

# ERCP - Endoscopic Retrograde Cholangio - Pancreatography

## Directly Observed Practical Skills:

- 1 Pre Procedure Preparation
- 2 Patient Monitoring
- 3 Cannulation & Sphincterotomy
- 4 Wire Insertion & Exchange
- 5 Needle Knife
- 6 Balloon Stone Extraction
- 7 Basket Stone Extraction
- 8 Mechanical Lithotripsy Basket (MLB)
- 9 Biliary and Pancreatic Dilation
- 10 Plastic Stent Insertion & Removal
- 11 Metal Stent Insertion & Removal
- 12 Cytology Brushing
- 13 Spyglass
- 14 Injection Therapy



Name:

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Position:

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Assessor:

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Date Commenced:

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Date Completed:

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## This scoring system will be used when assessing all competencies for your practice within the unit

The rating scale has been adapted from Benner (1982) and mirrors the New Zealand Professional Development and Recognition Programme (PDRP) stages. This allows for DOPS assessments to be completed and included as evidence in a Proficient or Expert portfolio. The criteria for clinical evaluation cluster into three areas: Stage of Skill Acquisition, **Quality of Performance** and Performance Indicators for that level of competency. Additionally, five descriptive levels of competency are identified: Novice, Advanced Beginner, Competent, Proficient and Expert.

Scale label	Score	Definition	Stage of Skill Acquisition	Quality of performance	Performance Indicators
<b>Expert</b>	<b>5</b>	The individual has extensive knowledge of situations that allows for confidence and an intuitive grasp of complex patient situations. Rules, guidelines and maxims are no longer relied upon because the individual is able to grasp the situation, apply creative thinking and understand what needs to be accomplished.	Safe Accurate Effect - Achieves intended outcome Affect - Efficiency is appropriate to intended outcome	Expert Co-ordinated Confident Expedient timeframe	Engages in clinical learning for others as an acknowledged expert in area of practice. Contributes to specialty knowledge and innovation in practice. Initiates and guides quality improvement activities. Delivers quality care to patients in complex situations while rolemodelling expert skills. Influences at service, professional or organisational level.
<b>Proficient</b>	<b>4</b>	The individuals is able to grasp a situation in it's entirety. They have a holistic understanding of what is needed which allows for faster decision making, they can multitask and be flexible.	Safe Accurate Effect - Achieves intended outcome Affect - Efficiency is appropriate to intended outcome	Proficient Co-ordinated Confident Expediant timeframe	Can practice autonomously and collaboratively with colleagues. Recognises complexity in patient status and acts proactively. Rolemodels and acts as a resource person to others. Actively contributes to the learning of others. Participates in quality improvement and practice innovation.
<b>Competent</b>	<b>3</b>	The individual is able to prioritize tasks at hand by utilising past experiences. They work in an efficient and organised manner due to conscious, deliberate planning to achieve known goals.	Safe Accurate Effect - Achieves most objectives for intended outcome Affect - Efficiency generally appropriate to context	Competent description of practical application Proficient demonstrate with practice equipment Confident  Expedient timeframe	Requires occasional supporting cues. Applies knowledge and skills to practice. Holistic overview of the patient and can anticipate health interventions and outcomes. Manages and prioritises care.
<b>Advanced Beginner</b>	<b>2</b>	An individual who has been involved in clinical activities enough to recognise recurrent actions or skills. They have some clinical knowledge but the focus is on rules and guidelines that have been taught. They still need assistance and support to ensure important patient needs do not go unattended.	Safe with guidance from others Building accuracy in processes  Effect - Completes tasks with support Affect - Efficiency generally inappropriate to context	Proficient when assisted Working towards optimal accuracy in care planning  Building confidence with support Developing confidence	Working with support of team Requires support in planning and delivering clinical complex care. Developing skills for interventional and diagnostic procedures.
<b>Novice</b>	<b>1</b>	An individual who has no previous experience with the situation at hand. They have limited knowledge and an inability to use discretionary judgement. They struggle to decide which tasks are most relevant to accomplish as they have no concrete rules to regulate performance.	Safe - Safe with direct support from others Accurate- when working directly with others Effect- Contributes to completion of tasks with direct support from others. Affect- Efficiency supported by working with others in completing tasks.	Learning practical skills alongside peer Working alongside peer Completes tasks with peer Learning to plan, prioritise and complete tasks.	Requires peer support from proficient or expert nurse

\*Recognition of prior learning: Certificates, demonstrations, oral presentations may be used as evidence.

## ERCP Directly Observed Practical Skills Assessment

		Date	Competency Score	Staff Signature	Assessor Signature	Comment
1	Pre procedure					
2	Patient Monitoring					
3	Cannulation / Sphincterotomy					
4	Wire Insertion and Exchange					
5	Needle Knife					
6	Balloon Stone Extraction					
7	Basket Stone Extraction					
8	Mechanical Lithotripsy Basket					
9	Biliary and Pancreatic Dilation					
10	Plastic Stent Insertion and Removal					
11	Metal Stent Insertion and Removal					
12	Cytology Brushing					
13	Spyglass					
14	Injection therapy					

Review Date:					
Item number (1-14):					
New competency score:					
Staff Signature:					
Assessor Signature:					

## Direct Observation of Practice

Date:

Pre-procedure preparation	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Ensure that each patient booked on the ERCP list has an appropriate procedural referral and x-ray has received a copy of each referral.		
Ensure that all duodenoscopes have been prepared correctly as per reprocessing guidelines.		
Ensure that all medications have been prepared and labelled correctly as per facility policy.		
Ensure that radiopaque contrast has been prepared and labelled correctly as per facility policy.		
Ensure that all the equipment has been safely transported to the screening room (if required) and the procedural room has been set up correctly.		
Ensure that the duodenoscope has been correctly connected to the light source and processor with all checks performed prior use. Eg. Suction / airflow / white balance/ CO2 / single use cap for Olympus 190 / locking device		
Ensure diathermy is operational and on the correct settings for ERCP.		
Can identify risks associated with diathermy and take appropriate precautions to ensure patient safety is maintained eg. pacemaker / ICD insitu, artificial joint.		
Can discuss the side effects and contraindications of <b>all</b> medications that may be administered during an ERCP eg. Glucagon, Hyoscine-N-Butylbromide.		
Ensure <b>all</b> emergency drugs are easily identified and accessible if required.		
Can discuss the side effects and contraindications of all emergency drugs.		
Ensure all patient documentation has been completed correctly prior to commencing the ERCP and is present with the patient eg. pre procedure checklist, medication chart and IV fluids chart.		
Can discuss the blood results required prior to an ERCP and the importance of ensuring these results are available prior to intubation. Eg. creatinine, INR		
Ensure the patient has been consented for the ERCP procedure prior to transfer to the screening room.		
Ensures that patient understands the procedure that they are having and has had the opportunity to ask questions and get answers..		
Ensure the 'Time out' process has been completed before commencing the ERCP procedure as per facility policy and allergies have been identified.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Patient monitoring	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Can discuss the requirements and rationale for patient monitoring during an ERCP procedure as per facility policy.		
Can attach the monitoring equipment appropriately to the patient and can provide an appropriate explanation for their actions.		
Ensure the oxygen is correctly positioned and set at the appropriate flow rate.		
Safely position the patient for the ERCP procedure and explain the need for a particular position. eg. Prone or Superman		
Safely position the diathermy pad on the patient to maximise effect without harming the patient eg. metal hip joints, pacemaker (See Diathermy DOP)		
Safely maintain the patient's airway throughout the procedure through positioning and suctioning.		
Monitor the patient's vitals and communicate any changes to the endoscopist immediately.		
Reassure the patient throughout the procedure eg. verbal / non-verbal communication.		
Ensure all vital signs, oxygen delivery and sedation levels are documented as per facility policy eg. NZEWS / verbal order policy.		
Accurately document all therapies and interventions undertaken during the ERCP in the patient procedural documentation.		
Safely transfer the patient from the x-ray bed and prepare for a safe transfer to the recovery area. Eg. ambu bag, continuous O2 monitoring, O2 & IV fluids.		
Provide an accurate handover to recovery nursing staff and clear post procedure instructions as per facility policy eg. Protocol A or B.		
<b>Assessors / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Cannulation / Sphincterotomy	Score	COMMENT
<b>To demonstrate competency in this the nurse will be observed:</b>		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Can identify the different types of cannulae / sphincterotomes that may be used to cannulate the common bile duct (CBD) or pancreatic duct (PD) and discuss the differences between them.		
Selects the appropriate cannula / sphincterotome required for the ERCP procedure as per the clinical indications listed on the patient referral.		
Safely removes cannula / sphincterotome from packaging and follows facility policy / guidelines for product tracing of disposable accessories.		
Inspects the product for any abnormalities to ensure it is suitable for use.		
Prepares the cannula / sphincterotome for use, careful to maintain 'clean' working area / field.		
Ensures diathermy is operational and setting correct for ERCP (See Diathermy DOP)		
Identifies the channel for guide wire placement and inserts guidewire (if appropriate).		
Identifies the channel for radiopaque contrast injection and primes appropriately with the correct strength of contrast.		
Can discuss the contraindications for use of radiopaque contrast.		
Can identify the papilla.		
Safely pass the cannula / sphincterotome to the endoscopist.		
Once the cannula / sphincterotome is in endoscopic field of vision, injects contrast to check it is primed correctly before cannulating the duct.		
Follows endoscopist's instruction eg.'splitting' guide wire from cannula / sphincterotome and ensuring it is secured appropriately eg. locking device		
Follows endoscopist's instruction to angulate tip of cannula / sphincterotome to assist with duct cannulation and making a cut in the Sphincter of Oddi using diathermy.		
On instruction, injects radiopaque contrast into the appropriate duct for imaging.		
Demonstrates exchanging the cannula / sphincterotome over the guide wire.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Dispose of all equipment safely as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Wire Insertion and Exchange	Score	COMMENT
<b>To demonstrate competency in this the nurse will be observed:</b>		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Can describe the purpose of using a guide wire.		
Can identify the different types of guide wires, the differences between them and indications for use.		
Identifies the appropriate guide wire for the ERCP procedure.		
Safely removes guidewire from packaging and follows facility policy / guidelines for product tracing of disposable accessories.		
Inspects the product for any abnormalities to ensure it is suitable for use.		
Identifies the channel for guide wire placement in the cannula / sphincterotome and prepares appropriately eg. flush with sterile water for lubrication.		
Advances the guide wire into the correct channel.		
Follows the endoscopist's instructions to split the guide wire and secure in place eg. locking device.		
Able to identify guide wire placement in CBD and PD on x-ray image.		
Able to use the guide wire to introduce / exchange equipment.		
Able to explain the process of exchange eg. back tension to maintain position.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of equipment safely as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Needle Knife	Score	COMMENT
<b>To demonstrate competency in this the nurse will be observed:</b>		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Can describe the difference between a Needle Knife and other sphincterotomy equipment.		
Can describe the difference between a 'sphincterotomy' and a 'precut'.		
Can prepare the patient safely for a sphincterotomy / precut eg. correct diathermy settings (See Diathermy DOP)		
Safely removes the Needle Knife from packaging and follows facility policy / guidelines for product tracing of disposable accessories.		
Inspects the product for any abnormalities to ensure suitable for use.		
Prepares the selected equipment for use. eg. guidewire inserted, Needle Knife connected to diathermy.		
Demonstrates the exchange of a Needle Knife over a guide wire (if required).		
Demonstrates the mechanism for extending and retracting the needle safely.		
Ensures the needle is secured at the appropriate length during sphincterotomy.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of equipment as per facility policy.		
<b>Assessor / Nurse's Initial</b>		



## Direct Observation of Practice

Date:

Balloon stone extraction	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Can discuss the formation of biliary stones and the possible complications the patient may present with eg. vomiting, RUQ pain, fever, jaundice		
Can describe how an stone extraction balloon works.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Selects the appropriate balloon size / type for duct.		
Safely removes balloon from packaging and follows facility policy / guidelines for product tracing of disposable accessories.		
Inspects the product for any abnormalities to ensure it is suitable for use.		
Identifies and connects the correct syringe to test balloon inflation.		
Identifies and connects radiopaque contrast injection and primes channel for use.		
Is able to exchange the balloon over the guide wire.		
Can identify any bile stones on X-ray image and the location of the balloon.		
Follows the endoscopist's instructions on balloon inflation and communicates clearly back to endoscopist.		
Injects contrast as instructed by endoscopist.		
Deflates the balloon when appropriate or instructed.		
Can identify issues / troubleshoot balloon inflation problems.		
Can describe what a balloon cholangiogram is and when this may be used.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of all equipment as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Basket stone extraction	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Can discuss how the stone extraction basket works.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Identifies the equipment required for basket stone extraction.		
Select the appropriate basket size / type and describe why that size was selected.		
Safely removes equipment from packaging and follows facility policy / guidelines for product tracing of disposable accessories.		
Inspects the product for any abnormalities to ensure it is suitable for use.		
Demonstrates assembling the crushing handle and stone extraction basket together if required.		
Opens the basket as instructed.		
Closes the basket in a controlled manner.		
Demonstrates safe stone extraction from duct and closes basket on instruction to crush stone and allow debris to drop into duodenum.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Can identify possible issues using the basket and locate the emergency equipment that may be required.eg. lithotripter handle		
Disposes of equipment as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Mechanical Lithotripsy Basket (MLB)	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Can describe how the Mechanical Lithotripsy Basket (MLB) works to crush stones too large for whole extraction.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Correctly locates and identifies all equipment required to undertake MLB.		
Safely removes equipment from packaging and follows facility policy / guidelines for product tracing of disposable equipment.		
Inspects the product for any abnormalities to ensure it is suitable for use.		
Assembles ready for use and tests operation of MLB outside of the duodenoscope.		
Selects the appropriate channel for injection of contrast and primes prior to insertion.		
On instruction, advances the plastic sheath in a controlled manner over the guidewire (if insitu) and locks into place.		
On instruction, is able to open and close the basket in a controlled manner and crush stones.		
On instruction, be able to retract plastic sheath into metal sheath, and lock.		
Can describe the possible difficulties with MLB and can locate and assemble the emergency lithotripter handle if necessary.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of equipment safely as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Biliary and Pancreatic dilation	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Can describe the rationale / reasons for biliary or pancreatic dilation.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Identifies the equipment required for dilation eg. biliary balloon or dilation catheter.		
Safely removes all equipment from packaging and follows facility policy / guidelines for product tracing of disposable equipment.		
Inspects the product for any abnormalities to ensure it is suitable for use and checks expiry date.		
Prepares the appropriate medium for balloon inflation device. ie 50/50 contrast/saline mix		
Identifies and connects inflation device to balloon port		
Exchanges the dilation balloon over the guide wire.		
Inflates the balloon to correct PSI pressure (using the attached guide) and maintains pressure for required length of time. Communicates clearly with endoscopist.		
Deflates the balloon device before removal from the duct and duodenoscope.		
Places the dilation catheter over the wire and inserts as directed, communicating actions with endoscopist. Assists endoscopist with cannula dilation as instructed.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of equipment as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Plastic stent insertion and removal	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Can identify and discuss the rationale / reasons for the insertion of a plastic stent.		
Can distinguish between the different types of plastic stent eg. straight / pigtail / biliary / pancreatic.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Locates and identifies all the therapeutic accessories required for a plastic stent insertion, eg pushing cannula, correct size stent		
Can describe the function for each accessory / equipment during the plastic stent insertion.		
Safely removes accessories / equipment from packaging and follows facility policy / guidelines for product tracing of disposable accessories.		
Inspects the products for any abnormalities to ensure suitable to use.		
Prepares the equipment for plastic stent insertion eg. removes flanges / marks stent		
Uses a pre-loaded biliary stent exchange system <b>OR</b> guide wire + pushing catheter / sphinctertome / balloon to insert plastic stent into duct.		
Can assist with indentifying the correct position of the plastic stent on fluroscopy with the endoscopist.		
Follows the instructions of the endoscopist to release stent (if using a stent delivery system).		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of the equipment as per facility policy.		
<b>For plastic stent removal:</b> Selects apropriate accessory to remove plastic stent eg. snare / biopsy forcep / rats tooth forcep.		
Ensures stent has been grasped securely before removal and communicates clearly with endoscopist.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of all equipment as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Metal stent Insertion / Removal	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Can discuss the rationale for the insertion of a metal stent based on the patient's referral for ERCP.		
Can identify / describe the different types of metal stents available and what factors lead to a particular choice of stent.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Selects the appropriate metal stent when required.		
Safely removes equipment from packaging and follows facility policy / guidelines for product tracing of single use equipment.		
Inspects the stent for any abnormalities to ensure it is suitable for use.		
Prepares the metal stent for use eg. removes protective cover, lubrication		
Can describe the mechanism used for deploying the metal stent.		
Exchanges the metal stent over the guide wire.		
Identifies the position of the metal stent on x-ray.		
Deploys the metal biliary stent in a controlled manner, communicating with the endoscopist throughout the process.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Completes all documentation associated with the insertion of a metal stent as per facility policy.		
Disposes of the equipment as per facility policy.		
<b>For metal stent removal:</b> Selects appropriate accessory to remove a metal stent eg. rat tooth forcep, snare.		
Ensures stent has been grasped securely before removal and communicates clearly with endoscopist.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of the equipment as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Cytology brushing	Score	COMMENT
<b>To demonstrate competency in this area the nurse will be observed:</b>		
Can discuss the rationale for obtaining cytology brushings.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Selects the appropriate cytology brush.		
Safely removes the cytology brush from packaging and follows facility policy / guidelines for product tracing of disposable equipment.		
Inspects the product for any abnormalities to ensure it is suitable for use.		
Ensures the cytology brush is retracted.		
Exchanges the cytology brush over guide wire.		
Identifies the distal tip of the cytology brush on X-ray.		
Advances the cytology brush as instructed in a controlled manner.		
Retracts the cytology brush as instructed in a controlled manner.		
Explains why brush should be fully inside catheter before removal from the duodenoscope eg. cross contamination		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Places the specimen into the appropriate medium, and labels correctly.		
Ensures appropriate documentation is completed.		
Disposes of the equipment as per facility policy.		
<b>Assessor / Nurse's Initial</b>		

## Direct Observation of Practice

Date:

Spyglass	Score	COMMENT
<b>To demonstrate competency in this the nurse will be observed:</b>		
Can describe the clinical indications for use of Spyglass as opposed to normal duct imaging.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Can identify the appropriate accessories / equipment for Spyglass and describe the rationale for each.		
Safely removes equipment from packaging and follows facility policy / guidelines for product tracing of disposable accessories.		
Inspects the product for any abnormalities to ensure it is suitable for use.		
Prepares accessories / equipment for use and checks it is operational prior to commencing the procedure eg. white balance, flush pump etc.		
Prepare lithotripter machine for use and check it is set on correct power settings.		
Able to use the guide wire to introduce / exchange Spyglass equipment.		
Able to identify Spyglass catheter in CBD on x-ray image.		
Able to prepare lithotripter probe for use if required.		
Able to prepare Spyglass biopsy forceps for use if required.		
Follows the instructions of the endoscopist and communicates actions clearly.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of equipment safely as per facility policy.		
<b>Assessor / Nurse's Initial</b>		



## Direct Observation of Practice

Date:

Injection Therapy	Score	COMMENT
<b>To demonstrate competency in this the nurse will be observed:</b>		
Discuss the rationale for injection therapy.		
Review endoscopist preference of technique and equipment for this procedure to ensure they can safely and competently assist		
Locate and identify correct solution for use eg. saline, adrenaline, indigo carmine or methylene blue.		
Locates correct injector for procedure.		
Correctly prepares the solution for injection according to facility policy.		
Safely removes equipment from packaging and follows facility policy / guidelines for product tracing of disposable accessories.		
Inspects the product for any abnormalities to ensure it is suitable for use.		
Prepares the injector for use and primes with solution for injection.		
Demonstrates testing of the injector by moving the needle in and out of the sheath prior to passing it down the accessory channel.		
Follows the instructions of the endoscopist, injecting the solution when appropriate and retracting the needle and communicates this clearly.		
Withdraws the device from the endoscope in a safe manner to control aerosolization of body fluids and prevent channel damage.		
Disposes of equipment safely as per facility policy.		
Ensure regulations are met to document use of injection dye ie. pharmacy register is completed if required.		
<b>Assessor / Nurse's Initial</b>		