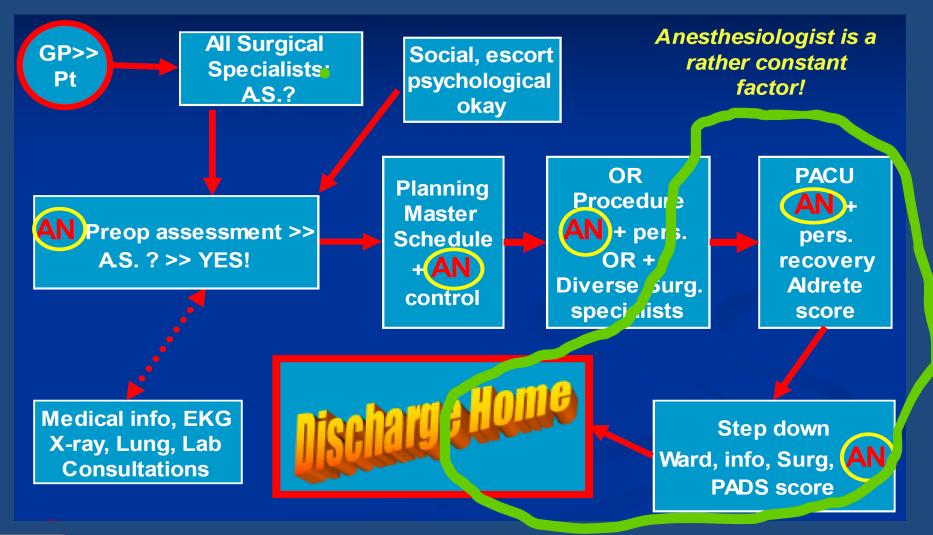


## How to organize the post operative pathway

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# Day Surgery: Logistic process postoperative care: tail of the process





Day Surgery is a logistic process: the complete logistics of a hospital treatment **within a couple of hours!!** This means: well organized, dedicated to process!!!!

Stage of recovery	Clinical definition
Early recovery	Awakening and recovery of vital reflexes PostAnesthesiaCare Unit
Intermediate recovery	Immediate clinical recovery Home readiness STEP DOWN RECOVERY
Late recovery	Full recovery <b>Post Discharge</b> Psychological recovery <b>care HOME</b>

Reproduced with permission from Steward DJ, Volgyesi G. Stabilometry: a new tool for measuring recovery following general anaesthesia. Can Anaesth Soc J 1978;25:4–6.



## First Phase Recovery: PACU

- Beds: Beds to OR Ratio: 2:1
- Staffing:Nurse to Patient Ratio 1:3, Anesthesiologist supervising



- Equipment
- Organise a Documented transfer from OR to PACU by anesthetist to nurse
- Monitoring vital signs and surgical site
- Continuous registration vital parameters untill *Discharge Criteria* are met
- Low rate crystalloid infusion; pain and PONV medication





First stage recovery ; Goal is safe meeting the DISCHARGE CRITERIA acc. to Aldrete

- Protocol based discharge (Aldrete score)
- Nurse led
- Medical staff responsible on distance
- Criterium is meeting discharge criteria
- A "minimum time" for stay in PACU is not necessary
- Efficient way



### Modified Aldrete Score

Delegated to PACU NURSING staff

For discharge to Step Down

# For Fast Track; "bypassing the PACU"

#### Max 12, minimal required 10

No score <1

Anesth Analg 1999; 88:1069-72,PF White

#### Table 3. Criteria for Fast-Tracking After Ambulatory Anesthesia\*

Awake and oriented2Arousable with minimal stimulation1Responsive only to tactile stimulation0Physical Activity:Able to move all extremities on command2Some weakness in movement of extremities1Unable to voluntarily move extremities0Hemodynamic Stability:2BP ± 15% of baseline2BP ± 30% of baseline1BP ± 50% of baseline0Oxygen Saturation:0Maintains value >90% on room air2Requires supplemental oxygen to maintain oxygen saturation >90%1Saturation <90% with supplemental oxygen0Pain:2None/mild discomfort2Persistent to severe0Emetic Symptoms:0None/mild nausea with no active vomiting Transient vomiting controlled with IV antiemetics1Persistent moderate to severe nausea & vomiting0	Level of Consciousness:	
Responsive only to tactile stimulation0Physical Activity: Able to move all extremities on command2Some weakness in movement of extremities1Unable to voluntarily move extremities0Hemodynamic Stability: BP ± 15% of baseline2BP ± 30% of baseline1BP ± 50% of baseline0Oxygen Saturation: Maintains value >90% on room air2Requires supplemental oxygen to maintain oxygen saturation >90%1Saturation <90% with supplemental oxygen	Awake and oriented	
Physical Activity: Able to move all extremities on command 2   Some weakness in movement of extremities 1   Unable to voluntarily move extremities 0   Hemodynamic Stability: 0   BP ± 15% of baseline 2   BP ± 30% of baseline 1   BP ± 50% of baseline 0   Oxygen Saturation: 0   Maintains value >90% on room air 2   Requires supplemental oxygen to maintain 0   oxygen saturation >90% 1   Saturation <90% with supplemental oxygen	Arousable with minimal stimulation	
Able to move all extremities on command2Some weakness in movement of extremities1Unable to voluntarily move extremities0Hemodynamic Stability: BP ± 15% of baseline2BP ± 50% of baseline1BP ± 50% of baseline0Oxygen Saturation: Maintains value >90% on room air2Requires supplemental oxygen to maintain oxygen saturation >90%1Saturation <90% with supplemental oxygen	Responsive only to tactile stimulation	0
Some weakness in movement of extremities1Unable to voluntarily move extremities0Hemodynamic Stability: BP ± 15% of baseline2BP ± 30% of baseline1BP ± 50% of baseline0Oxygen Saturation: Maintains value >90% on room air2Requires supplemental oxygen to maintain oxygen saturation >90%1Saturation <90% with supplemental oxygen	Physical Activity:	
Unable to voluntarily move extremities0Hemodynamic Stability: BP ± 15% of baseline2BP ± 30% of baseline1BP ± 50% of baseline0Oxygen Saturation: Maintains value >90% on room air2Requires supplemental oxygen to maintain oxygen saturation >90%1Saturation <90% with supplemental oxygen	Able to move all extremities on command	<b>2</b>
Hemodynamic Stability: BP ± 15% of baseline 2   BP ± 30% of baseline 1   BP ± 50% of baseline 0   Oxygen Saturation: 0   Maintains value >90% on room air 2   Requires supplemental oxygen to maintain 0   oxygen saturation >90% 1   Saturation <90% with supplemental oxygen	Some weakness in movement of extremities	
BP ± 15% of baseline 2   BP ± 30% of baseline 1   BP ± 50% of baseline 0   Oxygen Saturation: 0   Maintains value >90% on room air 2   Requires supplemental oxygen to maintain 2   oxygen saturation >90% 1   Saturation <90% with supplemental oxygen	Unable to voluntarily move extremities	0
BP ± 30% of baseline 1   BP ± 50% of baseline 0   Oxygen Saturation: 1   Maintains value >90% on room air 2   Requires supplemental oxygen to maintain 1   oxygen saturation >90% 1   Saturation <90% with supplemental oxygen	Hemodynamic Stability:	
BP ± 50% of baseline 0   Oxygen Saturation: Maintains value >90% on room air 2   Requires supplemental oxygen to maintain 0   oxygen saturation >90% 1   Saturation <90% with supplemental oxygen	BP $\pm$ 15% of baseline	<b>2</b>
Oxygen Saturation: Maintains value >90% on room air 2   Requires supplemental oxygen to maintain oxygen saturation >90% 1   Saturation <90% with supplemental oxygen	BP $\pm$ 30% of baseline	1
Maintains value >90% on room air 2   Requires supplemental oxygen to maintain 0   oxygen saturation >90% 1   Saturation <90% with supplemental oxygen	BP $\pm$ 50% of baseline	0
Requires supplemental oxygen to maintain oxygen saturation >90% 1   Saturation <90% with supplemental oxygen		
oxygen saturation >90%1Saturation <90% with supplemental oxygen	Maintains value >90% on room air	2
Saturation <90% with supplemental oxygen		
Pain: 2   None/mild discomfort 2   Moderate to severe, controlled with IV analgesics 1   Persistent to severe 0   Emetic Symptoms: 0   None/mild nausea with no active vomiting 2   Transient vomiting controlled with IV 1	oxygen saturation >90%	1
None/mild discomfort 2   Moderate to severe, controlled with IV analgesics 1   Persistent to severe 0   Emetic Symptoms: 0   None/mild nausea with no active vomiting 2   Transient vomiting controlled with IV 1	1.1 IV	0
Moderate to severe, controlled with IV analgesics 1 Persistent to severe 0 Emetic Symptoms: None/mild nausea with no active vomiting 2 Transient vomiting controlled with IV antiemetics 1		
Persistent to severe 0 Emetic Symptoms: None/mild nausea with no active vomiting 2 Transient vomiting controlled with IV antiemetics 1		2
Emetic Symptoms: None/mild nausea with no active vomiting 2 Transient vomiting controlled with IV antiemetics 1	5 C C C C C C C C C C C C C C C C C C C	
None/mild nausea with no active vomiting 2 Transient vomiting controlled with IV antiemetics 1		0
Transient vomiting controlled with IV antiemetics 1	Emetic Symptoms:	
antiemetics 1	None/mild nausea with no active vomiting	
	Transient vomiting controlled with IV	
Persistent moderate to severe nausea & vomiting 0	antiemetics	1
5°	Persistent moderate to severe nausea & vomiting	0

## Stepdown, second stage recovery; Goal make patient "streetfit"

- Beds: Bed:OR Ratio >> 6:1 beds or trolleys per OR
- **Staffing:** Nurse:Patient Ratio: 6:1
- Patients stable, no monitoring or i.v.
- Mobilizing, eating and drinking, adequate analgesia and surgical incision site and no nausea
- Patients being informed and instructed; verbally, leaflets, online

Urine voiding? Not in all patients necessary: perineal, hernia >> bladderscan, instructions for at home: before 22 hr Tonsillectomy: minimum stay 6 hours for bleeding risk



# Information and Instruction to the patient before discharge: Written AND Verbally

- About surgery: report (for other doctors)
- Anesthesia (precautions, events)
- Advice daily activities (shower, rehabilition, training)
- Wound care, dressings, blood
- Alarm signs >> phone contact: bleeding, fainting, fever, pain, drinking, impaired voiding, continued vomiting
- Instructions for pain and PONV
- Appointment control outpatient clinic



Again a Post Anesthesia Discharge Scoring System (PADSS acc to Chung)

# "Streetfit" if: At least 9, no 0



- 1 Vital signs
  - 2 = Within 20% of preoperative value
  - 1 = 20-40% of preoperative value
  - 0 = 40% of preoperative value
- 2 Ambulation and mental status 2 = Oriented × 3 and has a steady gait 1 = Oriented × 3 or has a steady gait 0 = Neither
- 3 Pain, or nausea/vomiting
  - 2 = Minimal
  - 1 = Moderate
  - 0 =Severe
- 4 Surgical bleeding
  - 2 = Minimal
  - 1 = Moderate
  - 0 =Severe
- 5 Intake and output
  - 2 = Has had PO fluids and voided
  - 1 = Has had PO fluids or voided
  - 0 =Neither



After good care and discharge in the Ambulatory Surgery Unit welcome back home is hopefully warm and caring.....





## After Discharge, when patient is at home: still work to be done!

- Facility needs to be available for on-call by phone
- Next day: follow up phone call Essential for Day Surgery!!



Nurse led >> contact with specialist if needed

Pain, nausea, medication, wound, dressing, mobilization, eating, night sleep, contact health care



# Thank you

