Wake Up the World Part 2: Primary Assessment

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Poll Question

What is your specialty?

1. Anesthesiology
2. Biomedical Engineering
3. Dental
4. Medical Records
5. Nursing
6. Nutrition
7. Pediatrics
8. Plastic Surgery
9. Psychosocial Care
10. Speech Language Pathology

Poll Question

What region of the world are you from?

1. Africa
2. Asia
3. Caribbean
4. Central America
5. Europe
6. North America
7. Oceania
8. South America

Summary Points of PACU Care

PACU Nurses are **specialty trained**

The PACU is **a high-level critical area** where vigilance is essential for the best outcome

Early recognition and response are essential for optimal outcomes

PACU staff work as a team with the PACU physician

Interdisciplinary communication is fundamental to safe care

Handoff

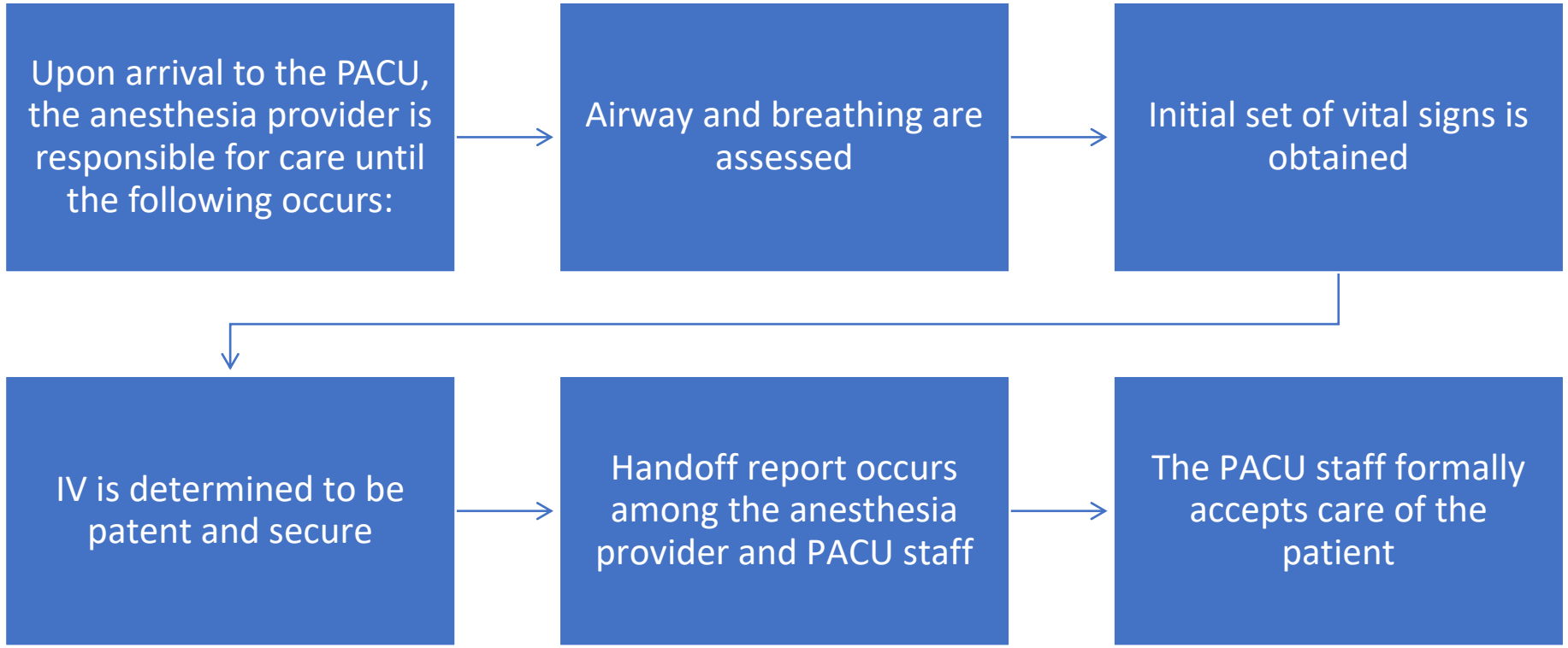
What is the purpose of handoff?

- Essential communication among providers
- Consistent, structured approach
- Opportunity for questions

Important Information

- Pertinent History
- Procedure and Surgeon
- Anesthesia/Sedation
- Medications
- Vital Signs
- Fluids
- Unusual Events

PACU Sequence of Events



Assessment

Initial PACU Assessment

It is primarily a rapid, initial examination to recognize and manage immediate life-threatening conditions.

A focused assessment concentrates on the patient's status related to anesthesia and the procedure performed.

Airway - Breathing - Circulation

Airway

- Observe - Patency, stridor, artificial airway.
- Act - Position on side (recovery position) and allow for open airway and drainage of blood and mucous.

Breathing

- Observe - Chest movement, rate, respiratory effort, oxygen saturation (SpO_2).
- Act - Supplemental oxygen to maintain SpO_2 > 93%. Listen to breath sounds.

Circulation

- Observe - Temperature, pulse rate/quality, blood pressure, capillary refill. Check peripheral pulses.
- Act - If no abnormalities, continue to monitor. Warm blankets to maintain normothermia and avoid hypothermia.

Neurological - Surgical Site - Hydration

Neurological

- Observe - Is the patient awake, alert, responding appropriately?
- Act - Protect unconscious patient from harm, monitor for emergence delirium, allow a sleeping child to wake naturally. When awake, do all extremities move normally?

Surgical Site

- Observe - Bleeding, incision intact, dressing type.
- Act - If bleeding, apply mild-moderate uninterrupted pressure for 10 minutes. Report rapid bleeding or dehiscence.

Hydration / IV Site

- Observe - IV site should be soft without bruising or swelling and taped securely.
- Act - Calculate fluid need with PACU physician and administer to prevent hypovolemia.

Poll Question

How much experience do you have in caring for pediatric patients?

1. I only care for pediatric patients
2. I care for both pediatric and adult patients
3. I only care for adult patients

Pediatric Considerations

Respiratory System

- The leading cause of perioperative complications is hypoxemia.
- Infants have small nares, a large tongue, a small mandible, a short neck, and a large amount of upper airway tissue.
- Children have proportionately larger heads in relation to their bodies. Risk of airway obstruction with supine position.

Cardiovascular System

- Heart rate & respiratory rate decrease with age. Be alert to subtle changes to prevent decompensation.

Thermoregulation

- Infants are sensitive to heat loss. When temperature falls, adrenaline is released increasing metabolism and need for oxygen.

Pediatric patients deteriorate quickly if decompensation is not recognized early and managed appropriately.

Pediatric Vital Signs

Age	RR	HR (awake)	BP
Infant < 1 year	30-53/min	100-180/min	72-104 systolic 37-56 diastolic
Toddler 1-2 years	22-37/min	98-140/min	86-106 systolic 42-63 diastolic
Preschool 3-5 years	20-28/min	80-120/min	89-112 systolic 46-72 diastolic
School 6-12 years	18-25/min	75-118/min	97-120 systolic 57-80 diastolic
Adolescent 13-15 years	12-20/min	60-100/min	110-131 systolic 64-83 diastolic

Any deviation from normal vital sign parameters should be reported to physician for potential intervention.

Pulse oximetry should be >93-100%

Adult Vital Signs

RR	HR (awake)	Pulse Oximetry
12-20/min	60-99	95-100%

Adult Blood Pressure Guidelines

Category	Systolic		Diastolic
Normal B/P	< 130	and	< 85
High-normal B/P	130 – 139	and/or	85 – 89
Grade 1 HTN	140 – 159	and/or	90 – 99
Grade 2 HTN	≥160	and/or	≥100

Any deviation from normal vital sign parameters should be reported to physician for potential intervention.

Continuous Assessment

- **Goal:** Ensure safe transition from anesthesia to wakefulness
- Breathing
- Level of consciousness/agitation
- Vital Signs
- Surgical Site
- IV site/Hydration
- Pain
- Nausea/Vomiting

Be Vigilant….

- **Early recognition** of clinical symptoms is important in preventing more severe and life-threatening problems.
- **Close monitoring** of changes in physiological status can identify and prevent serious adverse events.
- **Serious complications** often happen immediately following surgery but can happen at any point in the post-operative process.

Wake Up the World Part 3:PACU Emergencies

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Let's Talk....