Contents

1. Eyeballing Your Patient **1**

- Purpose *2*
- Technology and Your Patient *2*
- Focus on the Patient *2*
- Have a Mental Picture of Your Patient *3*
- Important Points to Remember *4*

2. Taking and Giving Shift Report **6**

- Shift Report: What Is It? *6*
- Shift Report: Why Is It Important? *7*
- Does Location Matter? *8*
- Taped versus Bedside *8*
- What Should be in It? (Content) *10*
- What Should not be in It? *10*
- Professional Behaviors *10*
- Documentation Tool *11*
- Important Points to Remember *12*

3. Assessing Your Patient **14**

- Head: Nervous System Assessment *15*
- Chest: Respiratory Assessment *15*
- Circulation/Chest: Cardiovascular Assessment *18*
- Blood Pressure Reading *20*
- Mean Arterial Pressure (MAP) *21*
- Abdominal Assessment (GI System) *21*
- Renal System Assessment (Elimination) *26*
- Skin Assessment (Protection) *27*

4. Machines, Monitors, and Meters **29**

- Machines *30*
- Understanding Mechanical Ventilation *30*
- Troubleshooting Alarms *37*
- Weaning (Liberation from the ventilators) from the Ventilators *40*
- Pain management, Sedation and Neuromuscular blockade *42*
- Hypothermia Machine *47*

- Continuous Renal Replacement Therapy (CRRT): Renal Machines *49*
- Meters *54*
- Monitors *55*
- Hemodynamic Monitoring *56*

5. ABCs of Arterial Blood Gas **65**

- Blood Gas Analysis *65*
- Acid-Base Disorders *67*
- Compensation: Understanding It *72*
- Mixed Acid-Base Disturbances *74*
- Steps in Interpreting ABG *74*
- Interventions in Acid–base Disturbances *76*

6. Graphs and Waves **79**

- EKG Waveforms *79*
- Rhythms Originating in Atria *87*
- Rhythms Originating in AV Junction *90*
- Rhythms Originating in Ventricles *92*
- Atrioventricular Blocks (AV Blocks) *97*
- Arterial Pressure Waveform *103*
- Capnography *104*
- Swan-Ganz Catheter Waveforms *104*
- Cardiac Output Waveforms *106*

7. Drugs, Drips, and Drops **109**

- Adenosine *110*
- Aminophylline *111*
- Amiodarone *111*
- Amrinone *112*
- Argatroban *113*
- Atropine *113*
- Calcium Gluconate *114*
- Digoxin *114*
- Diltiazem *115*
- Dobutamine *115*
- Dopamine *116*
- Esmolol *117*
- Heparin *117*
- Lidocaine *118*
- Milrinone *118*
- Phenylephrine *119*
- Regular Insulin *119*
- Phytonadione (Vitamin K) *120*
- Prothrombin Complex Concentrate, *4*-factor, Unactivated, from Human Plasma *122*

- Sodium Bicarbonate *122*
- Vasopressin *123*
- Sedatives and Analgesics in Critically Ill Patients *123*
- Cisatracurium *124*
- Dexmedetomidine *124*
- Fentanyl *125*
- Lorazepam *125*
- Midazolam *126*
- Propofol *127*
- Vecuronium *127*
- Drip Calculators *128*

8. Emergencies in the ICU **131**

- Adrenal Crisis *131*
- Arrhythmias *133*
- Asthma *137*
- Cardiac Arrest *139*
- Heart Failure *145*
- Pulmonary Edema *148*
- Hypertensive Emergency *149*
- Hypovolemia *149*
- Hypovolemia and Pregnancy *152*
- Rhabdomyolysis *153*
- Thyroid Storm (Thyroid Crisis) *154*
- Shock *155*

9. Procedures in the ICU **159**

- Assessment Guide for the Management of the Critical Care Patient *160*
- Protocol for Central Line Catheters *166*
- Flushing Central Venous Access Device *166*
- Hypothermia Protocol *167*
- Hemodynamic Monitoring *169*
- Normal Ranges and Waveforms *171*

10. Planning Your Day **184**

- Families *187*
- Nursing Students *189*
- ICU Nurses *189*

11. Special ICUs **192**

- Neurological ICU *192*
- Background Information *192*
- Peripheral Nervous System *193*
- Cerebral Perfusion Pressure (CCP) *203*
- Treatment Modalities *205*

- Hypothermia *206*
- Cardiac ICU *207*

12. Transporting the Critically Ill Patient **214**

- Phases of Transport *215*
- Special Equipment and Medications *218*

13. Documentation **221**

- Components of Documentation *222*
- New Trends in Documentation *222*
- Electronic Medical Record *223*

14. Excellence in Practice **228**

15. Infusions and Transfusions **236**

- Parenteral Nutrition *242*

16. Labs, Levels, and Labels **250**

- Electrolytes *250*
- Calcium-Induced Ischemia *258*
- Interventions *259*
- Replacement Therapy *262*
- Hematology *263*
- Differential Count *266*
- Labs to Evaluate Cardiovascular Integrity and Functions *268*

Index 277