.

Amended BB Tachwedd 14

Patients with Swallowing Problems

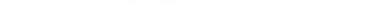
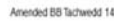
We DO NOT recommend the use of:



Fluid tends to be directed straight into the back of the mouth too quickly and then 'down the wrong way'. Instead....



Amended BB Tachwedd 14



- Amended BS Tachedd 14

Food textures

- Amended BS Tachweejd 14

Cardiff & Vale UHB: LED department, 'Committed to Caring' 2018

Final practical: Thickening Fluids



**Are we all
doing the
same thing?**

Amended BB Tachwedd 14

Resource® ThickenUp™ Clear

- Resource® ThickenUp™ Clear is an instant food and drink thickener. It is a Food for Special Medical Purposes for the dietary management of patients with swallowing difficulties
- Maltodextrin, Xanthan gum, Potassium chloride
- ACBS approved, prescribable on FP10 (GP10 in Scotland) for patients requiring thickening of liquid or food for the management of dysphagia due to conditions such as stroke, Parkinson's disease, muscular dystrophy, motor neurone disease, multiple sclerosis, neurological disorders caused by injury or disease, and malignancies of the oral cavity and throat
- No Contraindications
- Not suitable for children under 3 years of age
- Not suitable as a sole source of nutrition
- Available in: 125g re-sealable canister (with 1.2g scoop); 12 canisters per tray 1.2g x 24 stick packs per box, 12 boxes per case



1. Fisher

Amended BB Tachwedd 14

Mixing and dosage calculations

1. Put powder in a dry and clean glass/container first

2. Pour liquid over the powder

3. Stir briskly until dissolved

And enjoy!

Mixing to the consistency required is easy too. Just add 100ml of liquid (such as tea, coffee, water or juice) to the following number of scoops:

Stage 1: Syrup	Stage 2: Custard	Stage 3: Pudding
1 scoop	2 scoops	3 scoops

SLT Swallowing Advice	
Drinks	<ul style="list-style-type: none"> Normal Syrup Consistency (Stage 1) <ul style="list-style-type: none"> 1 level scoop per 100mls drink Custard Consistency (Stage 2) <ul style="list-style-type: none"> 2 level scoops per 100mls Pudding Consistency (Stage 3) <ul style="list-style-type: none"> 3 level scoops per 100mls
Food	<ul style="list-style-type: none"> Normal Fort Maltodextrin Dysphagia Diet (E) <ul style="list-style-type: none"> Soft, tender and moist, can be prepared with a fork, no lumps, no hard, stringy or chewy Thick Puree Dysphagia Diet (C) <ul style="list-style-type: none"> Thoroughly pureed, no lumps, no stringy food, no chewing required, moist as shown on a plate
Individual Advice	<ul style="list-style-type: none"> Only feed other eating/feeding advice Check for clear mouth before and after feeding Observe for choking, wet, noisy, noisy after eating or drinking No cream, 'custard' type unless otherwise specified
STOP if any signs of aspiration. Contact SLT Department if further advice required	

Amended BB Tachwedd 14

Referral to SLT

- Anyone in MDT can refer.
- HCSW should inform their staff nurse if making a direct referral
- Ring referral through to SLT Dept
- Document reasons for referral in medical notes
- We aim to see within 2 working days
- Don't forget we also help people with communication difficulties

Amended BB Tachwedd 14

Diolch!

...Any questions?



Amended BB Tachwedd 14

All Wales NHS Induction Programme Workbook For HCSW's Supporting Nursing & Allied Health Professions

University Hospital Llandough
Department of Nutrition & Dietetics

Aim:

To increase knowledge and understanding of the role of diet, nutrition and hydration in a healthcare setting.

Objectives:

- State 7 factors that affect diet, nutrition and hydration in healthcare settings.
- State 5 national or local initiatives that promote diet, nutrition or hydration.
- Accurately record food intake, fluid input and output onto an All-Wales food and fluid record chart.

Workbook Completion



Page ...

What Do We Know About Nutrition & Hydration?



	1. Base your meals on starchy foods
	2. Eat lots of fruit and veg
	3. Eat more fish – including a portion of oily fish each week
	4. Cut down on saturated fat and sugar
	5. Try to eat less salt – no more than 6g a day for adults
	6. Get active and try to be a healthy weight
	7. Drink plenty of water
	8. Don't skip breakfast

8 Guidelines for a Healthy Diet



Department of Health

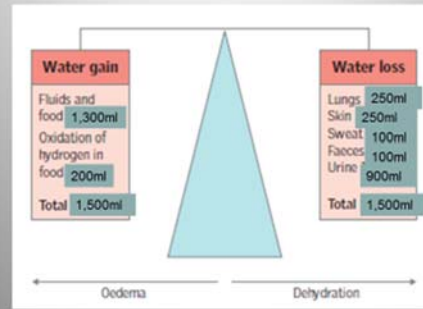
Fluid Balance & Hydration



What Is Fluid Balance?

- Appropriate balance of fluid input and output over 24hrs
- Used to measure a person's hydration
- Fluid balance can be recorded using the 'All-Wales Fluid Record Chart'
- Can lead to recommendations for a patient's care plan

Fluid Balance



Fluid Makes Up 60% Of Our Bodies

Average adult recommendation of
1.2 – 2.0 litres per day

6 – 8 Glasses

can vary depending on age, body size, level of activity, environment, diet and health

Fluid Intake

- Oral intake
- Enteral feeds
- Intravenous (IV) fluids
- Subcutaneous fluids
- Antibiotics (IV)
- Fluids given with medication



Fluid Intake

- Milk And Water
- Hot Drinks
- Fruit Juice / Squash
- Fizzy Drinks
- Soup
- Jelly
- Ice-cream
- Melon
- Oral Nutritional Supplements



Oral Nutritional Supplements



Fluid Loss

- Urine output
- Wound or surgical drain
- Stoma output
- Nasogastric tubes
- Vomiting or diarrhoea
- Sweat (hot weather, fever, high temperature)
- Medications side effects



Symptoms Of Dehydration



Pressure Areas



Low Urine Output /
Dark Urine



Dry, Less Elastic Skin



Urine Infection



Headache &
Confusion



Tiredness



Thirst



Constipation

How Could You Encourage A Person To Drink More Fluids?



Ways To Encourage Adequate Hydration

- Availability
- Verbal Encouragement
- Support / Assistance
- Offer Choice
- Preferences
- Appealing
- Promotion Of Benefits / Importance



Factors affecting Nutrition & hydration?



Factors Affecting Nutrition & Hydration

- Poor appetite
- Illness & disease
- Pain
- Medication side effects
- Constipation
- Disability
- Cost
- Behavioural
- Psychological
- Taste changes
- Oral health
- Reliance on others
- Access / Availability
- Special diets
- Pre-op fasting / Restrictions
- Isolation / Loneliness
- Likes and dislikes
- Meal timings



Consequences Of Poor Nutrition & Hydration?



Consequences Of Poor Nutrition & Hydration?

- Weight loss, muscle wasting, weakness
- Increased risk of infections
- Increased recovery time / longer hospital stays with greater input from Health Professionals
- Poor wound healing
- Anaemia and fatigue
- Apathy, depression and self neglect
- **Malnutrition**



Malnutrition

Malnutrition is a state of nutrition in which a deficiency, excess or imbalance of energy, protein, and other nutrients causes measurable adverse effects on body function and clinical outcome

NICE (2006), Clinical Guideline 32 Nutrition support in adults: NICE guideline. London: NICE

Screening For Malnutrition



Weight
Appetite
Ability
Stress Factor
Pressure Ulcer/Wound

Ways To Encourage Adequate Nutrition

- Availability of adequate meals & snacks
- Verbal encouragement
- Support and assistance
- Appetising
- Preferences and choice
- Catering for special diets
- Promotion of benefits and importance
- Social dining



Equipment To Assist Service Users To Eat & Drink



Local & National initiatives

- All-Wales Community Nutrition Pathway
- All-Wales Food And Fluid Record Chart
- Food First Advice
- Protected Mealtimes
- Nutrition And Hydration Week
- Drink A Drop Campaign
- Water Keeps You Well Campaign
- Eatwell Guide
- Red Tray Initiative
- WAASP – Nutritional Screening Tool



- All-Wales Community Nutrition Pathway
- All-Wales Food And Fluid Record Chart
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- Drink A Drop Campaign
- Water Keeps You Well Campaign
- Eatwell Guide
- Red Tray Initiative
- WAASP – Nutritional Screening Tool

[illegible][illegible]

All Wales Food Record Chart

When It Is Used:

- If there is concern with food/fluid intake
- WAASP score of 3 or above
- Critical care

Why Is It Needed:

- To identify risk of malnutrition / dehydration
- Aim to meet individuals nutritional needs

What To Include:

- All food & fluid consumed (not just offered)



- If there is concern with food/fluid intake
- WAASP score of 3 or above
- Critical care

- To identify risk of malnutrition / dehydration
- Aim to meet individuals nutritional needs

- All food & fluid consumed (not just offered)



All Wales Food Record Chart

All Wales Food and Fluid Record Chart for Community Settings

Please record all food, beverages, supplements, fluids and beverages intake consumed.
 If there are no intakes please specify the reason on the back.

Remember to:
 • Record all measured and fluid consumed throughout the day.
 • Specify the quantity and unit, an abbreviation e.g. 10.0 ml fluid of soup.
 • Record the quantity in fluid consumed.

Name	Location	Date	Bed no/age into number	Intake			
				Food intake (solid) g/kg	Fluid intake (solid) g/kg	Supplements g/kg	Drinks and beverages g/kg
Breakfast							
Midday							
Evening							
Bedtime							
Other							
Supplements							
Drinks and beverages							
Other							
Notes							

For further information contact the Welsh Food Record Centre on 01492 533333

Record all food,
drinks, nutritional
supplements,
snacks and special
diets e.g. pureed

Record all food, drinks, nutritional supplements, snacks and special diets e.g. pureed

All Wales Food and Fluid Record Chart for Community Settings

For use with all food, beverages, supplements, drinks and beverages (also consumed from containers) and food and beverages (also consumed from containers)

Notes:

- Record the date and time of each consumption.
- Record the type of food and drink consumed.
- Record the quantity of food and drink consumed.
- Record the quantity of food and drink consumed.

Record portion size that was served e.g. Small (S), Medium (M), Large (L)

Note: Use guide to help.

Siart Cofnodio Bwyd Food Record Chart Guide

Record portion size that was served e.g. Small (S), Medium (M), Large (L)

Note: Use guide to help.

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Record portion size that was served e.g. Small (S), Medium (M), Large (L)
Note: Use guide to help.



All Wales Food and Drink Record Chart for Community settings

Major source of food, National Curriculum, School and Pupil Health Survey

1. Record amount eaten (e.g. None, 1/4, 1/2, 3/4, all)

2. Note: Use guide to help.

Record amount eaten
e.g. None, 1/4, 1/2, 3/4, all
Note: Use guide to help.

Siart Cofnodi Bwyd Food Record Chart Guide

How to use the chart: The chart is divided into four sections: 1. Food and Drink, 2. Beverages, 3. Snacks, 4. Desserts. Each section contains a list of food items and a table for recording consumption. The chart is designed to be used by teachers and pupils to record food and drink consumption over a period of time.

Food and Drink

1. Record amount eaten (e.g. None, 1/4, 1/2, 3/4, all)

2. Note: Use guide to help.

Beverages

1. Record amount eaten (e.g. None, 1/4, 1/2, 3/4, all)

2. Note: Use guide to help.

Snacks

1. Record amount eaten (e.g. None, 1/4, 1/2, 3/4, all)

2. Note: Use guide to help.

Desserts

1. Record amount eaten (e.g. None, 1/4, 1/2, 3/4, all)

2. Note: Use guide to help.

Note: Use guide to help.



All Wales Food Record Chart

Record fluids consumed (mls)
Note: Use guide to help.

Canllaw i Gyfeintiau Hyf Fluid Volume Guide

All Wales Food Record Chart

Record total fluids over 24 hours

All Wales Food Record Chart

Record any specific actions taken to improve food and fluid requirements
• Sign entry

Aim:
 To increase knowledge and understanding of the role of diet, nutrition and hydration in a healthcare setting.

Objectives:

- State 7 factors that affect diet, nutrition and hydration in healthcare settings.
- State 5 national or local initiatives that promote diet, nutrition or hydration.
- Accurately record food & fluid intake/output onto an All-Wales food and fluid record chart.

Other Objectives Covered

- Explain what 'Fluid Balance' is, how it is calculated and why it is important.
- List what counts as fluid intake / fluid output.
- State symptoms of dehydration.
- Confident in encouraging good hydration.
- State the 5 food groups of the Eatwell Guide, including a key message for each group.

Evaluation

Thank You

For further support regarding nutrition and hydration feel free to contact us:

University Hospital Llandough
Department of Nutrition & Dietetics:
029 20 715281

Definition

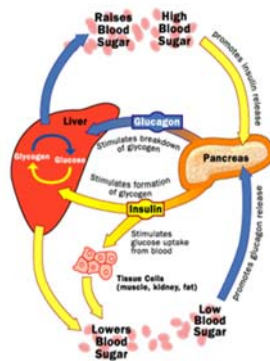
What is Diabetes??

Annie Ming

Diabetes Nurse Specialist

Cardiff and Vale UHB

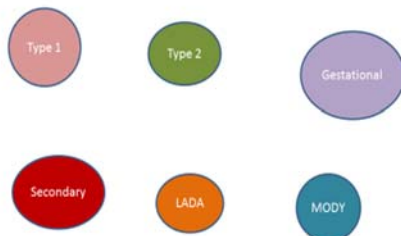
Diabetes is a metabolic disorder of multiple aetiology characterised by hyperglycaemia resulting from defects in insulin secretion, insulin action or both.



What is the range for 'normal' blood glucose levels?



Classification



Type 1

- Previously known as IDDM or juvenile onset diabetes
- Rapid onset
- Lack of endogenous insulin production
- Accounts for 5-15% of all people with diabetes
- Peak onset is 10-14 years
- Auto-immune condition
- Presence of antibodies (GAD and ICA)

Causes of Type 1

- Trigger for immune responses unclear
- Predisposition
- Environmental factors
- Viral infections



Type 2

- Previously known as NIDDM or late onset diabetes
- Occurs mostly in people over the age of 40 years
- Accounts for 85-95% of all people with diabetes
- Poor production or usage of endogenous insulin or both
- Slow onset (progressive metabolic disorder)

Causes of Type 2



MODY

- Affects 1-2% of people with Diabetes
- Often develops before the age of 25 years
- Runs in families
- Single gene mutation

LADA

- Latent Auto-immune Diabetes in Adults
- 'slow burner' Type 1 DM
- Generally occurs >age of 25 years

Gestational Diabetes

- Insulin resistance results from a blocking effect of hormones made by the placenta
- Commonly develops 20 – 24 weeks gestation
- Often resolves post delivery
- 40% develop Type 2 within 5 – 10 years



Secondary Diabetes

- Medication
- Endocrine Disorders
- Cystic Fibrosis
- Pancreatectomy

Classic symptoms of diabetes



- Ketonuria
- Mood changes
- Recurrent infections
- Hyperglycaemia

Hyperglycaemia

- Unacceptable range is:
>11 mmols in hospital
> 15 mmols/osmotic symptoms in Palliative Care

Causes of hyperglycaemia

- Illness/infection
- Enteral/parental feeding
- Medications/missed diabetes drugs
- Insufficient insulinization
- Volume depletion
- Undiagnosed diabetes
- Insulin pump failure

Things to consider:

- Have you used the correct technique? - have you cleaned the patient's fingers prior to testing?
- Has the meter been quality controlled?
- Expiry date of strips/quality control solution?
- Has the patient eaten any food prior to testing?
- Do I need to check for ketones?
- Is the patient symptomatic?
- Have I informed qualified staff immediately?

Hypoglycaemia

- Defined as a blood glucose of <4mmols/l

Causes of hypoglycaemia

- Missed/late meal
- Inadequate carbohydrate intake
- Extra insulin/sulphonylurea
- Exercise/physical activity
- Alcohol
- Hot climate
- Decreasing insulin requirements
- IM injections of insulin
- Change of injection site
- No apparent cause

lipodystrophy



- Fatty deposits in subcutaneous layer
- Long-term insulin usage
- Poor injection technique
- Multi use of needles
- Usually presents with erratic blood glucose levels

Symptoms

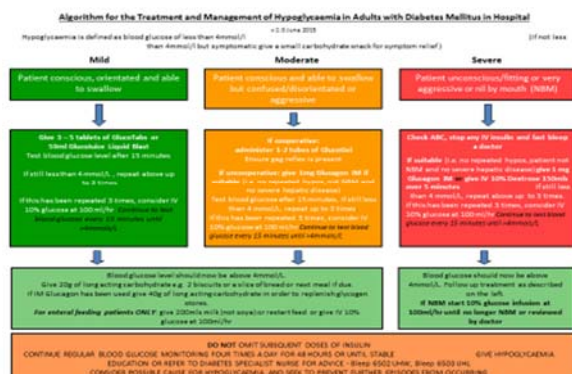


"I'm the Blood Sugar Fairy.
If you can see me, yours is too low."

© 2009 Diabetes Health



Treatment of Hypoglycaemia



Inform qualified staff if:

- > 11 mmols/l
- < 4 mmols/l
- Symptoms: hypo or hyper glycaemia
- Decreased appetite/dietary intake
- Evidence of Lipo
- Concerns re: feet

Questions??



Infection Prevention & Control



GIG NHS
Cardiff and Vale University Health Board

Aim

- **Awareness** - how infections spread
- **Minimise** e.g. hand hygiene, PPE, environmental & equipment cleaning
- **Containment** e.g. isolation, cohorting

GIG NHS
Cardiff and Vale University Health Board

Infection Prevention & Control?

- **Prevention:**
To stop infection occurring
- **Control:**
If an infection has occurred, to prevent the spread/cross contamination



GIG NHS
Cardiff and Vale University Health Board

Who does IP&C apply to?



EVERYONE

Staff, patients and visitors

All have an important role to play in the prevention of infections spreading

GIG NHS
Cardiff and Vale University Health Board

5000 patients die each year as a result of Healthcare Associated Infection



Hospitals Acquired Infections cost the NHS

1 BILLION EVERY YEAR

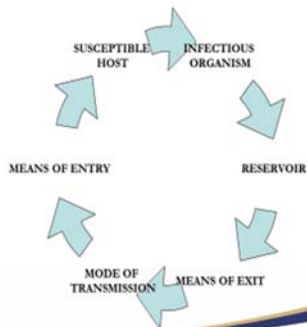


Why is IP+C so important?

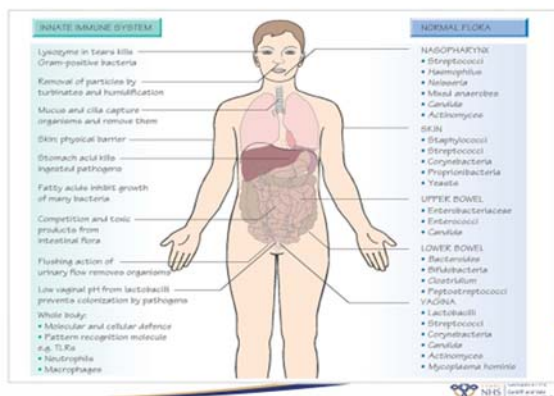
- Death and serious harm to patients
- Psychological effects
- Public confidence
- Huge financial burden to the NHS
- Increasing burden of antibiotic resistance
- Increased length of stay, impact on patient flow



Chain of infection



Reservoirs



Mode of Transmission

Micro-organisms can spread from one person to person through:

DIRECT contact with body surfaces or fluids

INDIRECT contact with the clinical environment/hospital equipment.
E.g. – dirty linen, soiled commodes



Modes of Transmission



Contact



Airborne



Faecal - Oral



Invading Body defences



Prevention of infection

For all patients - Standard Precautions

- Hand hygiene
- Respiratory hygiene and cough etiquette
- Personal protective equipment (PPE)
- Management of care equipment
- Control of the environment
- Safe management of linen inc alginate bags.
- Management of blood and bodily fluid spillages
- Safe disposal of waste
- Occupational exposure management (including sharps safety & vaccination)



Prevention of infection

Transmission Based Precautions (TBP's)

- Standard Infection Control Precautions (SICPs) may be insufficient to prevent cross transmission of specific infectious agents.
- TBPs should be applied when caring for:
 - Patients with a known or suspected infection
 - Patients colonised with a pathogenic infectious agent e.g. MRSA or other resistant organisms



Hand Hygiene



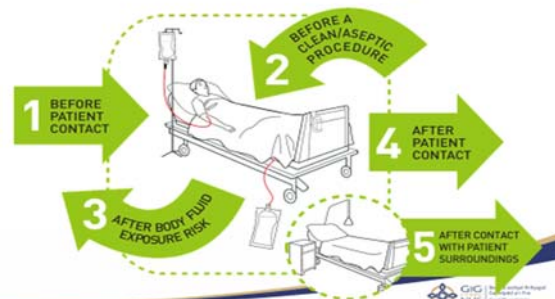
Hands are the main spread of infection through contact
BUT...



HAND WASHING is the single most effective infection control measure in both hospitals and community.



5 moments of Hand Hygiene



Hand Washing

- Set the water temperature before starting
- Always wet your hands before applying soap
- Froth and friction for mechanical removal of bacteria
- Cover all areas
- Rinse & dry thoroughly
- Maintain skin integrity



GIC
NHS
Development of a
National and state
infectious disease
response

- # Hand Washing
- Set the water temperature before starting
 - Always wet your hands before applying soap
 - Froth and friction for mechanical removal of bacteria
 - Cover all areas
 - Rinse & dry thoroughly
 - Maintain skin integrity
- 
- 
- GIC
NHS
Development of a
National and state
infectious disease
response

Patients and hand hygiene



A cartoon illustration of a patient with short brown hair lying in a hospital bed, covered with a green blanket. The patient is wearing a blue t-shirt and is holding and reading a red book. The bed has a white pillow and a green blanket. To the right of the bed, there is a bedside table with a white lamp and a small clock. A window is visible in the background, showing a potted plant with green leaves and purple flowers on the sill. The overall scene is a simple, clean illustration of a patient in a hospital room.



Soap or Gel?

- Always use soap and water when....**
- Hands are visibly soiled.
- The patient is experiencing D&V.
- There is direct contact with bodily fluids (e.g., gloves have not been worn).
- There is an outbreak of Norovirus, C diff or another diarrhoeal illness.



GIG
NHS

Healthcare Infection Control
Specialist Centre
Infect and Resp
Microbiology Group

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- 
- 
- GIG
NHS
- Healthcare Infection Control
Specialist Centre
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Personal Protective Equipment (PPE)

- Gloves
- Aprons
- Protective Eyewear
- Face Masks



A person wearing full personal protective equipment (PPE), including a white lab coat, a blue surgical cap, a white face mask, and blue gloves, holding a clipboard.

 GIG NES Gezondheidsinstelling Noord- en Oost-Schaumburg

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-  GIG NES Gezondheidsinstelling Noord- en Oost-Schaumburg



Cleaning Equipment

© Can Stock Photo - csp7551435

GIG
NHS
Bristol Support & Support
Development Unit
Can GP and NHS
improve Health Status



Cleaning products



Hydrogen Peroxide Vapour Service

- Utilise HPV service – for isolation rooms & patient equipment as often as possible.



Sharps Disposal



- Medicinal sharps
- Blood contaminated sharps
- Cytotoxic sharps

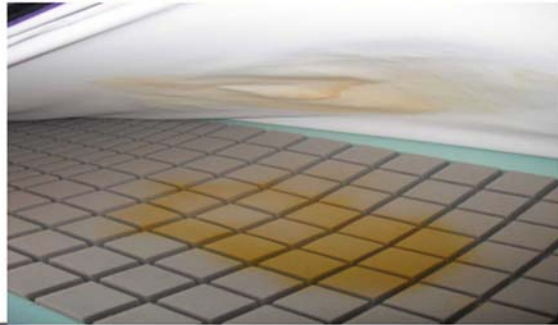
Waste Disposal



- Domestic waste
- Offensive / hygiene waste
- Infectious waste



How many of you / family / friends have slept on a hospital mattress like this ???



Or.....



Other issues to be aware of

- *Health Board Policies
- *Good clear documentation
- *Vaccination!!!
- *Outbreak season



Stat Strip™



Hospital Blood
Glucose & Ketone
Monitoring System



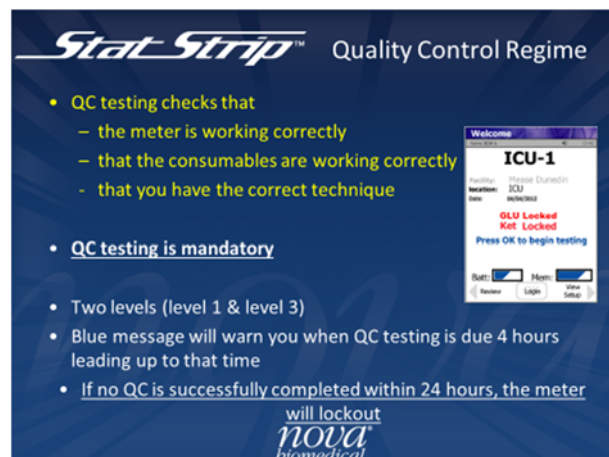
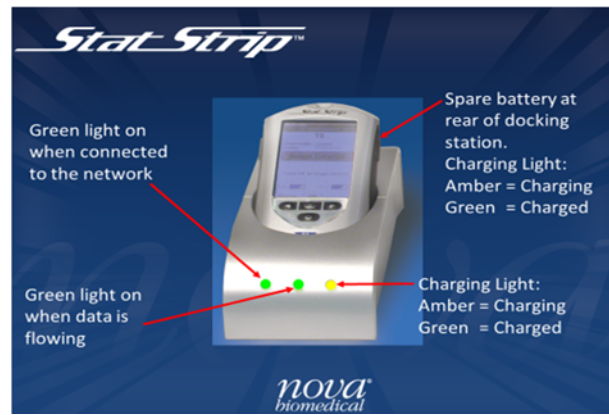
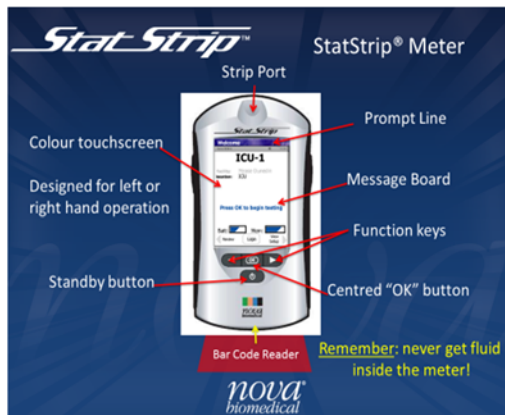
Welcome to your StatStrip® Meter Training

nova
biomedical

Stat Strip™ Your Training Session

- Presentation
 - please take notes and ask questions.
- Assessment & Competency
 - will include running a 'patient test' and a QC test. Then complete a Knowledge Check Test and a Competency Form.
- Get Test Checked & Hand in Competency Form

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biomedical



Stat Strip™ Quality Control Solutions



- Once opened stable for **3 months** – always write discard date on bottles
- Meter reads the lot number and knows which level QC you are using
- Meter requires glucose control every **24 hours**

nova biomedical

Stat Strip™ QC Solutions



- Use the same QC solutions for glucose and ketone testing
- QC testing will only be required prior to a patient test for ketones, unless already run in the last 24 hours

nova biomedical

Stat Strip™ Running a QC Test

- 1) Patient Test**
Glu
QC Lockout
L1 L2 QC Required
Press QC to begin
L1 Glucose QC testing
QC MENU
- 2) Enter Strip Lot**
Scan
- 3) Enter QC Lot**
Scan
- 4) Insert Strip**
Insert Test Strip in reader
- 5) Apply Sample**
Touch test strip
Wetland 1 QC strip
- 6) QC Result**
QC Result
Strip Lot: 020400024
QC: Pending 0204 00:00
OK **2.8mmol/L PASS** Sample 020400

nova biomedical

Stat Strip™ What to do if QC fails...

If QC has failed

- Check correct QC level was used
- Check the expiry date of the QC and the test strips
- Repeat test to check technique

If QC still fails

- Use a different QC bottle and repeat
- Use a different vial of strips and repeat

If QC still fails...

- Ring POCT Helpdesk

IMPORTANT: the meter will 'lock out' if the QC fails. Patient tests cannot be performed until successful QC has been performed.

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Stat Strip™ What to do if QC fails...

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Stat Strip™

Running a Patient Sample

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Stat Strip™ Before taking a patient sample...

- Observe clinical presentation of patient
- Explain procedure to patient & obtain consent if possible
- Wash own hands thoroughly & put on gloves according to Trust Policy
- Ensure patient's hands are clean and dry and free from contaminants. Wash hands with soap and water.
- Common contaminants – fruit juice, fizzy drinks, sweets, newspaper ink, patients own soap

nova biomedical

Stat Strip™ Taking a patient sample...

- Perform the finger prick on patient
- Obtain patient blood sample ensuring:
 - Use a new sterile lancet each time
 - Prick the side of the patient's finger
 - Remember not to use the thumb or index finger
- Venous or Arterial blood samples may also be used.

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Stat Strip™ Patient Testing

Obtaining a capillary sample may be difficult or inappropriate.

For example:

- Severe dehydration
- Shock and hypotension
- Hypothermia
- Peripheral vascular disease

In such circumstances use venous or arterial sample

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Stat Strip™ Patient Preparation



Wash patient's hand thoroughly and massage finger to stimulate blood flow.

Use safety lancet to puncture finger or heel

Squeeze finger to form blood drop

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Stat Strip™ Running a Patient Test



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Stat Strip™ Results Screen

Three Options following display of results...

1. Accept Result
- Or
2. Add Comment and Accept Result
- Or
3. Add Comment and Reject Result

NB Comments must be entered BEFORE the result is accepted or rejected

nova biomedical

Stat Strip™ Interpreting Patient Results

Actionable limits

- Glucose: <4 mmol/L or >11 mmol/L
- Ketones: >3 mmol/L

Glu **HI** mmol/L ↑↑
EXCESSIVE RANGE > 20

Glu **LO** mmol/L ↓↓
EXCESSIVE RANGE < 2.0

Report abnormal or unexpected results to nurse or doctor

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Stat Strip™ After you have finished the test...

- Discard the test strip safely into the sharps bin
- Discard the used lancet into the sharps bin
- Wipe the meter over
- Return the meter to the docking station
- Write the result into the patients notes and inform staff in charge of patient, if required

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Stat Strip™ Emergency Patients

For those areas who have one, use the emergency barcode in this way:

1. Follow the normal procedure on the meter as far as 'Enter patient ID'
2. Scan the emergency barcode in the meter box
3. Proceed as usual with test

Only ever use the barcode in genuine emergency cases!

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Stat Strip™ External Quality Assurance - **EQA**

- It is **mandatory** to participate in the EQA scheme in line with Trust policy
- Every 2 months a test sample is delivered to each department with an explanatory letter
- The test must be performed on all meters in the Dept. It can be done by anyone trained to use the meters by following the written instructions and the result should be returned to the POCT team **ASAP**

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Stat Strip™ External Quality Assurance - **EQA**

- If your result is out of the expected range your ward will be contacted by the POCT team.

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Stat Strip™

Maintenance & Troubleshooting

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Stat Strip™ Maintenance

- Clean meter and docking station using your yellow top detergent wipes
- Dry with paper towel
- Change battery as necessary

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Stat Strip™ Troubleshooting



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Stat Strip™ Contacts

For any technical or training issues with meters, please contact

Point of Care Testing (POCT) coordinators:

Hayley Miller or Seetal Sall
Tel: 02920 745414

For any clinical advice on patients, contact Diabetic Specialist Nurse

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Stat Strip™

POCT allow you access to meters for 2 weeks.

You need to:
Take Form A to assessor on ward as proof of attendance
Fill out Form B with assessor
Perform 3 QC and 3 patient samples
Your assessor sends Form C to POCT
POCT will activate you on our system for 2 years.
Deactivation from database if you have not tested a patient/ IQC in a year.

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Stat Strip™

Thank you. Any questions?

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Assisting the Patient with Medication

The role of the HCSW



Session Contents

- Briefly discuss risks involved in medicines administration
- Discuss the role and responsibilities of the Registered Nurse
- Discuss the role and responsibilities of the HCSW when assisting the patient with medication



Medicine Administration

- 1 – 10 patients will incur a medication error, during an inpatient stay.
- Reducing medication errors to improve patient safety is a priority for all clinical areas



What types of medication errors do you think happen



Medication errors

- Wrong Dose.
- Wrong Time.
- Wrong drug
- Wrong patient
- Incorrect route
- Allergy – Not recorded.
- Medication not given or delayed
- Lack of knowledge



What factors can contribute to errors occurring?

How could a HCSW contribute to a medication error?



How could a HCSW contribute to a medication error?

- By getting patients to take medications left on tables it might not be the right table or it may be too late for them to take the medication
- By not letting registered nurses know if patients do not take medications, are hiding medications or taking their own medications
- By giving advice they are not qualified to give
- By not following the guidance given in this session



Key Responsibilities of the Qualified Nurse.

Registered nurses must:

- Know the patients condition and plan of care.
- Know the normal dose, indications and contraindications of the medicines.



Key Responsibilities of the Qualified Nurse.



Right patient

Right drug

Right dose

Right Route

Right time

- Check for allergy's
- Check the medication has not expired
- Check the patient's clinical condition



The role of the HCSW

What do you think your role will be in this process?



Delegation from a Registered Nurse to a HCSW

The Nursing and Midwifery Council Standards for Medicines management tell us that:

- A Registered Nurse can enlist the help of a HCSW to assist the patient to take/apply a medicine **providing that**



But there are proviso's

- It must serve the interests of the patient/client.
- Registered Nurse must undertake appropriate assessment, planning, implementation and evaluation of the delegated role.
- The person to whom the task is delegated must have the appropriate role, level of experience and competence to carry it out.



The registered Nurse must:

1. Get the medications ready in medicine pot
2. Check the patient's identity and be with you and the patient when showing you the medications to be given to which patient
3. Sign the medication chart once all meds have been give (you must tell them when all taken)



Appropriate Delegation

- You must not be asked to undertake tasks beyond the level of your role and experience.
- You should undertake training (provided by employer) to ensure competency in carrying out any tasks required.
- You must feel confident in carrying out the delegated task. (if you don't say so)
- Level of supervision and feedback provided is appropriate to the task being delegated.



What are the responsibilities of the HCSW

- You need to accept responsibility for undertaking the task if you are happy to do so:
- Ensure that you wash hands do not touch medication.
- Ensure that right patient has been established at bedside with registered nurse.
- Gain consent from the patient.
- Ensure adequate fluids available
- Sit patient upright
- Oversee patient taking medication, do not leave until the process is complete.



A couple of things to note.....

- Disguising medication
- Crushing medication
- Inform the Registered Nurse once the patient has taken/refused medication.
- Return any medication not take by the patient to the Registered Nurse.



Adverse Events

- Know what to do in the event of the patient receiving a drug reaction
- Report any drug error made immediately to the Registered Nurse and complete/assist in the completion of the clinical incident form.



Reporting back

- It is the registered nurse's responsibility to ensure you have carried out their instructions safely and without issue.
- It would be helpful if you made a point of letting them know that has happened.
- But more importantly telling them if there have been any issues, e.g. patient refusal, problems with swallowing etc.



Question 1

- A staff nurse on your ward hands you a pot with two Paracetamol tablets and asks you to go to Mr Brown in Room 2 and give him the medication.

- What would you do?
- Why?



Question 2

- A staff Nurse is giving out medication in a 6 bedded room and leaves a pot of medication on the opposite patients' bedside locker and asks you to give them once you have finished assisting the patient with their medication.

- What would you do?
- Why?



Question 3

- You have been asked to assist a patient with their medicines. The patient tells you its ok they will take them later.
- What do you do ?
- Why ?



Question 4

- A patient you have been asked to assist, doesn't want to take his medicines, the registered nurse ask you to put the medicines in his food.
- What do you do?
- Why?



Question 5

- When you are assisting patient with their medicines, they tell you they only usually have 3 in the morning and today they have 4.
- What do you do?
- Why?



Gaining Competence

- A variety of :
 - patients
 - medication types
- Observation of practice and Written Evidence.



Recognising the patient in pain.

Recognising the patient in pain

AIMS

- To have a basic understanding of different types of pain.
- To appreciate influencing factors in pain management.
- To be able to assess and understand the importance of recognising the patient in pain.
- To understand what happens to the human body when a patient is in pain.
- To know what to do if a patient is in pain.

What is Pain?

- Pain is "An unpleasant sensory & emotional experience associated with actual or potential tissue damage" (IASP 1986)

Classification of pain

- **Acute**
 - Lasting for 6 months or less, usually improving as the healing process takes place, therefore has a predictable end. Physiological signs being tachycardia, Hypertension, anxiety.
- **Chronic**
 - Very often no diagnostic cause, lasting longer than 3-6 months. Very poor response to conventional analgesics. Physiological signs not present.

What influences Pain?

- Age
- Character
- Anxiety
- Social class
- Previous pain experience
- Coping strategies
- Current emotional status
- Cultural factors
- Beliefs
- Cognitive understanding



Why Treat Pain?

- **Humanitarian reasons**
- **Physiological reasons**
 - Chest infection -Thromboembolus
 - Pressure sores -Muscular atrophy
 - Constipation -Stress response
- **Psychological effects**

"Pain cannot be treated or controlled if it is not assessed"

The Royal College of Surgeons of England & The College of Anaesthetists (1990). (Joint Colleges Report on Pain After Surgery.)

Role of HCSW in pain management

- **Accurate pain assessment**
- **Correct interpretation of observations**
- **Precise documentation and acting upon findings**

Why should we assess pain?

- **Need a baseline**
- **Accurate and appropriate treatment & evaluation**
- **Patient involvement**
- **Relieve suffering**
- **Prevents complications**
- **Avoids misconceptions**

How should pain be assessed?

- **"How is your pain?" invites misunderstandings**
- **A pain tool is essential for effective pain assessment**
- **A pain tool should be valid & reliable to reduce error and quick & easy for nurses to use**
- **If possible patients should have education regarding the pain tool to be used**
- **Pain must be assessed on movement/ coughing, NOT at rest**

Pain Assessment



Pain Assessment Tool

- **NO pain** 0
- **MILD pain** 1
- **MODERATE pain** 2
- **SEVERE pain** 3

ASSESS PAIN ON MOVEMENT/COUGHING

<h2 style="text-align: center;">Bolton Pain Assessment Scale (BPAS)</h2> <p style="text-align: center;">For patients with communication difficulties</p>					
SCORE	ABSENT SCORE 0	MILD SCORE 1	MODERATE SCORE 2	SEVERE SCORE 3	SCORE
VOCALISATION	None	Occasional breath or groan	Low level speech, with a negative or disapproving quality	Repetitively crying out, loud moaning or crying	
FACIAL EXPRESSION	Smiling or relaxed	Looking tense	Sweat, frowning	Grimacing and looks frightened	
CHANGE IN BODY LANGUAGE	None	Tenses, fidgeting	Guarding part of body	Withdrawn, rigid, fists clenched, knees drawn up	
BEHAVIOURAL CHANGE	None	Increased confusion	Refusing to eat, alterations in usual pattern	Agitation or pushing away, striking out	
PHYSIOLOGICAL CHANGE	Normal	Occasional laboured breath, increased heart rate	Hyperventilation, raised heart rate and BP	Change in pulse, BP, respiratory rate, Perspiring, flushed or pale	
PHYSICAL CHANGE	None	Shin tears	Pressure sores, sores/lesions	Post-surgery trauma	
<p>CONSIDER - does the patient usually take analgesics?</p> <p>DISCUS - with family and / or carers how the patient has reacted to pain in the past</p> <p>ASSESS - pain on movement, during physiotherapy and after an analgesic intervention</p>					TOTAL SCORE
APPLY TOTAL SCORE TO ANALGESIC LADDER	0-2 = No pain	3-7 = Mild pain	8-13 = Moderate pain	14+ = Severe pain	

Copyright Royal Bolton Hospital Foundation Trust 2011

GLMS
Greater Manchester and Eastern Cheshire Local Maternity System

A fan of cards showing various body parts and a 'Show me where?' card with a 'Yes'/'No' response area. The cards are arranged in a semi-circle, with the 'Show me where?' card at the bottom. The cards show: Head, Neck, Chest, Back, Groin, Genitals, Anus, Thighs, Arms, Hands, Feet, and Legs. The 'Show me where?' card has a 'Yes'/'No' response area and a 'Show me where?' label.

Key Issues in Pain Assessment

- **Pain is the 5th vital sign**
- **Assess pain on movement or deep breathing/coughing**
- **DOCUMENT the patients' response with the numbers 0,1,2,3 in the appropriate box**
- **If pain is moderate to severe (2-3) take action.....**

Problems associated with pain assessment

- We cannot prove that a patient is in pain; there are no reliable and usable measures of pain
- Pain is subjective
- Some patients cannot tell us about their pain
- We don't always believe them when they do tell us

Why might a patient NOT report pain?

- Fear
- They expect pain
- They believe they can only have painkillers at set times
- They don't like to bother the nurses
- They worry that if they complain of pain they may have to stay in hospital longer
- Their pain is ok if they keep still
- Lack of understanding
- Personal profile

Why else may a patient not report pain?

- They may be too unwell to respond accurately/ appropriately to pain assessment!

How can WE recognise the patient in pain?

- **MEASURABLE INDICATORS**
 - Increased blood pressure
 - Increased heart rate
 - Increased respiratory rate
 - Decreased SATS
 - Nausea/ vomiting

N.B NOT RELIABLE HOWEVER

Behavioural Signs

- Crying
- Fear/ Anxiety
- Inability to move/cough
- 'Muscle splinting' (contraction)
- Difficulty deep breathing or grunting on breathing out
- Guarding
- Delirium

RECAP:- Recognising the patient in pain

- To understand the importance of pain management
- To be able to assess and recognise the patient in pain
- To know what to do if a patient is in pain

Falls and Falls Prevention



What is a fall?

A fall is when a subject unintentionally comes to rest on the ground or at a lower level.



Statistics

- Cost to Health and social care £84 million
- 1 in 5 falls results in a fracture
- Total UK bed days for all fractures in the over 60s and falls in the over 75's was > 4 million
- 1 in 2 women >50yrs will lead to a broken bone
- 1 in 5 men > 50yrs will lead to a broken bone
- An 85 year old is 5 times more likely to fall than a 65 year old
- 10% of hip fractures will die within a month

Risks of falling

- **intrinsic factors** are a higher risk – eg history of falls; impaired mobility/vision; medications; acute medical problems; cognitive impairment and fear of falling
- **external factors** – environmental influences

Group exercise



What are the causes / risk factors associated with patient falls in hospital?

Causes

- Poor footwear
- Poor lighting
- Cluttered environment
- Uneven floor surfaces
- Unstable furniture / equipment
- Walking aids being tidied away and not being in reach of the patient
- Worn ferrules



Risk Factors

Past history of falls

- Fear of falling

Acute and chronic illness/conditions.

- Parkinsonism
- Arthritis
- Peripheral Neuropathy (reduced feeling in feet/hands)
- Myopathy (muscle weakness)
- Failing eyesight



Slower gait, because of foot problems can affect the patients stance & postural control & lead to possible increase risk of falling.

Risk Factors

- Foot problems



Neglected nails can cause foot pain.....
'risk factor' for falling

What types of medication increase the risk of falls?



Medication and Falls

- Anti-depressants
- Tranquilizers
- Benzodiazepines
- Analgesics (pain killers)
- Diuretics (water tablets)
- Anti-hypertensive (blood pressure lowering drugs)
- Laxatives
- Sedatives
- Anti-hypoglycemic (blood sugar reducing drug)

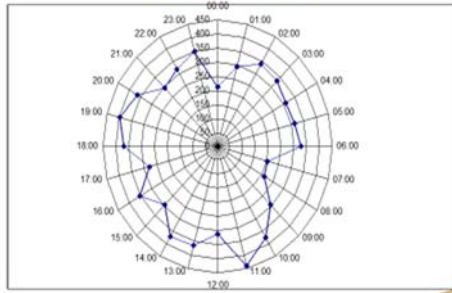


Risk Factors

- Mental state
- Reduced mobility
- History of incontinence
- Communication and sensory issues
- Medications
- Time of day



UHB in-patient falls by time of day (2010-2012)



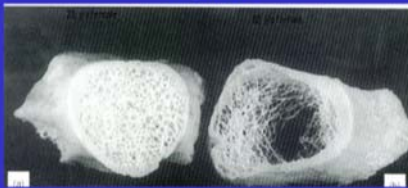
The Human Cost Of a Fall

- ❑ Loss of function/ mobility
- ❑ Loss of independence / dignity /confidence
- ❑ Fear of another fall
- ❑ Further loss of mobility
- ❑ Increase in isolation, loneliness & possible admittance into nursing residential care
- ❑ Injury – can be catastrophic



Femoral neck and osteoporosis

Fractures can happen more easily as we get older due to Osteoporosis



Consider Unintended Consequences:



Deconditioning & loss of strength:

Total inactivity >10-20% decrease in muscle strength per week (1-3% per day);

3-5 weeks of complete immobilisation can lead to a 50% decrease in muscle strength

Campbell: http://aging.uci.edu/files/2011/01/deconditioning_campbell.pdf

Group Exercise

How can you help to prevent falls in hospital patients?

How can you help to reduce falls?

- Provide a safe environment, adequate lighting, flooring, de-clutter etc
- Ensure that the call bell is close to hand
- Treatment and management plan for incontinence – regular toileting

How can you help to reduce falls?



Ensure correct footwear is worn



How can you help to reduce falls?

Low rise bed and crash mats



How can you help to reduce falls?

- Low rise beds and crash mats
- Keep mobility aids near the patient ... and ensure that the patient knows how to use them
- Intentional rounding
- Try to position the patient where you can see them – a cubicle may not be the best place



How can you help to reduce falls?

- Good nutrition and hydration – poor nutrition / dehydration will cause weakness / dizziness and patients may fall
- Don't shut the door on confused patients – they can get frightened and wander
- Chairs at correct height



Dealing with a patient who has fallen:

- Check **ABCDE** whilst patient on floor
- Call qualified nurse to assess patient
- Do not move if lower limb fracture suspected until seen by a doctor
- Do not move if neck or spinal fracture suspected – must be moved back to bed using a scoop/hoverjack (trauma / A&E Porters to be contacted for scoop/hoverjack and for help and advice to move patient)



If a head injury is suspected:

1. The patient must be seen by a doctor
2. Neuro obs must be recorded:
 - Every 30 mins for 2 hours – keep recording every 30 mins (or more frequently if not normal)
 - If stable every 1 hour for 4 hours
 - If stable every 2 hours for 24 hours
3. Look for signs of neurological deterioration: Confusion, vomiting, memory loss, head ache, loss of sensation / balance etc



Use of bedrails



The Purpose of Bedrails

- Bedrails are safety devices used to reduce the risk of patients accidentally slipping, sliding or rolling out of bed

Bedrails must NEVER be used to restrict a patient who wants / is trying to get out of bed
(even if the patient would be unsteady and at risk of falling once they were out of bed)

The patient is at risk of falling from an increased height if they attempt to climb over the bedrails

When should bedrails be used?

- **Decisions on bedrails need to be based on the risks and benefits for them as an individual.**
Registered Nurses will complete a risk assessment to help them to decide if bedrails should be in place
- *Patients who are confused enough and mobile enough to climb over bedrails should not be given bedrails*
- *Patients who want to get out of bed without help from staff should not be given bedrails*
- **Always check with the Registered Nurse before putting bed rails in place**

Entrapment Risk



Vulnerable patients must not be left unattended on trolleys with this style of bedrail. On older beds protective bumpers will need to be used with this style of bedrail.

BBC NEWS

Home is fined over woman's death

A company which owns a care home where a resident suffocated in a bed has been fined £175,000 for breaching health and safety laws.

Ms O'Mara, who was seriously disabled after a series of strokes, was trapped face down and unable to free herself.

Margaret O'Mara, 69, became trapped by the legs in a gap between a badly fitted bedrail and the mattress.

The HSE blamed a "catalogue of errors" at the home, where bedrails and mattress were incorrectly fitted by staff who were untrained on the jobs and where risk assessment procedures were not followed.



16 February 2007

<http://news.bbc.co.uk/1/hi/england/staffordshire/6370000.stm>

BBC NEWS

Council is guilty over bed death

A council has admitted three health and safety charges over a disabled man who died after becoming trapped between the headboard and rail of a care home bed.

A verdict of accidental death, contributed to by neglect, was returned by an inquest in October 2006.

Rhondda Cynon Taf Council



22 November 2007

<http://news.bbc.co.uk/1/hi/wales/7104719.stm>



Raising the Awareness of Good Foot Health



Bwrdd Iechyd Prifysgol
Cardiff a'n Ffro
Cardiff and Vale
University Health Board

Aims & Objectives

- To raise awareness of the importance of good foot health
- To learn how *you* can help deliver basic foot care to your patients
- To learn how you can encourage your patients and their families to help with foot care
- To assist in maintaining a patients mobility and independence where possible
- To help in the prevention of future problems
- To know when to seek help

Why worry about Diabetes and Feet?

- Can cause changes to the circulation to the feet
- Can cause changes to the sensation in the feet
- Can delay wound healing time

Diabetes

- The relative likelihood of death following amputation or foot ulcers within 5 years is greater than colon, prostate and breast

Amputation / foot ulcer
Up to 80%

Colon cancer
49%

Prostate
Cancer 20%

Breast
cancer
17%

Derived from DUK narrative foot campaign 2012
Source: Office of National Statistics (2010). Cancer survival in England: one year and five year survival for 21 common cancers, by sex and age. Moulik K., et al. (2003). Amputation and mortality in new-onset diabetic foot ulcers stratified by etiology

TOUCH THE TOES TEST

ABOUT THE TEST

The Touch the Toes Test is a simple and easy-to-use test to check for changes in sensation in the feet. It is a quick and easy test that can be done by the patient or a healthcare professional. It is a test that can be done at home or in a clinic. It is a test that can be done by the patient or a healthcare professional. It is a test that can be done at home or in a clinic.

REFERENCE GUIDE

Right foot, heel, sole, ball, toes

Left foot, heel, sole, ball, toes

STEP-BY-STEP INSTRUCTION

HOW TO PERFORM THE TEST

The test should involve one light, touching stroke, from the heel to the toes. The test should be done on both feet. The test should be done on both feet. The test should be done on both feet.

VERY IMPORTANT!

- The test should be done on a flat surface, and the patient should be sitting or lying down.
- The test should be done on a flat surface, and the patient should be sitting or lying down.
- The test should be done on a flat surface, and the patient should be sitting or lying down.

RECORDING THE RESULTS

REMINDER

Using the index finger, touch the tips of toes. Following the sequence from 1 to 10, record the results. The results should be recorded on the form.

WHAT THE RESULTS MEAN AND WHAT TO DO

NORMAL SENSATION

If you feel the touch of all or most of the toes, as shown in the example below, then your sensation is normal and you are well at detecting the touch of the toes. If you feel the touch of all or most of the toes, as shown in the example below, then your sensation is normal and you are well at detecting the touch of the toes.

IMPAIRED SENSATION

If you did not feel the touch of all or most of the toes, as shown in the example below, then your sensation is impaired. If you did not feel the touch of all or most of the toes, as shown in the example below, then your sensation is impaired.

How are feet affected by other Health Conditions?

- Diabetes
- Vascular Disease (poor circulation)
- Multiple Sclerosis
- Parkinson's Disease
- Alcoholism
- Injury to Nerves in Spine
- Spina Bifida
- Pernicious Anaemia (Vitamin B12 Deficiency)



Basic Foot Care

What is your Role?



Look

- Are the feet clean (including between the toes)?
- Is the skin broken or red?
- Are there any areas of pressure?
- Are the toe nails well maintained?
- Is there anything that concerns you?



Washing Feet

- Use warm, soapy water
- Ensure you wash between the toes
- Dry well, concentrating on spaces between toes



Apply Cream (where needed)

- Use a cream prescribed for the patient (or a cream which the patient has used before)
- Rub the cream over the top and bottom of the feet
- Avoid putting cream between the toes



Footwear

- Check inside shoes and slippers for anything that shouldn't be there
- Check for seams inside shoes which may rub and cause damage
- Ideally, shoes should have a fastening so that they are held securely on the feet



Socks & Tights

- Hosiery needs to be changed and laundered regularly – preferably daily
- There should be enough room so that feet and toes are not cramped (be aware of internal seams)
- Tight garters and stocking tops restrict the circulation and are best avoided
- Elastic stockings/support tights should ideally be put on first thing in the morning before the client gets out of bed or soon after

Common Foot Problems

- Thickened nails



Common Foot Problems

- Verruca (Warts)



Common Foot Problems

- In-growing Toe Nails



Common Foot Problems

- Fungal Nails



Common Foot Problems

- Athletes Foot



Common Foot Problems

- Corns & Callous



Common Foot Problems

- Heel Callous/ Cracked Heels



DEVICES CURRENTLY USED FOR PRESSURE RELIEF

- Heel lift suspension boots
- Specialist mattresses
- Pillows
- Heel cup dressings
- Repose inflatable heel troughs
- Repose Wedges

These devices can be very effective but they have some disadvantages

- Not always enough pressure relief is provided
- Concordance with patients
- Ability to mobilise with the devices



Common Foot Problems

- Heel Pressure Sores



Signs of Infection

- Pain
- Swelling
- Redness/Inflammation
- Warmth
- Pus
- Fever/Feeling generally unwell



Any Questions?



Hygiene needs

HCSW INDUCTION

Why do we need to ensure that patients are helped with their hygiene needs?

Why do we need to ensure that patients are helped with their hygiene needs?

- To keep the skin clean and to help to prevent infection
- To ensure good preoperative preparation
- To avoid oral problems
- To avoid body odour
- To help patients to feel more comfortable

What else can we do when we provide hygiene care?

What else can we do?

- Build relationships with our patients (show empathy)
- Communicate with our patients (answer questions, discuss anxieties, check their understanding)
- Full physical examination
- Check pressure areas
- Assess their pain

What are the important issues?

- Ensure the care is person centred and respect the patients
- Maintain the patients **privacy, dignity, comfort and independence**
- Always encourage the patient (when able) to be involved (**rehab!!**)
- Respect the patients individuality - take personal choice into account

What does hygiene care include?

- Wash / shower / bed bath / bath
- Teeth / mouth
- Hair - can be washed in bed
- Nails
- Ears
- Nose
- Shave (consent, warfarin, no communal razors!)



"It was the little things that made the qualitative difference to patient's lives; little things such as dressing in their own clothes, manicuring nails, making sure their hearing aid worked."
(Smith, 1992)

Why is helping the patient to the bathroom better if possible?

Why is the bathroom better if possible?

- Encourage patient independence
- Encourage the patient to walk to the toilet if they are able - combine mobility with washing
- Rehabilitation
- Privacy and dignity

When would you not bath / shower a patient?

When would you not bath / shower?

- If the patient had wounds or ischaemic limbs which need to be kept dry
- If the patient was too immobile to safely be hoisted into bath
- If the patient was very confused / agitated/non compliant
- Medically unstable patients
- Lines in place e.g. Central lines, epidurals
- If the patient had a lot of pain

Never lift a patient into the bath



Consider seating for showers...



Elimination

- Remember the same principles when dealing with elimination i.e.:
- **privacy**
- **dignity**
- **comfort**
- **encourage independence**

Why do we monitor bowels daily?

- To provide an accurate record of bowel movements (remember to document if the patient has their bowels open well or not)
- So that constipation can be acted upon early

Why can patients become constipated in hospital?

- Reduced mobility
- Altered routine
- Altered diet
- Painkillers
- Reluctance to drink (if suffering from incontinence)

Always remember.....

Keep the call bell to hand
at all times!

?

RECOGNITION OF THE SICK PATIENT

Resuscitation Service

Cardiff and Vale uLHB



YOUR ROLE IS IMPORTANT!

- You are closely involved with patient care
- You are often responsible for measuring patient's observations.



Therefore it is important that you know how to recognise a patient who is deteriorating and what are 'normal' vital signs



OUR AIMS.....

- Reduce preventable cardiac arrests
- Reduce preventable deaths
- More timely intensive care admissions



2222 statistics

- In 2017 there were 1564 calls
- There were 612 due to high NEWS
- There were 227 due to CA



Why do we record observations?

- Observations can tell us that the patient is becoming unwell before they look unwell.
- Observations can give us warning signs that something is happening in the body that we can't see

Therefore it is important that we record a **full** set of **accurate** observations on patients. Any abnormalities should be **reported** to the nurse in charge of the patient.

NEWS Charts

HOW TO ASSESS A SICK PATIENT

Use basic examination skills

-
-
-

ASSESSING THE CRITICALLY ILL PATIENT

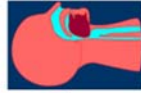
Airway
Breathing
Circulation
Disability
Exposure

Of all of the observations, which one is the most sensitive to patient deterioration?

- HR?
- BP?
- Sats?
- RR?
- Temp?



AIRWAY



Can your patient talk?

If your patient can talk they have a clear airway

Is their breathing noisy?

Any added sounds indicate that their airway is partially blocked – what sounds may you hear in a partially obstructed airway?

If your patient is unconscious, the airway needs to be checked for any obstruction.



WHAT CAN BLOCK AN AIRWAY?

- Tongue – when will your tongue block your airway?
- Vomit
- Blood
- Food
- Secretions
- Swelling – what can cause airway swelling?
- Dentures



What is happening?
What will happen next?



What interventions would help?



TREATMENT FOR A BLOCKED AIRWAY

- Suction
 - Airway positioning
 - head tilt chin lift
 - (jaw thrust)
- Turn unconscious patients on their side to allow secretions to drain out of mouth



DO NOT DO A FINGER SWEEP TO CLEAR THE MOUTH



TREATMENT FOR A BLOCKED AIRWAY



ALL SICK PATIENTS NEED OXYGEN

15L of oxygen via a non-rebreather mask

Oxygen does not need to be prescribed in an emergency



Oxygen must be started by a qualified nurse – you can prepare the mask – ensure the reservoir bag is inflated



BREATHING



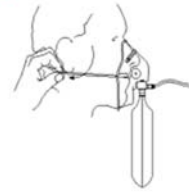
- To breath effectively we need effective respiratory drive and good respiratory effort
- Our central nervous system controls our respiratory drive
- Decreased respiratory effort can occur through disease such as MS, neurological causes and from exhaustion



BREATHING

Assess:

- Respiratory rate
- Depth
- Chest movement
- Accessory muscles
- Skin colour
- Oxygen saturations
- Any added sounds?



If fingers are cold and there is no sats trace, no need to warm the finger = C problem



Normal Values

Respiratory Rate

12 to 20 breaths per minute

Oxygen Saturations

94-100% in otherwise healthy patients
88-92% in patients with COPD



CIRCULATION



Assess

- Blood pressure
- Pulse: rate and volume – manual check, peripheral/central
- Limb temperature – blood directed away from peripheries to vital organs in sick patients
- Skin Colour
- Capillary Refill Time
- Urine output



How and where do you check a pulse?



- Radial artery is the easiest to locate (unless hypotensive patient)
- Measure for one whole minute – recorded as beats per minute (bpm)
- Also note volume and regularity
- Do not use the dynamap to measure heart rate in acutely unwell patients – will not get volume information

Why would a pulse feel weak?



Measuring BP

- If a patient's BP is low, you may not be able to record it on the dynamap



- To get a more accurate reading on hypotensive patients, a BP should be recorded manually

Always use the correct size cuff for the patient





HYPOTENSION IS A LATE SIGN OF SHOCK

**HYPOTENSION REQUIRES
RAPID CORRECTION AND
IMMEDIATE SEARCH FOR IT'S
CAUSE**



How do you measure a Capillary Refill Time (CRT)?

Press on the sternum for 5 seconds and count the length of time it takes for the colour to return to normal. It should return within **2 seconds**



What is a normal urine output?



**0.5-1ml/kg/hour
or
More than 30ml/hour**



Low urine output should not be ignored. If the patient is not catheterised, urine output should still be measured and recorded



DISABILITY

Assess

- Conscious level - using AVPU
- Blood Sugar – even if the patient is not diabetic
- Pupils: are they equal size and reactive to light?



How to use AVPU

AVPU: **A**lert
Responds to **V**oice
Responds to **P**ain
Unresponsive

- How would you stimulate a pain response?
- When would a patient be at risk of losing their airway on AVPU?



EXPOSURE

- Uncover the patient to look for wounds, rashes, injuries, blood loss etc.
- Maintain dignity
- Prevent heat loss



SHOCK

• A patient with a low blood pressure (hypotension) and a fast pulse (tachycardia) is showing clinical signs of **shock**.

- **Shock** occurs from loss of fluid from:
 - Blood loss → hypovolaemic shock – post-op pts
 - Vomiting/diarrhoea → hypovolaemic shock
 - Infection → septic shock



SHOCK

↓
DECREASED BLOOD SUPPLY TO ORGANS

↓
INADEQUATE OXYGEN SUPPLY TO ORGANS

↓
ORGAN DAMAGE

↓
MORBIDITY & MORTALITY



EXAMPLE 1

A 75 year old man 3 days post-op from abdominal surgery. Patient has a problematic IVI which has finally tissued.

How would you assess this patient?

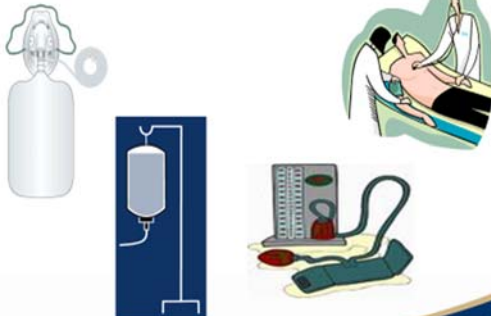


EXAMPLE 1

- A = Clear
- B = RR 25/min
Sats unrecordable
- C = Pulse 120/min and 'thready'
Poor urine output
Cap refill time: 4 secs
- D = Anxious but Alert
- E = Pale and clammy
Complaining of abdo pain



What does this patient need?



EXAMPLE 2

A 75 year old female, 3 days post abdominal surgery. Has been pyrexial for 36 hrs. BP has been falling.

How would you assess this patient?



EXAMPLE 2



- A= Clear
- B= RR 35 min
- C= Pulse 130/min good volume
BP = 80/40, CRT 5 secs
- D= Confused, nauseated
- E= Warm extremities



What does this patient need?



EXAMPLE 3

A 56 year old lady known to have a 'chronic chest' has become acutely short of breath.

How would you assess this patient?



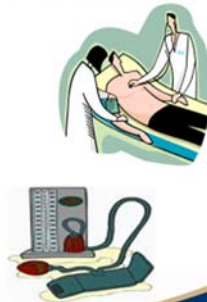
EXAMPLE 3



- A= Audible wheeze
- B= RR 40
Sats 82% on 3L via nasal cannula
Dusky fingertips and earlobes
- C=HR 110 bpm, BP 160/95, CRT 2 secs
- D=Agitated
- E=Clammy



What does this patient need?



EXAMPLE 4

A 30 year old patient who vomited their dinner, has become unrousable.

How would you assess this patient?

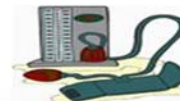


EXAMPLE 4



- A= gurgling, vomit in mouth
- B= RR 16, sats 99% on air
- C= HR 80bpm, BP 120/80, CRT 2 secs
- D= PEARL, U on AVPU, BM 1.3
- E= unremarkable

What does this patient need?



ANY QUESTIONS



Reducing Hospital Acquired Pressure Ulcers

Prevention & Management
of Pressure Damage

What are pressure ulcers?

What are pressure ulcers?

- Commonly referred to as **bed sores / pressure sores**.
- Damage to the skin and underlying tissues which is caused by **pressure**.
- When skin and other tissues are directly **compressed** between **bone** and another surface such as a bed or a chair. This **shuts off** the **blood supply** and **causes tissue to die**!

Low pressure can cause damage if present over **several hours**.

High pressure can cause damage within **minutes**!

Pressure Ulcers



Prevalence & Cost

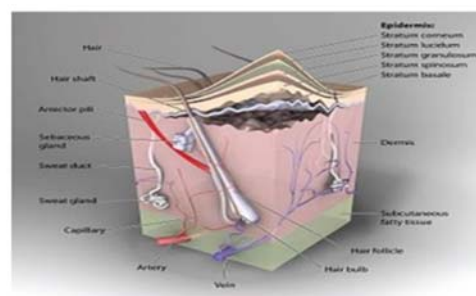
- **Prevalence** ranges from **18-20%** in the UK
- **Cost** of treating one grade 4 pressure ulcer is estimated to be at least **£10,551**
- Total costs in U.K. estimated to be **£1.4-£2.1 billion** annually
- Equivalent to **4%** of the total NHS expenditure

How do pressure ulcers impact upon the patient?

Patient impact

- Pain
- Infection
- Loss of limb
- **Extended hospital stay** – which can delay the admissions of other patients
- **Loss of independence** – may need to be nursed on bed rest / have to wait for DN calls
- Can lead to death

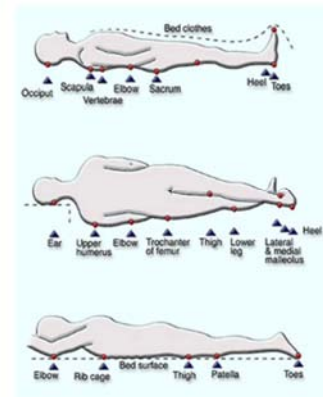
The Skin



What parts of the body are **at risk** of pressure damage?

Common Pressure ulcer locations

- Sacrum 40%
- Heels 20%
- Other 40%



Causes of pressure ulcers (External factors)

- Pressure
- Shear

Contributing factors

- Friction
- Moisture

Shear



- Skin moves at a different rate to underlying structures
- Stretches skin surface
- Stretches, displaces and distorts blood capillaries so blood supply to tissue is effected

Example: When a seated patient slips down in a chair or bed

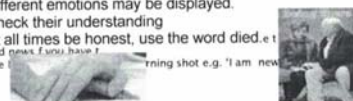
This is why the hospital beds will bend in the knee area when the head end is brought up

Bereavement

Tracey Skyrme
Senior Nurse Bereavement Service

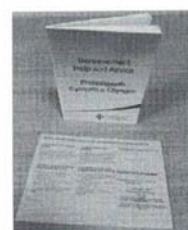
Communication with the family

- › Ensure the family understand what has happened
- › If you do have to give bad news, ensure you give the family a warning shot e.g. 'I am very sorry, but I have some bad news for you'.
- › If it was an unexpected death, please give the family time with the medical staff.
- › Time and privacy : saying goodbye is very important.
- › Different emotions may be displayed.
- › Check their understanding
- › At all times be honest, use the word died. e.g. 'I am very sorry, but I have some bad news for you. I have to tell you that your loved one has died.'



- › Use clear language in a sensitive manner
- › Information is not retained when people are distressed
- › Relatives need to be sure of what happens next. A copy of the UHB Bereavement help and advice booklet should be given to the family.
- › Reiterate the importance of contacting the bereavement office to collect the Medical certificate for the cause of death.

UHB Booklet and MCCD



Last offices / Care of the deceased

- › Ensure death is verified
- › Check to see if there is going to be a post mortem
- › Wearing gloves and apron remove devices if there is not going to be a post mortem
- › Wash the patient unless requested not to for Cultural reasons
- › Dress appropriately, own nightdress/ pyjamas is acceptable



Cont'd

- › Replace dentures/shave/comb hair etc
- › Ensure the deceased is treated with the same dignity and respect as you would if they were alive
- › Ensure identification bands are new and have the correct details on them
- › Remove/leave jewellery as previously discussed with family (ensure the UHB property list is completed as per guidelines)

Cont'd

- › Using a clean sheet wrap the patient appropriately
- › Ensure the death notification proforma is completed-qualified nurse to sign
- › Ensure section on hazard in handling deceased is completed correctly
- › Contact porters regarding transferring the deceased to the mortuary / assist to transfer as appropriate

Viewing facilities

- › There are viewing rooms at UHW and UHL
- › Booking is by appointment only
- › They are not a "chapel of rest"
- › Often better for families to view their relative at the funeral home

Post Mortems

- › Coroner's Post Mortem, generally decision taken from family
- › Coroner's office liaise directly with the family
- › Hospital Post mortem, families involved in the decision making
- › Results can take many months, sometimes not the answers the family hope for, negative findings can be positive



Multi faith Practices

- › Christianity
- › Buddhism
- › Baha'i
- › Judaism
- › Sikhism
- › Islam
- › Rastafarianism
- › Hinduism
- › Mormonism
- › Christian Scientist
- › Jehovah's witness



Guidance



What to do after death

- › Ensure families are given the UHB bereavement booklet
- › Death certificates are issued from the bereavement office/ ward/ medical records (ring first)
- › 5 working days to register a death
- › Families need to arrange funerals, with or without funeral directors (average cost in Cardiff £2,500)
- › If Coroner involved, death certificate issued via Coroner's office.

Where to get help

- › Chaplaincy-via switchboard
- › Wellbeing counselling service for staff 02920744133
- › National death handbook (website) www.naturaldeath.org.uk
- › Mortuary staff- if there are any queries
- › Senior Nurse Bereavement Service 20744949

Looking after yourselves

- › Don't go off duty if you have any anxieties or questions
- › The importance of debriefing, particularly after an emergency situation
- › It is okay to be upset- we are only human
- › Saying goodbye is important for us, sometimes professional relationships develop, particularly if you have looked after someone for a long time.

Thank you for Listening



Fluid Balance Monitoring



Facts

✓ Water has a profound effect on brain function and energy levels. Even a slight dehydration can produce a small but critical shrinkage of the brain, impairing neuromuscular coordination, concentration and thinking.



✓ Dehydration will significantly affect your patients well being

✓ Dehydration will also significantly affect your wellbeing and your ability to function well at work. Make sure you keep yourself hydrated at work.

Water is like oxygen, it is crucial to our survival.

We can go up to 3 weeks without food but we can only survive for up to 3 days without water



Why Does The Body Need Water?

Facts



- ✓ The human body is composed of 55-60% water
- ✓ Men hold more body water (61%) than women (52%)
- ✓ Obese patients hold less water than slim patients
- ✓ Elderly patients have lost approx half their water content
- ✓ It takes a loss of only 1% - 2% of your body's ideal water content to cause dehydration.

Why Does The Body Need Water?

- As a solvent in the body to transport nutrients & oxygen and remove waste
- To keep the skin elastic
- For temperature regulation
- To keep the organs in the body moist – muscles, lungs and brain contain high amounts of water
- To protect and lubricate joints and organs

Ultimately we need it to survive

What is fluid balance?

Fluid balance is achieved when the water taken into the body equals the water that the body loses



However

- Thirst mechanism lost in older people – starts to diminish in the over 50s

ALSO

- Patients who are confused or have altered conscious levels
- Patients with swallowing problems
- Patients receiving artificial nutrition

May not be able to recognise or satisfy their need for water

How Do We Maintain Our Fluid Balance?

How does fluid get into the body?

We Drink when we are thirsty!!



In reality our bodies need water long before we feel thirsty

How does fluid get into the body?

NATURAL SOURCES:

- Absorption from liquid and food
- Metabolism of nutrients creates water as a by product

MEDICAL INTERVENTIONS:

- IV / SC infusions
- NG / PEG feeds

Fluid Loss

How is fluid lost from the body?

Dehydration

- Dehydration occurs when:
Fluid Loss Is Greater Than Fluid Gain
- e.g. Input = 1200 Output = 2500

Fluid Loss

- Urine
- Perspiration
- Vomiting
- Faeces
- Wound drainage
- Breathing = approximately 300 ml lost every day

What are the reasons that hospital patients may become dehydrated

Why do we need to monitor fluid balance?

Early recognition of problems such as:

- Dehydration
- Hypovolaemia
- Overload
- Oedema

Hospital patients may become dehydrated because of.....

- ✓ Diarrhoea and or vomiting
- ✓ Prolonged periods of being Nil By Mouth
- ✓ Poor Oral intake
- ✓ Infection (sweating with raised temperature)
- ✓ UTI (due to increased urine output – failure to drink)
- ✓ Reduced thirst
- ✓ Cognitive problems
- ✓ Unable to reach / give self drinks
- ✓ Sedation e.g. Patients post surgery

What are the symptoms of dehydration?

Oedema

Abnormally high amount of fluid in the tissues and the body's failure to get rid of this fluid

Causes:

- Immobility
- Low protein levels
- Surgery/ wounds
- General malaise
- Kidney failure or Liver Failure



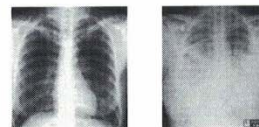
Symptoms become increasingly severe with greater water loss

- ✓ heart and respiration rates begin to increase
- ✓ body temperature may rise because of decreased sweating.
- ✓ At around **5% to 6%** water loss patient may become groggy or sleepy, experience headaches or nausea and may feel tingling in limbs (paresthesia).
- ✓ With **10% to 15%** fluid loss, muscles may become spastic, skin may shrivel and wrinkle (decreased skin turgor), vision may dim, urination will be greatly reduced and may become painful, and delirium may begin.
- ✓ Losses greater than **15%** are usually fatal.

Overload

Occurs when the heart fails (as a pump) to move fluid around the body e.g. In the Lungs:-

- Wheeze
- Restlessness
- Increased respiratory rate
- Usually Increase in Blood Pressure/ Heart rate



Hypovolaemia

It occurs as the result of an abnormally low blood volume and is life threatening

Causes:

- Recent Surgery (bleeding or fluid loss)
- Severe Dehydration (diarrhoea/ vomiting)
- Trauma
- Burns

Common Errors In Measuring Fluid Intake And Output

Intake:

- Over / underestimation of the volume in containers
- Failure to consider the volume of fluid in ice
- Assumption that empty containers have been taken by patients
- Failure to measure small volumes of fluid taken by the patient (e.g. Sips)

Common Errors In Measuring Fluid Intake And Output

Output:

- Under / over estimation of loss which is difficult to measure such as vomit, incontinence and wound exudate
- Failure to take into account leakage from catheters
- Failure to consider fluid lost as perspiration

Scenario

- Dorothy is a 76 year old lady who has been admitted due to an infection in a large leg ulcer. Dorothy is having IV antibiotics and has been very unwell. Due to the infection Dorothy is regularly spiking high temperatures and is very hot and sweating a lot. Dorothy is drinking well and passing good amounts of urine but still shows signs of being dehydrated.
- What might be the reason that Dorothy still is not achieving a good fluid balance?
- How could this be documented and where?

COMMON ERRORS IN MEASURING FLUID INTAKE AND OUTPUT

RECORDING:

- Not knowing who is on fluid balance charts
- Failure to inform patient of monitoring
- Failure to measure volumes when it is quicker to guess
- Failure to record hourly estimations accurately

How Can We Improve Fluid Balance Monitoring?

- Measuring accurately
- Weigh pads dry and then when wet
- Be clear about who you are monitoring – speak to your colleagues and divide the workload when possible
- If you help a patient to drink write down the volume straight away
- Communicate well with your qualified nurses
- Ensure that your patient is aware and that the necessary equipment is ready for them



"Illnesses are deeply meaningful events within people's lives, events that often challenge people to think about their lives quite differently. Spirituality sits at the heart of such experiences.

A person's spirituality...provides belief structures and ways of coping through which people begin to rebuild and make sense of their lives in times of trauma and distress.

It offers ways in which people can explain and cope with their illness experiences and in so doing discover and maintain a sense of hope, inner harmony and peacefulness in the midst of the existential challenges illness inevitably brings."

Swinton J in Cobb M (Ed) (2005) The Hospital Chaplain's Handbook



Spiritual Care

- Exploring the individual's sense of meaning and purpose in life
- Exploring attitudes, beliefs, ideas, values and concerns around life and death
- Exploring individual's hopes and fears regarding past, present and future
- Exploring concerns regarding how the individual's illness will effect others
- Exploring the why? questions in relation to life, death, illness and suffering



Christian Religious Needs

- The Sacraments of:
 - Baptism
 - Confirmation
 - Holy Communion
 - Reconciliation - Confession
 - Anointing of the Sick
 - Marriage
- Prayer
- Scriptures
- Commendation at time of death
- Funeral



World Faith Communities




Multi-faith Sanctuaries

- Prayer
- Meditation
- Reflection
- Silence
- Services
- Worship
- Ceremonies



Staff Needs




"We're short a few nurses again. Buses is not an option."

How Chaplaincy Can Help You


- We can provide religious support, pastoral care and a listening ear to patients, relatives, carers and staff.
- You don't have to be religious to access this service.
- Chaplains are available 24/7.
- You can refer patients to chaplaincy for support, we can be a resource for you to use.
- Support and advice with 'Religious and Faith' practices.

- 9-5 Monday – Friday
- Phone: ex 43230
- In person: office UHW B5
office UHL
- Intranet
- spiritual.careteam@wales.nhs.uk
- Switch Board – on call chaplains
24/7



"There is much suffering in the world - physical, material, mental. The suffering of some can be blamed on the greed of others. The material and physical suffering is suffering from hunger, from homelessness, from all kinds of diseases.

But the greatest suffering is being lonely, feeling unloved, having no one. I have come more and more to realize that it is being unwanted that is the worst disease that any human being can ever experience."



Reflection



Robert Ledsam Clinical Facilitator

Aims/Objectives

- By the end of the session you will be able to state what Reflection is and discuss the benefits of applying reflection to your individual practice.
- You will have knowledge of a model of reflection and be able to discuss it's main points.

Reflection

- Reflective practice model serves as a framework within which nursing or other management professions can work.

Definitions of reflection

- "...an activity in which people recapture their experience, think about it, mull over it and evaluate it"

Boud, Keogh and Walker (1985)

- "...through reflection and analysis we strive to understand the experience"

Osterman and Kottkamp (1993)

- This striving for understanding links reflection with learning

So.....What is Reflection?

- "the capacity to **reflect** on action so as to engage in a process of continuous learning" (Schon 1983)
- One of the defining characteristics of professional practice (Schon 1983)
- The importance of **reflecting** on what you are doing, as part of the learning process.

What is reflection?

- It is a thought process
- It involves:
 - looking back at events and asking questions (**Retrospective**)
 - looking forward (crystal ball gazing) and asking questions (**Prospective**)
 - self-assessment of practice / competence in a given situation
 - looking for learning points within the scenario or situation on which you reflect
 - identifying learning / development needs

Potential benefits of reflective practice

- Improves the quality of our performance
- Allows us an objective look at our practice in order to improve
- Helps us to recognise what we do well so that we can apply these skills in other situations

Potential benefits of reflective practice

- Improves professional judgement
- Helps us to learn from successes and mistakes to enhance development
- Helps us to plan for future situations and therefore respond more positively to change
- Enables us to apply the skill of reflection to the CPD cycle

How might you already be reflecting?

- Talking over a situation you have found difficult with a partner, friend or colleague e.g. a difficult patient or doctor or an intervention
- Thinking over the events of the day on the way home
- During your Personal Development Review (PDR), when you look at your performance during the past year, and assess your learning / development needs for the next year
- Application forms for attending training events sometimes ask you to reflect on why you feel you need to attend; and also ask for you to evaluate your learning on return to work

Models of Reflection

- Gibbs Model of Reflection - 1988
- Kolb's Learning Cycle – 1984
- John's Model of Reflection – 1994
- Atkin and Murphy's Model of Reflection - 1994

Gibbs Model

6 stages

1. Descriptive
2. Feelings
3. Evaluation
4. Analysis
5. Conclusion
6. Action Plan

Stage 1

Description

Describe the event/care/occurrence that you are reflecting upon.

Stage 2

Feelings

Describe what you were thinking and feeling as the event/care occurrence took place.

Stage 3

Evaluation

What was good and bad about the experience.

Stage 4

Analysis

What sense can you make of the situation.

Stage 5

Conclusion

What else could you have done.

Stage 6

Action Plan

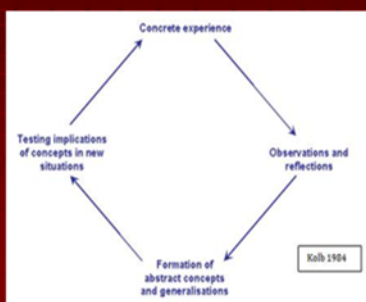
If the situation arose again what would you do.

At this point you could also think about transferring what you have gained from the reflection to other circumstances.

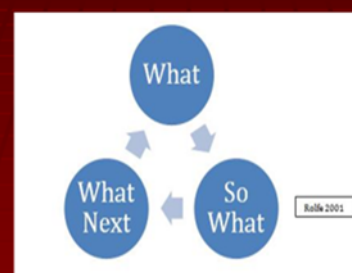
Gibbs Model of Reflection



Adaptation of Kolbs Model



Rolfe Reflexive Model based on Borton 1970





Individual work

- Using the template provided and your own practice reflect on an area of care/ task or occurrence that took place.
- This should take up to 30 min as you use the cycle to analyse what occurred and gain new insight in to the occurrence you are reflecting upon.

Aims/Objectives

- By the end of the session you will be able to state what Reflection is and discuss the benefits of applying reflection to your individual practice.
- You will have knowledge of a model of reflection and be able to discuss it's main points.

Further Reading

- Bolton, G (2010) *Reflective Practice, Writing and Professional Development*. 3rd Ed, California: SAGE publications.
- Gibbs G. (1988) *Learning by Doing: A guide to teaching and learning methods*. Further Education Unit, Oxford Brookes University, Oxford.
- Schön D.(1988) *Educating the Reflective Practitioner*. London: Basic Books.



Aims of the Session

- To understand the prevalence of sensory loss in Wales
- To gain awareness of the impact that sensory loss has on an individual
- To think about the area in which you work and what techniques you may use to help people with sensory loss.

What is Sensory Loss?

The term 'people with sensory loss' is used throughout to refer to the following:

- People who are Deaf; deafened or hard of hearing;
- People who are Blind or partially sighted;
- People who are Deafblind: those whose combined sight and hearing impairment cause difficulties with communication, access to information and mobility.

NB There is a legal duty under the Equality Act 2010 to ensure that reasonable adjustments are made to deliver equality of access to healthcare services for disabled people.



How Common is Sensory Loss?

- More than **600,000** people in Wales have hearing and/or sight loss. This means that in any hospital or general practice waiting room, **1 in 4** patients are likely to have some form of sensory loss. (i)
- There are approximately **575,500** deaf and hard of hearing people in Wales. (ii)
- There are approximately **4,000** people in Wales who are Deaf and use British Sign Language (BSL) (iii)



How Common is Sensory Loss?

- **70%** of people aged 70 and over have hearing loss. (ii)
- There are approximately **100,000** blind and partially sighted people in Wales. (iv)
- **1 in 3** people over the age of 85 are living with sight loss. (v)
- There are approximately **18,850** people in Wales who are Deafblind, i.e. living with a combination of sight and hearing loss. (vi)



Why is this Important?

- People with sensory loss are more likely to experience major health conditions as well as higher levels of mental illness. (viii)
- **69%** of people with sight and hearing loss in the UK have two or more additional long term conditions. (vii)
- **61%** of people with sight and hearing loss reported symptoms of anxiety and depression, compared with **31%** of people from the general population. (viii)



Why is this Important?

- People with learning disabilities are ten times more likely to have a serious sight problem and **60%** will need to wear glasses. (ix)
- Lack of accessible information and communication support leads to missed diagnosis and poor treatment, which costs the NHS **£30 million** a year. (x)



Video

- [Living Full Lives with Sensory Loss - YouTube](#)



What did you learn from that video?



Building a Learning Culture



Communicating with people with sight loss.

- Give your name when you approach or speak to a person with sight loss.
- Be aware that if a person does not respond, it may be that they are unaware that you are speaking to them
- If a person does not respond, you could touch their arm lightly to let them know you are speaking to them.
- Make sure they are wearing the right glasses to see you



Communicating with people with sight loss.

- Ensure that you introduce anyone is with you
- If you are leaving the conversation remember to tell the person that you are leaving
- Speak directly to the person and not to someone who may be accompanying them.
- If you are using written communication, explore alternative formats such as font size, audio, braille etc...



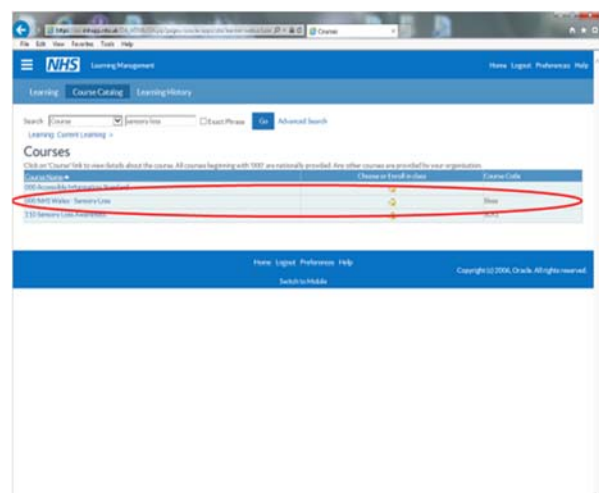
Communicating with people with hearing loss.

- Face the person, maintain eye contact and keep your mouth free from obstruction
- Be careful not to turn your head away
- Support your speech with appropriate facial expressions. Do not exaggerate your mouth movements
- Ensure hearing aids are in and working (Check Batteries!)



Communicating with people with hearing loss.

- Use your normal voice level. DON'T SHOUT!
- Ensure people are aware of systems available on the ward such as hearing loops
- Ask if a person requires an interpreter
- Explore the most effective method for communicating remotely ie: text messages/emails



Any Questions

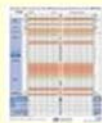


References

- i. Action on Hearing Loss Cymru, RNIB
- ii. Action on Hearing Loss
- iii. BDA (2015)
- iv. Sources and further information: (A review of support in Eye Clinics (Barrick RNIB 2000), Blind and Partially Sighted Adults in UK (Bruce et al RNIB 1991), The Eye Clinic Journey (McBride RNIB 2002)) Towards an Inclusive Health Service: A Research Report into the availability of health information for blind and partially sighted people, (E. Sibley March 2009).
- v. Sensory Loss in the adult population in Wales (WGLA 2012)
- vi. Robertson J and Emerson E (2010) Estimating the Number of People with Co-Occurring Vision and Hearing Impairments in the UK. The Centre for Disability Research (CeDR)
- vii. Annual report of the Chief Medical Officer, 2012, On the State of the Public's Health: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/298297/cmo-report-2012.pdf
- viii. Data based on analysis of the GP Patient Survey by Sense for deafblind people (2016). Equal Access to Healthcare: The Importance of accessible healthcare for people who are deafblind.
- ix. Emerson, E., & Robertson, J. (2011). Estimated prevalence of visual impairment among people with learning disabilities in the UK. London: RNIB and SeeAbility Learning Disabilities Observatory. <http://www.rnib.org.uk/knowledge-and-research-hub/research-reports/prevention-sight-loss/prevalence-VI-learning-disabilities>
- x. <http://www.signhealth.org.uk/health-information/sick-of-it-report/>.



Undertaking and Recording Vital Signs



Session Objectives

By the end of this session you will

- Have knowledge of the A&P of vital signs and be able to undertake these and record them correctly on an observation chart



1. Why do we record observations?

2. WHAT OBSERVATIONS DO WE DO?

What is Blood pressure? (BP)

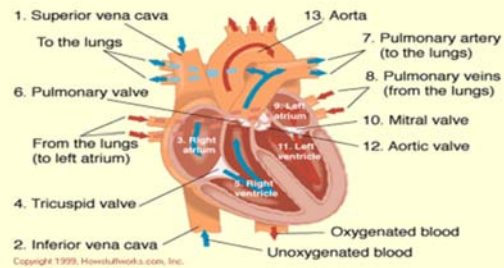
- The pressure exerted on artery walls by the blood as it flows through them (mmHg)
- 2 pressure measurements
 1. Systolic (Heart contracting)
 2. Diastolic (Heart relaxed)

Facts about the Heart !

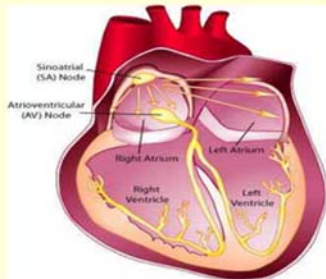
- It's a muscle about the size of your fist
- Weighs between 200-425g
- It beats about 3 billion times during an average life time
- and each day your heart beats about 100,000 times and pumps about 5,000 gallons of blood around your body



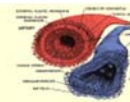
A&P of the Heart



How the Heart Works



Veins, Arteries & Capillaries



- **Arteries**
Carry blood **away** from the heart
Thick muscular wall
bright red
- **Veins**
Carry blood **to** the heart
Thin walls
Dark red
- **Capillaries**
Connect arteries to veins
Oxygen and waste pass in and out of your body through capillary walls



MEASURING BLOOD PRESSURE

- Measured internally or by using a sphygmomanometer (Korotkoff sounds) or dynamap (The machine should be at the same level as the heart)



Always use the correct size cuff for the patient



Normal values

- Normal Bp = 120/70 mmHg (age dependant)
- Hypertension = 140/90 mmHg upwards
..... Will depend on patient as well though
- Hypotension = top number being under 100

Hypertension

Causes:

- 90% unknown
- Kidney / Liver problems
- High salt / saturated fat intake
- Pain
- Drugs

Effects:

- Headache, Heart failure, Cerebral Haemorrhage, MI, Poor vision, Kidney failure, Death

Hypotension

Causes:

- Dehydration
- Haemorrhaging
- Drugs
- Shock

Effects:

- Dizziness, Fainting, Organ failure, Death

What is a Pulse?

- A series of pressure waves within an artery caused by the contractions of the heart
- Can be felt at any point where the artery is near the surface of the skin
- Recorded as beats per minute – must always be counted for a full minute

Where can you find a Pulse

- Radial 
- Brachial 
- Carotid 
- Pedal – Foot 
- Femoral – Groin 
- Popliteal - Behind knee

Normal pulse values

- Normal rate = 60-80 beats per minute
- Bradycardia = <60bpm
- Tachycardia = >80bpm
- Either could lead to cardiac arrest



Counting the Pulse

- Count for a full minute
- Is the pulse regular?
- Is the pulse strong or weak?
- Note patient's skin condition – are they cold / clammy or hot and sweaty – **ALWAYS report both!**



WHAT CAN EFFECT THE HEART RATE?

- Bleeding/ hypovolaemia
- Shock
- Fluid overload
- Dehydration
- Sepsis (severe infection)
- Exercise
- Drugs
- Heart Problems

Blood Facts

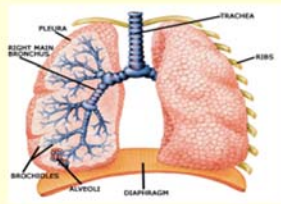
One **drop** of blood contains:
half a drop of plasma,
5 MILLION Red Blood Cells,
10 THOUSAND White Blood Cells
250 THOUSAND Platelets.



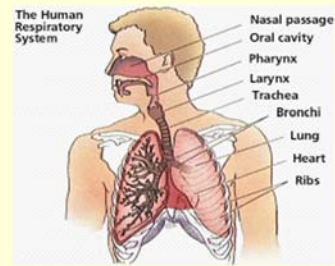
- Body contains about 5 litres (8 pints) blood
- If you took all of the blood vessels out of an average adult they would be **100,000** miles long! (wrap around the equator twice!!)

Respiration

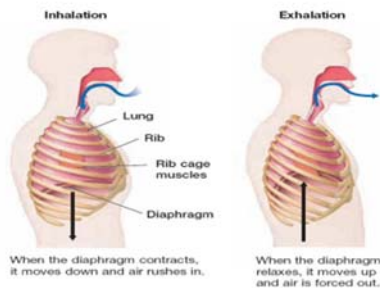
What is Respiration?



Respiratory System



Inhalation and Exhalation



LOOK, LISTEN AND FEEL



- Count the number of resps per min
- Important to count the number of breaths for 1 whole minute to determine rate and rhythm
- **Look** at the way the patient breathes
- Are the breaths regular?
- Report any noises you can **hear** when the patient breathes!
- If you find it hard to see the patient breathing gently place your hand on their chest to **feel** the breaths

Normal values

- Normal rate is 12 – 16 breaths per minute

Abnormal rates may lead to lack of oxygen and could result in respiratory arrest



What can effect the respiratory rate?

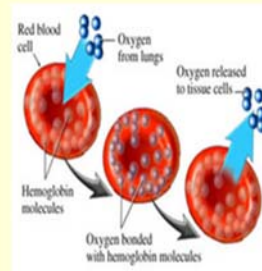
- Sepsis
- Bleeding/ hypovolaemia
- Fluid Overload
- Shock
- Drugs i.e. Morphine
- Exercise



Oxygen Saturations

- Oxygen is carried in the blood attached to haemoglobin molecules.
- Oxygen saturation is a measure of how much oxygen the blood is carrying as a percentage of the maximum it could carry.
- Low O2 saturations are below 95%

Oxy Haemoglobin



- 1 Haemoglobin molecule will carry 4 Oxygen molecules
- Haemoglobin is contained in erythrocytes, more commonly referred to as red blood cells.

Low oxygen saturations

Causes:

- Long term chest conditions
- Lying flat
- Anaesthetic
- Hypovolemia
- Chest infection

Temperature

- Body temperature is a measure of the body's ability to generate and get rid of heat.
- The body is very good at keeping its temperature within a narrow, safe range in spite of large variations in temperatures outside the body.

How does it work?



- Pyrexia = >37.5
 - blood vessels in your skin expand (dilate) to carry the excess heat to your skin's surface.
- too cold = <35
 - your blood vessels narrow (contract) so that blood flow to your skin is reduced to conserve body heat.

General Observations

- Colour
- Sweat
- Facial expression / Posture
- Confusion / Agitation
- Limb power
- Eyes
- Skin

Observational Charts

- Vital Signs charts
- Pain charts
- Neuro obs charts
- Fluid balance charts
- Food charts
- Special observation charts
 - Weight, Turns, Bowels, Trachy etc

Peak Flow

- Used to detect the maximum volume of air a patient can exhale quickly
- used in the diagnosis and treatment of asthma
- Correct technique:
Standing up
Best of three attempts



Session Objectives

By the end of this session you will

- Have knowledge of the A&P of vital signs and be able to undertake these and record them correctly on an observation chart



Questions



Physical Observations, measurements and normal ranges.

Observation	Normal Range
Respiratory Rate	12-20
O2 Saturations	96-100
Temperature	36.1-37.5c
Blood Pressure	120/60 – 140/90
Heart Rate	60-90 beats per minute.

What are respirations?

Respirations are when you breathe in and out. Your respiratory, or breathing, rate is the number of times you breathe in and out in 1 minute. Most people breathe in and

out 12 to 20 times every minute. This is the **most important** observation you will take, but most commonly forgotten.

What are O2 (oxygen) saturations?

O2 saturations often referred to as 'sats' are the percentage of haemoglobin that is oxygen-saturated. This is measured using a pulse oximetry probe.

What is temperature?

Body temperature is measured using a thermometer with the normal range 36.1-37.5°C indicating optimal health and thermoregulation.

What is blood pressure?

The first number, called **systolic** blood pressure, measures the pressure in your blood vessels when your heart beats. The second number, called **diastolic** blood pressure, measures the pressure in your blood vessels when your heart rests between beats.

For example:

Systolic

Diastolic

Note: Systolic is always the bigger number.

This will be taken by using a vital signs machine (dynamap) which records your blood pressure (BP) or manually taken using a stethoscope and sphygmomanometer.

What is heart rate?

Heart rate is the number of times your heart beats in 1 minute; also known as pulse. The diagram below shows where you can take a pulse on a body.

Blood Pressure (BP) Measurement



Blood pressure (BP) monitoring is one of the principal vital signs. It assesses the pressure required by the heart to pump. This is routinely measured on all patients whether in hospital, outpatient clinics or by the patient's GP.

Procedure Steps

Step 01

Ensure that you have the necessary equipment:

- A sphygmometer.
- A stethoscope
- Hand cleansing gel.



Equipment for measuring blood pressure

Step 02

It is important when measuring blood pressure to build a rapport with your patient to prevent [White coat syndrome](#) which may give you an inaccurately high reading.

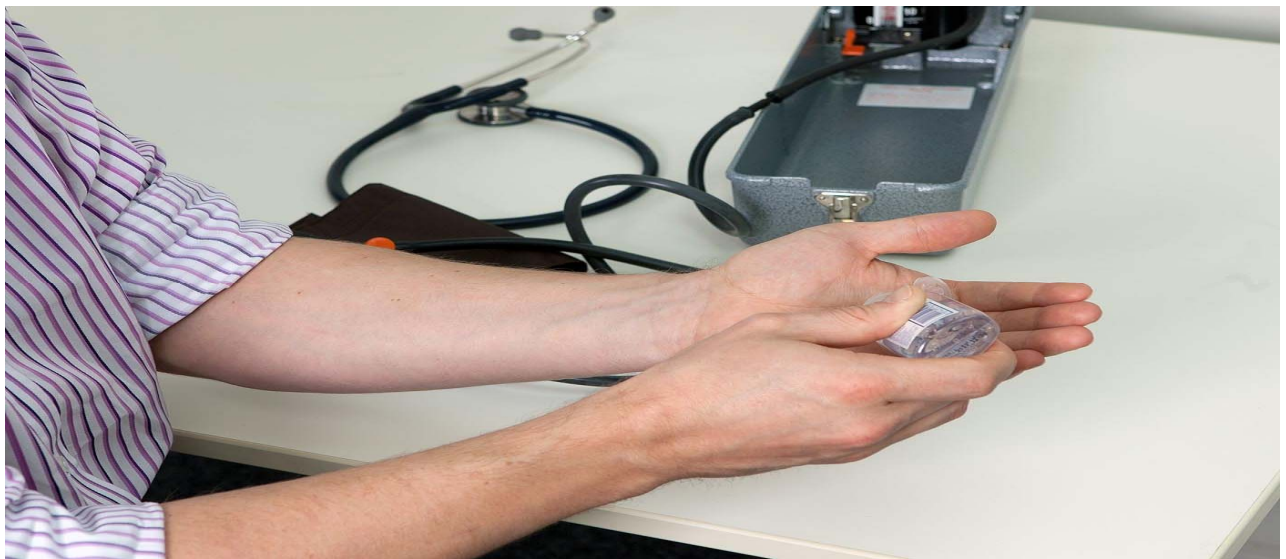
Therefore, ensure you introduce yourself to the patient, explain the procedure answering any questions they may have, and ask for their consent. You should also explain to them that they may feel some discomfort as you inflate the cuff, but that this will be short-lived. Make sure they are sitting comfortably, with their arm rested.



Introduce yourself to the patient

Step 03

As with all clinical procedures, it is vital that you first wash your hands with alcohol cleanser and allow to dry.



Sanitise your hands using alcohol cleanse

Step 04

Ensure that you have selected the correct cuff size for your patient. A different cuff size may be required for obese patients or children.



Select the correct cuff size to suit your patient

Step 05

Wrap the cuff around the patient's upper arm ensuring the arrow is in line with the [brachial artery](#). This should be determined by feeling the *brachial pulse*.



Ensure correct placement of the cuff

Now that you have a rough value, the true value can be measured. Place the diaphragm of your stethoscope over the brachial artery and re-inflate the cuff to 20-30 mmHg higher than the estimated value taken before.

Then deflate the cuff at 2-3 mmHg per second until you hear the first [Korotkoff sound](#) – this is the systolic blood pressure.

Continue to deflate the cuff until the sounds disappear, the 5th Korotokoff sound – this is the diastolic blood pressure.



Record the true blood pressure

Further Reading

Nice guidelines: Pressure ulcer prevention and treatment

<https://www.nice.org.uk/Guidance/cg179>

Nice guidance: Hypertension

<https://www.nice.org.uk/guidance/CG127>

Nice guidance: Care of people at the end of Life

<https://www.nice.org.uk/news/article/new-guidelines-to-improve-care-for-people-at-the-end-of-life>

Nice guidance: Acutely ill person

<https://www.nice.org.uk/guidance/cg50>

Nice guidance: Assessment of pain

<http://www.evidence.nhs.uk/search?q=pain+assessment+guideline>

Agored Cymru

<https://www.agored.cymru/>

National pressure ulcer advisory panel

<http://www.npuap.org/resources/educational-and-clinical-resources/>

Stool sampling

<https://www.gov.uk/government/news/poo-pots-how-do-you-fill-them>

Urine Sampling

<http://www.bd.com/vacutainer/labnotes/Volume14Number2/>

RCN: First steps

<http://rcnhca.org.uk/>

Cardiff & Vale Employee wellbeing

<http://www.cardiffandvaleuhb.wales.nhs.uk/your-health-wellbeing>