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Policy Title: POLICY ON ARTERIAL BLOOD GAS ANALYSIS (ABG)			
		Section / Department PULMONARY SECTION	
Prepared By:	Reviewed By:	Appro	oved by:
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# ARTERIAL BLOOD GAS ANALYSIS (ABG)

### I. STATEMENT OF THE POLICY

The policy on receiving requests and the collection of arterial blood gas shall serve as a guide to all Respiratory Therapist and other health care workers in the proper performance of the procedure.

## II. POLICY GUIDELINES

- 1. Physician's order must be written before extracting arterial blood.
- 2. The Respiratory Therapist must verify that arterial blood gas is requested in iHomis. Strictly NO iHomis, NO extraction.
- 3. Only trained and qualified staffs are allowed to perform arterial blood gas extractions.
- 4. Universal precaution shall be strictly observed and practiced when collecting blood specimen.
- 5. Patient's physiologic status and oxygenation shall be obtained and recorded on the request form before arterial sampling.
- 6. Anticoagulants must be used (0.5 ml of 1000units per 3cc of blood) to avoid introducing blood clots to the analyzer.
- 7. Arterial punctures shall be done preferably in the radial or brachial artery.
- 8. In case of unsuccessful blood gas extraction (two attempts) the Nurse on duty must be informed and must have the patient referred to the Resident on Duty.
- 9. Arterial blood gas samples for analysis shall be properly labelled and analysis shall be done immediately after being extracted.
- 10. Quality control shall be conducted every after opening a box of cartridges for levels 1, 2 and 3 as advised by Edan product specialist.
- 11. Arterial blood gas specimens from other hospitals must meet the requirements for proper transport and shall be analyzed immediately.
  - Specimen must be heparinised to prevent blood clots.
  - Specimen must be transported within 30min to 45min post extraction to prevent metabolization and to maintain the accuracy of the blood gas results.

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- Specimen must be properly stored in an ice box, preferably with slushed ice to completely submerge the specimen in ice for an effective delay of metabolization.
- The Respiratory Therapy on duty reserves all rights to refuse a specimen if it does not meet the standards stated above.
- 12. All blood gas specimens that have been analyzed shall be properly and safely disposed.
- 13. Clotted specimen should be rejected for analysis and must be advised to repeat the collection of blood sample.
- 14. Blood gas analysis results shall be logged into the logbook provided and must be charged and encoded in iHomis accordingly.

#### III. MAINTENANCE AND STORAGE OF ABG ANALYZER

### 1. Thermal Printer

 The correct size of thermal paper must be installed properly on the ABG analyzer

# 2. Test Cartridge

- Should be in room temperature upon usage. The Respiratory Therapist must always check the cartridge's expiration date before analyzation.
- Cartridges must be used immediately after opening the pouch.
- Test cartridges should be stored at 4 30°C, and should be used at 10 31°C

## 3. Calibrant fluid pack

- A calibrant fluid pack containing calibrant solutions is intended to be used together with the analyzer to perform one-point sensor calibration. It has 100 sampling operations.
- Calibrant fluid packs should be stored at 2 8°C (to avoid freezing) and should be used while at 10 - 31°C.