Structural Reform Support Service

Project

SRSS/S2019/021

EU SRSS PROJECT
Ist TRAINING WORKSHOP ON AMBULATORY SURGERY
UNDER THE AUSPICES OF THE
INTERNATIONAL ASSOCIATION FOR AMBULATORY SURGERY (IAAS) & THE HUNGARIAN ASSOCIATION FOR AMBULATORY SURGERY (HAAS)

5/12/2019, HOTEL FLAMENCO, BUDAPEST

EU SRSS PROJECT FOR DEVELOPING DAY SURGERY IN HUNGARY

5/12/2019, Hotel Flamenco, Budapest

08:30–09:00	**Registration**
09:00–09:10	**Opening** *Doug McWhinnie, Gabriella Pál, Gamal Mohamed*
09:30–10:10	**Opening plenary** *Doug McWhinnie:* Initial overview of day/ambulatory surgery pathway
10:10–10:30	**Coffee break**
10:30–12:00	**Discussions of outbreak groups:** a) Anaesthetic: guided by *Jan Eshuis,* HAAS expert: *Zsolt Iványi, Göböl Zsolt* b) Preassessment group, guided by: *Ian Jackson,* HAAS Expert: *Janecskó Mária, Mészáros János* c) Surgical group, guided by: *Doug McWhinnie,* HAAS expert: *Gamal Mohamed*
12:00–12:45	**Lunch**
12:45–14:15	**Interactive workshops** 8 groups (4 participants from each hospital: surgeon, anaesthesiologist, nurse, manager) **Pathway topics to be discussed:** selection criteria, procedure selection, preassessment, operating list scheduling, discharge protocols, and help at home. **Aim:** to work out an action Plan to address short, medium and longer term change. Please form an action presentation **Circulating facilitators:** *Doug McWhinnie, Ian Jackson, Jan Eshuis, Mária Janecskó, Zsolt Göböl, Zsolt Iványi, János Mészáros, Gamal Mohamed*
14:15–15:35	**Action plan presentations for each hospital** (5 min. presentation + 5 min. discussion)
15:35	**Closure**

Streamlining the Pathway

Professor Douglas McWhinnie
President
International Association of
Ambulatory Surgery

European Commission

Increasing Demand for Ambulatory Surgery Worldwide

Health cost containment
Population growth
Patient expectations
Technology

Pre-operative Care	*Out-Patient Clinic*
Peri-operative care	*Junior Doctor Assessment* *Pre-op Visit by Surgeon and Anaesthetist in Ward* *Operation* *Recovery*
Post-operative care	*Surgical Ward* *Discharge* *Follow-Up*

AMBULATORY (DAY) SURGERY

Suggested international terminology and definitions

"An operation/procedure (excluding an office or outpatient operation/ procedure) where the patient is discharged on the same working day"

Approved by the Executive Committee IAAS - Paris 9/27/2003

Ambulatory Surgery

"An operation/procedure (excluding an office or outpatient operation/procedure) where the patient is discharged on the same working day"

International Terminology in Ambulatory Surgery and its Worldwide Practice. Toftgaard C, Parmentier G. In : Lemos P, Jarrett P, Philip B, Eds. Day Surgery Development and Practice. London: IAAS, 2006: (2),35-59.

International Association for Ambulatory Surgery

The difficulty in producing.... definitions which will apply to... the health care system of each nation is appreciated.

For this reason, member nations of the IAAS have been invited.... to include any **necessary interpretation applicable to their health care systems.**

Ambulatory Surgery
Current Membership Countries IAAS

Corresponding Members

Day Surgery Definition

'A surgical day case is a patient who is admitted for an operation on a planned **non-resident basis** and who nonetheless requires **facilities for recovery**. The whole procedure should **not require an overnight stay in a hospital bed'.**

Day Surgery as the new paradigm of surgery / Danish Regions 2013 / 2

Ambulatory Surgery Definition

"Chirurgie Ambulatoire" is defined as the group of surgical procedures [...] that are planned and carried out under technical conditions that require the **safety of an operating room**, using a variety of types of anaesthetic and followed by **postoperative monitoring** that enables the patient to be **discharged on the day of the procedure**, without increased risk."

© Haute Autorité de Santé April 2012

Day Surgery Definition

"Day surgery is the admission of ***selected*** patients to hospital for a ***planned*** surgical procedure, returning home on the ***same day***.

Day Surgery:Operational Guide. DoH, London,2002

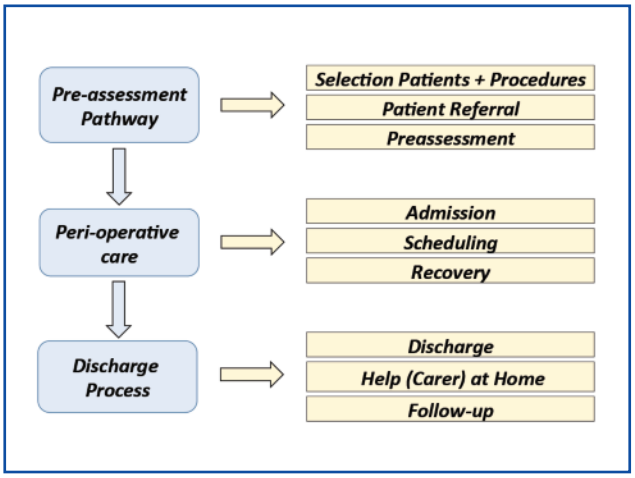
Day Surgery Definition

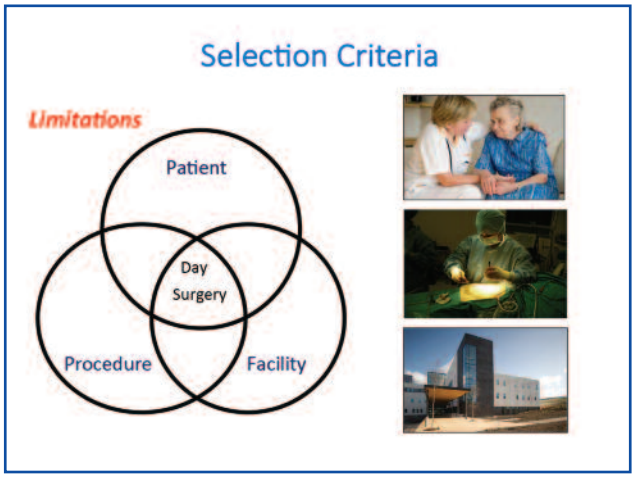
Day-surgery patient : A patient having an elective surgical intervention that requires a **full operating theatre facility,** excluding an office intervention, who is admitted and **discharged on the same day.**

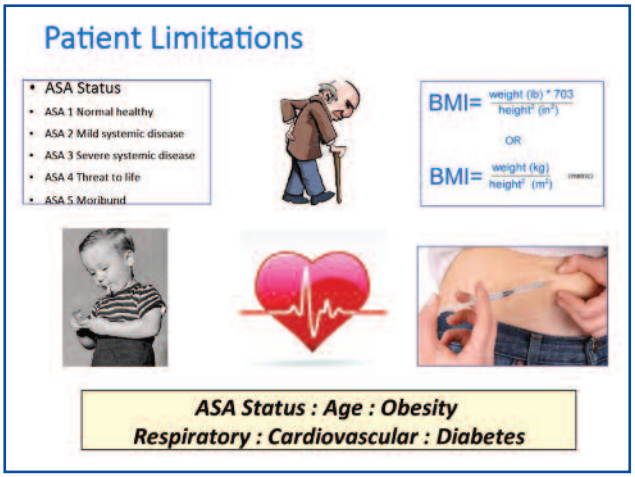
Leroy R, Camberlin C, Lefèvre M, Mistiaen P, Van den Heede K, Van de Sande S, Van de Voorde C, Beguin C. Proposals for a further expansion of day surgery in Belgium – Short report. Health Services Research (HSR) Brussels: Belgian Health Care Knowledge Centre (KCE). 2017. KCE Reports 282Cs. D/ 2017/10.273/08

Day Surgery Definition

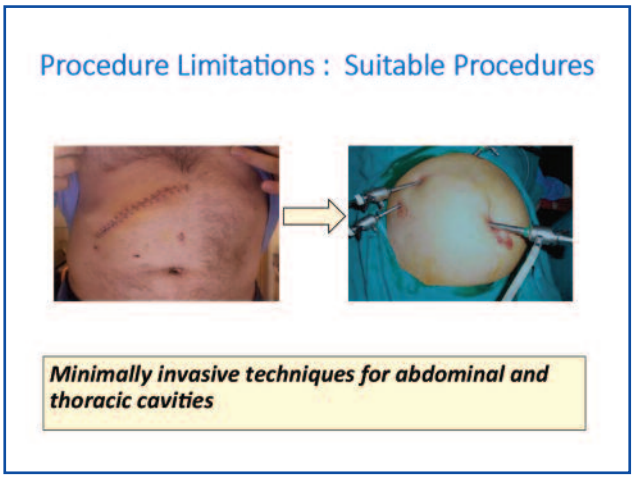
Definition
The current definition of Day Surgery used by clinicians in Hungary includes an overnight stay. We recommend that the definition of Day Surgery be updated to **remove mention of overnight stay and so brought in line with international standards**. This definition should be adopted across the private and public sector.

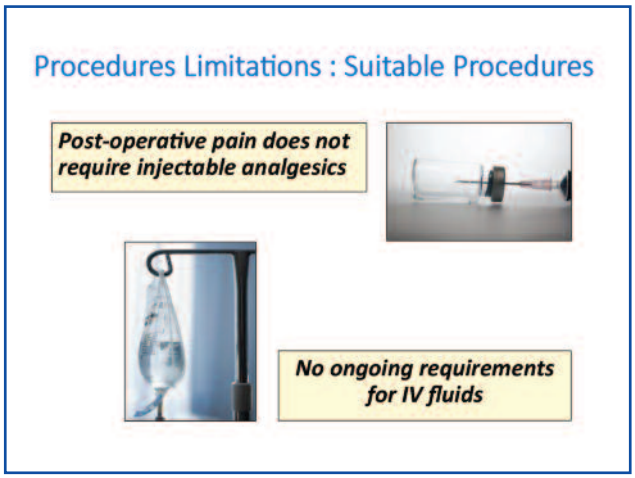

Pre-assessment Pathway
Selection Patients + Procedures
Patient Referral
Preassessment
Peri-operative care
Admission
Scheduling
Recovery
Discharge Process
Discharge
Help (Carer) at Home
Follow-up


Selection Criteria
Limitations
Patient
Day Surgery
Procedure
Facility


Patient Limitations
ASA Status
ASA 1 Normal healthy
ASA 2 Mild systemic disease
ASA 3 Severe systemic disease
ASA 4 Threat to life
ASA 5 Moribund
BMI= weight (lb) * 703 / height² (in²)
OR
BMI= weight (kg) / height² (m²)
ASA Status : Age : Obesity
Respiratory : Cardiovascular : Diabetes


Facility Limitations
Stand alone unit
Dedicated ward and operating theatre
Transfer unplanned overnight admissions
Integrated hospital unit
Dedicated ward and operating theatre
Dedicated ward, use main operating theatre
- Beds, trolleys and chairs
Emergency admissions block day ward


Procedure Limitations : Suitable Procedures
Minimally invasive techniques for abdominal and thoracic cavities


Procedures Limitations : Suitable Procedures
Post-operative pain does not require injectable analgesics
No ongoing requirements for IV fluids

Procedure Limitations : Suitable Procedures

Low risk of postoperative complications

Haemorrhage

Reactionary - occurs after 4-6 hours with mobilisation
ligature slippage
clot displacement
cessation of vasospasm after mobilisation

Secondary – occurs after >24 hours
infection eroding a vessel

Procedures Limitations : Suitable Procedures

Operation time maximum about 2 hours with minimum 4 hours recovery before discharge

Degree of surgical trauma more important than duration of the procedure

Procedures Suitable for Ambulatory Surgery

No Definitive List

Lemos P, Jarrett P, Philip B
IAAS, London; 2006

Jackson IB, 2014;
www.iaas-med.com/files

Surgical Sub-Specialties

- Breast Surgery
- ENT
- General Surgery
- Gynaecology
- Head and Neck Surgery
- Ophthalmology
- Orthopaedics
- Paediatric Surgery
- Urology
- Vascular Surgery
- Medical Procedures
- Emergency Surgery

12 sub-specialties
>200 procedures

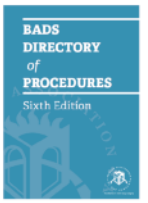
British Association of Day Surgery Directory of Procedures

- Literature review
- National and International Day Surgery Data
- Networking
- Specialist organisations

→

Aspirational percentages for
- Procedure Room
- Zero night stay
  (Day Surgery 12 hours)
- One night stay
  (23 hour surgery)
- Two night stay

Target Percentages for Length of Stay Management



GENERAL

Description	Procedure Room	Zero night stay	One night stay	Two night stay
Laparoscopic repair of hiatus hernia with anti-reflux procedure		20	70	10
Laparoscopic gastric banding		50	50	
Transanal excision of lesion of anus	40	25	35	
Repair of rectal mucosal prolapse		10	90	
Excision/destruction of lesion of anus		100		
Haemorrhoidectomy including stapled		100		
Injection or banding of haemorrhoids	100			
Treatment of anal fistula including seaton suture		95	5	
Excision/treatment of anal fissure		100		
Pilonidal sinus surgery -laying open or suture/ skin graft		95	5	
Diagnostic laparoscopy		90	10	
Laparoscopic cholecystectomy		75	25	
Primary repair of inguinal hernia		90	10	
Repair of recurrent inguinal hernia		90	10	
Primary repair of femoral hernia		95	5	
Repair of umbilical hernia		90	10	
Laparoscopic repair of incisional hernia		40	50	10
Excision biopsy of lymph node for diagnosis (cervical, inguinal, axillary)		95	5	

Short Stay Equation

- Scenario I
  - 100 Laparoscopic Cholecystectomies
    - 50 Day Cases
    - 30 Overnight Admission
    - 20 Two Night Admission

  Total 70 Inpatient Bed Days
- Scenario II
  - 100 Laparoscopic Cholecystectomies
    - 40 Day Cases
    - 60 Overnight Admission

  Total 60 Inpatient Bed Days

Patient Referral : Health Screen

Presenting complaint
Past medical history / comorbidities
Medication and allergies
Blood pressure
Body mass index
Diagnostics

$$\text{Body Mass Index} = \frac{\text{Weight (in kg)}}{\text{Height}^2 \text{ (in m)}}$$

Patient Referral : Surgical Out Patient Visit

Topic	Discussion
Assess the value of surgery	*Open or minimally invasive or no surgery*
Provide information on risks/benefits	*Verbal, written, digital*
Possible ambulatory surgery ?	*Comorbidities Patient Choice Home circumstances*
Provide information on pathway, timescale and consent	*With patient and carer managing their expectations*

Preassessment

Dedicated preassessment team
- Nurses
- Anaesthetic sessions

Empowered
- Decide day case or overnight stay

Preassessment
- valid for 6 months

MacarthurAJ, Macarthur C, Bevan JC. Preoperative assessment clinic reduces day surgery cancellations. Anesthesiology 1991;75:A1109.

Anesthesiology

Preassessment Philosophy

Can this patient be a Day Case ?

Is there any reason this patient *cannot* be a Day Case ?

Yes	Maybe	No
Overnight stay	Convert to Day Case	Day Case

Preassessment Format

One-stop at surgical clinic
Interval preassessment
- Telephone
- Face-to-face
- On-line

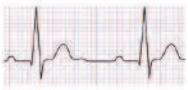
Anaesthetic assessment



Preassessment Investigations

Routine preassessment investigations on healthy patients is unnecessary (and costly)

Czoski-Murray C et al Health Technol Assess 2012 Dec;16(50):i-xvi, 1-159.


Structured history and targeted examination performed by experienced nursing staff required

www.nice.org.uk/guidance/ng45

Preassessment Investigations

Safe and cost-effective preassessment based on algorithms

Targeted investigations

Complexity of surgery : Minor, Intermediate, Major
Fitness of patient : ASA 1, 2 or 3
Age of patient

Timing of Preassessment

Early
Preassessment validity
Patient relocates
Patient changes mind
Procedure not required

Late
Availability
Unforeseen comorbidities

Unfilled Theatre Slot

Admission

Dedicated Day Ward
Unplanned overnight admissions

Dedicated day unit	***1.0 %***
In-patient ward	***17.0 %***

Day Surgery in Different Guises. Fehrmann K, Matthews CM, Stocker ME
J One-Day Surgery 2011; 19:39-47

Admission

Consent
Surgical marking
VTE assessment


Venous Thrombo-Embolism

All Elective Admissions : Assessing the Risk of VTE
Prophylaxis required if :-

Surgical patients
- Operation > 90 minutes
- Operation > 60 minutes if pelvis or lower limb
- Acute abdomen
- Expected reduction in mobility
- One or more risk factors

Risk factors
- Age > 60 BMI > 30
- Significant comorbidities
- Dehydration
- Thrombophilia
- History VTE (self or 1 degree relative
- HRT or oestrogen contraception
- Cancer

NICE. *Venous Thromboembolism: reducing the risk* (CG92) London:NICE 2010

NHS National Institute for Health and Clinical Excellence

VTE Assessment and Prophylaxis

Is it required in Ambulatory Surgery ?

Age > 60
BMI > 30
Operation > 90 minutes
Operation > 60 minutes (lower limb)
One or more medical comorbidities
1st degree relative VTE

VTE Assessment and Prophylaxis

Norfolk and Norwich Hospital, England
57000 patients
54 months
Day Surgery
General anaesthetic

Overall incidence
37 of 57000 (0.065%)

Varicose Vein incidence
9 of 825 (1.0%)

How often does venous thromboembolism occur after day surgery and is the number of risk factors associated with increased risk?
Lipp et al Journal of One-Day Surgery,2016, 26(2),28-30

Operating Room Scheduling

Right clinicians
Right operations
Right theatre
Right time

↓

Operating Room Efficiency

Theatre Efficiency Metrics

	22 Aug	29 Aug	05 Sept	12 Sept	19 Sept
Sessions Scheduled	15	12	18	14	18
Sessions Held	9	6	17	13	17
Time Available (mins)	1890	1260	3570	2730	3570
Time used (mins)	1949	1195	3384	2935	3917
% Utilisation - Sessions	60	50	94	93	94
% Utilisation - Time	103	95	95	108	110
% Utilisation - Total	62	47	90	100	104
Operations Done	23	12	38	32	32
Operations done / list	2.6	2.0	2.2	2.5	1.9

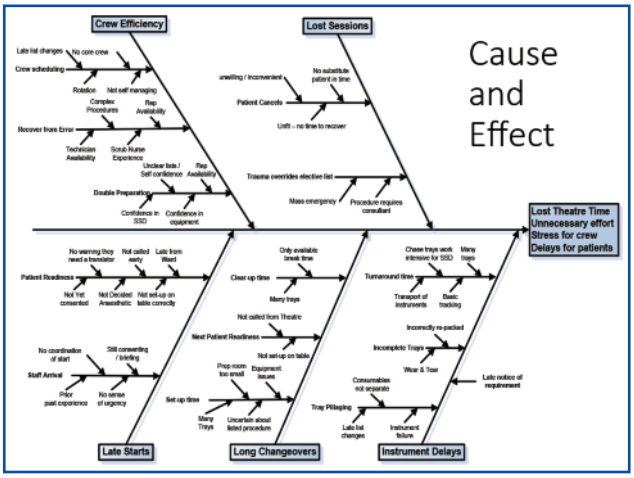
Beware of Data

Beware of Data

Operating Room performance data reflects outcome.....

.....but not process !

Cause and Effect



WHO Theatre Briefing and Checklist

World Health Organization

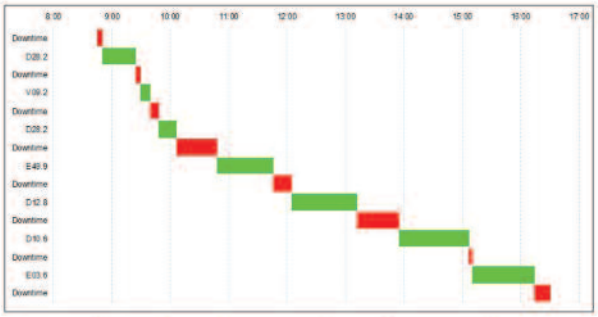
Improves safety..... and efficiency

Operational Ambulatory Scheduling 'Golden Patient'

Select patient to be first on list :

Identified beforehand
Brought to operating room early
Required equipment pre-checked

Gap or turnaround time : Multiple case day surgery list



Operating Theatre Gap Time

Issue	*Example*
Insufficient Theatre Staff	Scrub and non-scrub staff
	Inappropriate skill mix
Planning	Altered list order
	Equipment unavailable
	Low stock levels
Surgical work pressure	Surgeon 'multitasking'
Unplanned clinical event	Delay in wakening patient

Operating Theatre Utilisation Time

Time	*%*
Anaesthetic	18
Theatre Preparation	14
Operating	62
Under-run	6

Operating 62% of an 8 hour day = 5 hours

Orchard M, Ellams J, McWhinnie D What do we mean by 'Theatre Utilisation'? Journal One Day Surgery 2010:20:4-6

Operating Theatre Scheduling

Dedicated day case lists
Maximise day morning lists
Extend effective operating hours
Projected operating times

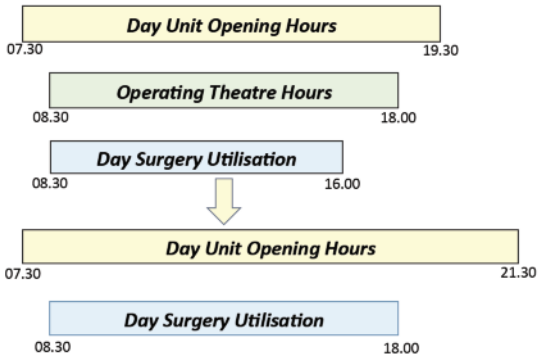
Operational Ambulatory Scheduling

Dedicated day case list (max 12 hours stay)
- morning day cases
- afternoon day cases

Dedicated short stay list
- morning day cases
- afternoon overnight stay (same-day admission)

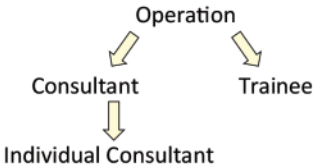
Mixed day case and major cases for inpatient stay
- day case first in morning before major case
- day case after major case

Extend Effective Ambulatory Operating Hours



How long does an operation take ?

Indicative times for specific procedures +/anaesthetic time



Matches operations to available operating theatre time

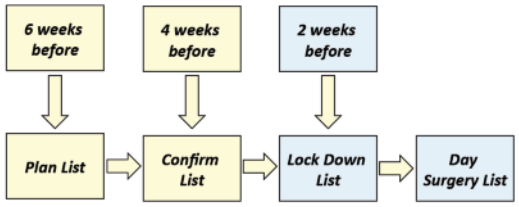
Operational Ambulatory Scheduling 'Smart Lists'

Prioritise list order according to :

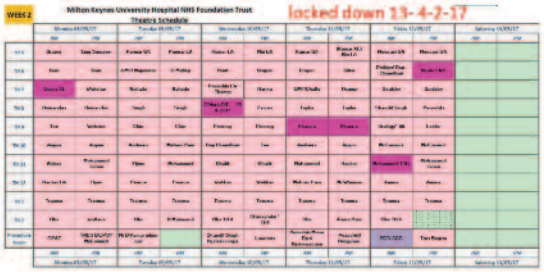
Recovery time
Diabetes
Other medical comorbidities
Prone procedures
Young or old

Session Utilisation

Lock down Ambulatory List :
Staff, patient, theatre availability



Theatre Management Systems



Expensive
Good for operational scheduling
Remember !..... Rubbish in - Rubbish out

Recovery

1st stage recovery
(post anaesthesia care unit-PACU)
2nd stage recovery

Bypass 1st stage recovery for local and regional anaesthetic procedures

Extend the day unit opening hours to lengthen the operating day

Discharge

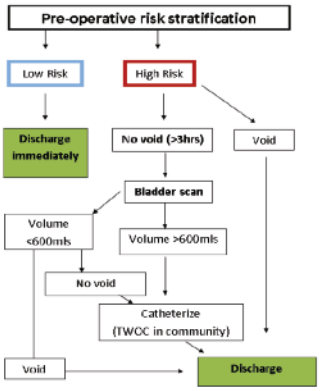
Protocol-based discharge

Verma R, Alladi R, Jackson I et al. Day case and short stay surgery. Anaesthesia 2011;66:417-34.
Anaesthesia

Discharge Criteria

Vital signs stable
Orientation
Pain controlled
Minimal PONV
Minimal wound bleeding
Oral analgesics supplied
Understands medication
Cannula removed
Ability to dress and walk
Written & oral instructions
Pass urine
Escort to take them home
Carer at home for 24 hrs

Discharge : Pass Urine



High Risk

Men > 50
Inguinal hernia repair
Anorectal Surgery
Prostatic procedures

No need to pass urine before discharge unless high risk patient

Transfer home

Responsible Adult

- ill-defined
- accountable and competent

Maximum Journey Time

- one hour's travel

Avoid Public transport ?

Help at Home

Official UK National Health Service guidance

'It's a good idea to have an adult available to help you for at least 24 hours after surgery'

www.nhs.uk/Conditions/surgery/Pages/after-surgery.aspx

NHS choices www.nhs.uk

Many patients falsely claim to have help at home the first night after surgery

Help (carer) at Home

Essential

Elderly

Invasive surgery

Airway at risk

Pragmatic

Non-invasive surgery

Practice guidelines for post-anesthetic care . Anesthesiology 2002; 96: 742-52.

Anesthesiology

Follow-up

Do patients require a follow-up telephone call 24 hours after day surgery ?

Telephone follow-up 549 patients

Routine 17 patients (3%) → ***4/17 failed to answer telephone***

On-demand 532 patients (97%) → ***Used by 23 patients (4%)***

Eastwood L, Richardson K. 'Don't call us; We'll call you' - Evaluating the need for a 24 hour follow-up call. J One-Day Surg 2014;24(S):15

Pre-assessment Pathway → ***Selection Patients + Procedures*** / ***Patient Referral*** / ***Preassessment***

Peri-operative care → ***Admission*** / ***Scheduling*** / ***Recovery***

Discharge Process → ***Discharge*** / ***Help (Carer)at Home*** / ***Follow-up***

Surgical Breakout Group Programme

Introductions: Surgical delegates introduce themselves and indicate their surgical specialty. They also state what they want from this session. (DMcW+GEM) 10 minutes

Short presentation on procedures suitable for day surgery. (DMcW) 5 minutes

Discussion: Each delegate to write down the 7 most common procedures they perform and indicate which and how many they could convert to day surgery. Each delegate can explain their individual barriers to the group with group discussion. (LvO) 15 minutes

Short presentation on operating room scheduling (DMcW) 5 minutes

Discussion: Efficient Scheduling discussed regarding creating a list order for day case patients based on clinical history. Each delegate to create a list order and why…..remembering there are no correct answers. (DMcW, GEM, LvO) 25 minutes

If time…..

Short presentation on operating room turnaround time (DMcW) 5 minutes

Discussion: Group discussion on slow patient turnaround and how to improve it. (DMcW, LvO, GEM) 25 minutes

Surgical Breakout Group

Douglas McWhinnie IAAS
Luc van Outryve IAAS
Gamal Eldin Mohamed HAAS

European Commission

Procedures Suitable for Day Surgery

Day Surgery Definition

Definition

The current definition of Day Surgery used by clinicians in Hungary includes an overnight stay. We recommend that the definition of Day Surgery be updated to **remove mention of overnight stay and so brought in line with international standards.** This definition should be adopted across the private and public sector. This will require updating of the Rule Book and Minister Decree No. 16/2002. (XII. 12.).


SRSS/S2019/021

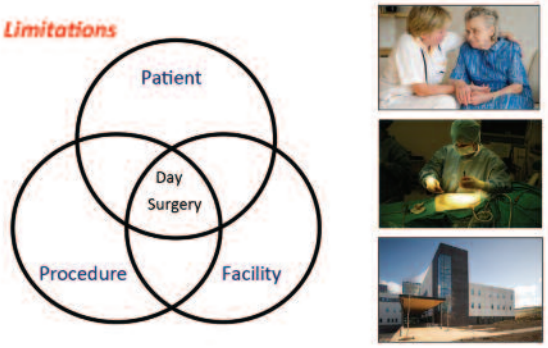
Recommendations on the design and implementation of a policy framework for developing Ambulatory Surgery in Hungary.

Output 6 Activity 3.1

Facility-specific diagnosis and tailor-made recommendations on developing ambulatory surgery.

Report from Hospital visits performed October 3-4th 2019

Selection Criteria



Facility Limitations

Stand alone unit

Dedicated ward and operating theatre

Transfer unplanned overnight admissions

Integrated hospital unit

Dedicated ward and operating theatre

Dedicated ward, use main operating theatre

- Beds, trolleys and chairs

Emergency admissions block day ward

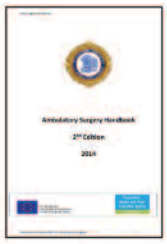
Procedure Limitations : Suitable Procedures

Minimally invasive techniques for abdominal and thoracic cavities
Post-operative pain does not require IV/IM analgesics
No ongoing requirements for IV fluids
Low risk of postoperative complications
Operation time maximum about 2 hours
About 4 hours recovery before safe discharge

Procedures Suitable for Ambulatory Surgery

No Definitive List

Lemos P, Jarrett P, Philip B
IAAS, London; 2006



Jackson IB, 2014;
www.iaas-med.com/files

Procedures Suitable for Ambulatory Surgery

UK Audit Commission's Basket of Procedures 2000

- Cataract Extraction
- Excision Breast Lump
- Carpal Tunnel Decompression
- Bat Ears
- R/O Metalwork
- Bunion Operations
- Laparoscopy
- Tonsillectomy
- TURBT
- Squint Correction
- Orchidopexy
- Anal Fissure
- D&C / Hysteroscopy
- Nasal Fractures
- Myringotomy
- Laparoscopic Cholecystectomy
- Excision of Ganglion
- Hernia Repair
- Varicose Veins
- Dupuytren's Contracture
- Haemorrhoidectomy
- Circumcision
- Arthroscopy
- SMR
- Termination of pregnancy

Procedures Suitable for Ambulatory Surgery

AAS COHORT OF AMBULATORY SURGERY PROCEDURES FOR 2017

Orthopaedic: Knee arthroscopy including meniscectomy, meniscal or other repair; Removal of bone implants (removal of internal fixation from bone / joint excluding K-wires); Bunion operations with or without internal fixation and soft tissue correction; Carpal Tunnel Release; Dupuytren's fasciectomy
General surgery: Laparoscopic Cholecystectomy; Laparoscopic repair of hiatus hernia with anti-reflux procedure (eg fundoplication); Haemorrhoidectomy; Primary inguinal hernia repair
Breast surgery: Wide local excision of breast with or without axillary node biopsy; Mastectomy with or without axillary node biopsy
Urology: Orchidopexy, Endoscopic resection of prostate (TUR) – can include laser surgery; Endoscopic excision of lesion of bladder
Specialist surgery: Hemithyroidectomy; partial thyroidectomy; posterior excision of lumbar disc prolapse including microdiscectomy

Problems with index procedures

- The index procedures represent only 30% of all Day Surgery activity
- Listing index procedures may exclude other routine procedures which are possible as day cases
- Requires regular updating
- No recognition of the Short Stay Pathway
- No recognition for innovation

Short Stay Equation

- Scenario I
  - 100 Laparoscopic Cholecystectomies
    - 50 Day Cases
    - 30 Overnight Admission
    - 20 Two Night Admission

  Total **70** Inpatient Bed Days
- Scenario II
  - 100 Laparoscopic Cholecystectomies
    - 40 Day Cases
    - 60 Overnight Admission

  Total **60** Inpatient Bed Days

Day Case Nephrectomy

Day Case Surgery is World First

Without realising it until after the event, one of our surgeons recently performed the world's first laparoscopic nephrectomy (the removal of a kidney by keyhole surgery) as a day case operation.

Photograph courtesy of The Sentinel

The keyhole operation was first performed in 1991 and has since become common practice, but has normally involved a two or three day stay in hospital. On this occasion, however, the operation went very well as normal, but the patient recovered so quickly and was so keen to go home the same day that the surgeon, Anurag Golash, agreed.

Surgical Sub-Specialties

- Breast Surgery
- ENT
- General Surgery
- Gynaecology
- Head and Neck Surgery
- Ophthalmology
- Orthopaedics
- Paediatric Surgery
- Urology
- Vascular Surgery
- Medical Procedures
- Emergency Surgery

12 sub-specialties
>200 procedures

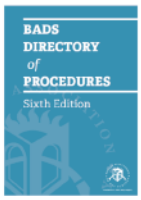
British Association of Day Surgery Directory of Procedures

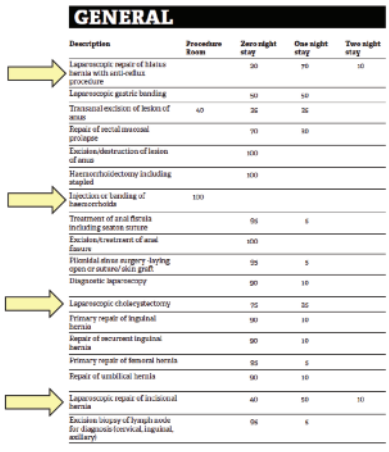
- Literature review
- National and International Day Surgery Data
- Networking
- Specialist organisations

→

Aspirational percentages for
- Procedure Room
- Zero night stay
  (Day Surgery 12 hours)
- One night stay
  (23 hour surgery)
- Two night stay

Target Percentages for Length of Stay Management

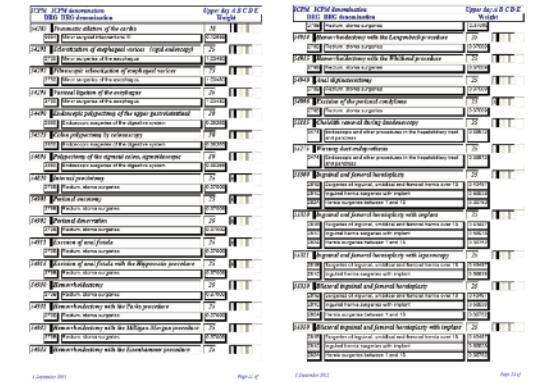




GENERAL

Description	Procedure Room	Zero night stay	One night stay	Two night stay
Laparoscopic repair of hiatus hernia with anti-reflux procedure		20	70	10
Laparoscopic gastric banding		50	50	
Transanal excision of lesion of anus	40	25	25	
Repair of rectal mucosal prolapse		70	30	
Excision/destruction of lesion of anus		100		
Haemorrhoidectomy including stapled		100		
Injection or banding of haemorrhoids	100			
Treatment of anal fistula including seaton suture		95	5	
Excision/treatment of anal fissure		100		
Pilonidal sinus surgery -laying open or suture/ skin graft		95	5	
Diagnostic laparoscopy		90	10	
Laparoscopic cholecystectomy		75	25	
Primary repair of inguinal hernia		90	10	
Repair of recurrent inguinal hernia		90	10	
Primary repair of femoral hernia		95	5	
Repair of umbilical hernia		90	10	
Laparoscopic repair of incisional hernia		40	50	10
Excision biopsy of lymph node for diagnosis (cervical, inguinal, axillary)		95	5	

Hungarian Basket of Day Surgery Procedures



Hungarian Basket of Day Surgery Procedures - Recommendations

General Surgery

Out

In

Procedures Suitable for Ambulatory Surgery

Write down the 7 most common procedures you perform and decide which could be day cases and how many.

Operating Room Scheduling

Operating Room Scheduling

Right clinicians
Right operations
Right theatre
Right time

↓

Operating Room Efficiency

Operational Ambulatory Scheduling

Dedicated day case list (max 12 hours stay)

- morning day cases
- afternoon day cases

Dedicated short stay list

- morning day cases
- afternoon overnight stay (same-day admission)

Mixed day case and major cases for inpatient stay

- day case first in morning before major case
- day case after major case

Operational Ambulatory Scheduling 'Smart Planning'

Prioritise list order according to :

Recovery time
Diabetes
Other medical comorbidities
Prone procedures
Young or old

Operational Ambulatory Scheduling 'Smart Planning'

Put these patients in a day surgery all-day operating list order :

Explain your reasons.....and remember there is no single correct answer!

Operational Ambulatory Scheduling 'Smart Planning'

45 year old female for laparoscopic cholecystectomy with a BMI of 38

65 year old male for open inguinal hernia repair with coronary stent 9 months ago

38 year old lady for small (lesser, short) saphenous vein ligation with past history of DVT

29 year old man for excision of 15 cm diameter lipoma back of neck with Type I diabetes

82 year old female for open femoral hernia repair with rheumatoid arthritis on steroids

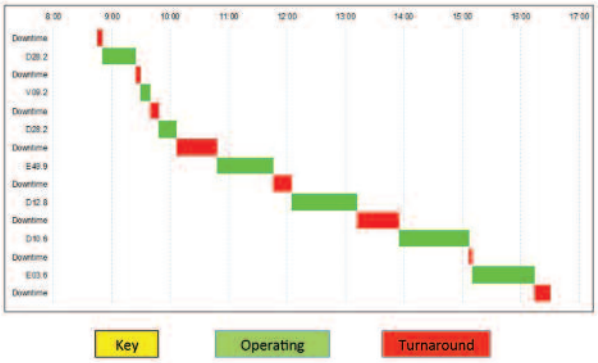
Operating Room Turnaround Time

WHO Theatre Briefing and Checklist

World Health Organization

Improves safety..... and efficiency

Gap or turnaround time : Multiple case day surgery list



Operating Theatre Gap Time

Issue	*Example*
Insufficient Theatre Staff	Scrub and non-scrub staff
	Inappropriate skill mix
Planning	Altered list order
	Equipment unavailable
	Low stock levels
Surgical work pressure	Surgeon 'multitasking'
Unplanned clinical event	Delay in wakening patient

Operating Theatre Gap Time

Write down the most common reasons your operating list fails to start on time and think how it might be improved.

Write down the most common reasons for delays between cases and think how it might be improved.

Questions ?

Nursing Breakout Group Programme

Introductions: Nursing delegates introduce themselves and indicate their current area of work. They also discuss what they would value from this session. (IJ) 10 minutes

Short presentation on preoperative assessment. (IJ) 10 minutes

Discussion: Each delegate to write down the 7 most common procedures they perform and indicate which and how many they could convert to day surgery. Each delegate can explain their individual barriers to the group with group discussion. 15 minutes

Short presentation on patient information (IJ) 10 minutes

Discussion: How nursing staff could support preoperative assessment process given constraints in Hungary.

If time…..

Short presentation Criteria led discharge (10 minutes)

Discussion: Group discussion on nursing involvement in discharge process

Nursing Breakout Group

Ian Jackson IAAS
Janecskó Mária HAAS
Mészáros János HAAS

European Commission

Nursing staff

- Crucial to success
- Teamwork
- Can do attitude
  - How do I make this work
- Organisational abilities
- Good outcomes

Nursing roles

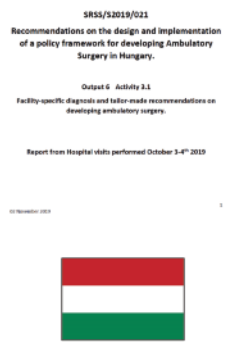
- Preoperative Assessment
- Admission
- Perioperative
  - Scrub/Runner/Assistant
- Recovery
- Discharge
- Post discharge follow up

Preoperative Assessment

Day Surgery Definition

Definition

The current definition of Day Surgery used by clinicians in Hungary includes an overnight stay. We recommend that the definition of Day Surgery be updated to **remove mention of overnight stay and so brought in line with international standards.** This definition should be adopted across the private and public sector. This will require updating of the Rule Book and Minister Decree No. 16/2002. (XII. 12.).


SRSS/S2019/021

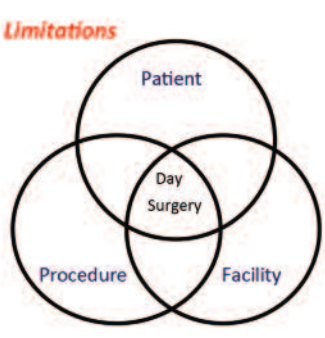
Recommendations on the design and implementation of a policy framework for developing Ambulatory Surgery in Hungary.

Output 6 Activity 3.1

Facility-specific diagnosis and tailor-made recommendations on developing ambulatory surgery.

Report from Hospital visits performed October 3-4th 2019

Selection Criteria



Facility Limitations

Stand alone unit

Dedicated ward and operating theatre

Transfer unplanned overnight admissions

Integrated hospital unit

Dedicated ward and operating theatre

Dedicated ward, use main operating theatre

- Beds, trolleys and chairs

Emergency admissions block day ward

What is a day surgery patient?

- Why not everyone?
- Why not every operation?

Why not everyone ?

Maybe not ?

Why not everyone ?

- We all think we know the answers to this one, we need to remove patients who
  - have problems with their social circumstances
  - are not fit for surgery or anaesthesia
  - have any one of a number of specific contraindications for day surgery

Is it clear who is not suitable ?

- Many "grey areas"
- What is right for one unit and its local population or even one specialty may not be right for another!

Who decides ?

- ? Surgeons
- ? Anaesthetists

but what about the views of the

- Nursing Staff - community and hospital
- Patient

these also vitally important

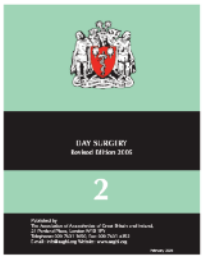
High BMI

What are the ambulatory surgical patient selection criteria in Canada?
Friedman Z, Wong DT, Chung F.
Can J Anesth 2003; 50(Suppl): A16 (abstract).

Survey of Canadian anaesthesiologists

91% regarded otherwise healthy patients with a BMI of 35-44 as acceptable for ambulatory care

50% regarding a BMI > 45 as similarly feasible



'Obesity is not an absolute contraindication for day care in expert hands and with appropriate resources.'

Hypertension

There is little evidence for an association between admission arterial pressures of less than 180 mmHg systolic or 110 mmHg diastolic and Perioperative complications

Hypertension, hypertensive heart disease and perioperative cardiac risk
Howell SJ, Sear JW & Foëx P. BJA:2004;9: 570-583

Systematic review and meta-analysis of 30 observational studies

Diabetes

- Inpatient surgery and blood sugar controlled with advice from diabetologist team
- No evidence that GKI is necessary following minor or intermediate surgery
- In fact we now no longer start GKI on any patient that will be able to eat within 4 hours

Diabetes

	LIKELY to eat within FOUR hours post-operatively.	
	TYPE 1	TYPE 2
Pre-op	Omit morning insulin	Omit morning oral hypoglycaemics
Pre and Per-op	If blood glucose >15mmol/L then commence Insulin infusion (see below for blood glucose <4mmol/L.)	
Post-op	Restart usual medication once eating established	

If initial blood glucose < 4mmol/L give 4 dextrose lozenges and repeat blood sugar in 30 minutes

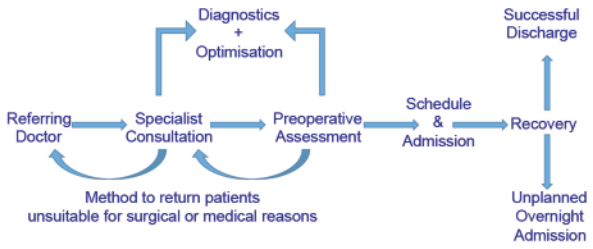
Free download at

www.diabetes.org.uk

How do you decide if day case?

Assessment Clinic

- Anaesthetic staff
- Nursing staff



Questions ?

Functions of Preassessment

- Screening
- Answering patients and carers questions
- Provide written information about operation and anaesthetic
- Verbal reinforcement of this information

Information provided to patients

- Location of the Centre
- Items to bring on the day of operation
- Procedure for cancellation or inability to attend
- Contact number for communication with the Centre
- Date of operation and time of admission
- Approximate time of discharge
- Pre-operative preparation – fasting, medication
- Post-operative management
- Car parking facilities
- Facilities for relatives or carers

Procedure specific information

- Description of procedure
- Description of recovery
- Pain management
- When can bath/shower
- When can return to work
- Who to contact if problem

I believe that a good day surgery nurse is one of the best nurses you can find, an excellent day surgery nurse is worth their weight in gold.

Wendy Adams
Australian Day Surgery Council

Questions ?

Nurse led discharge

The aim of Nurse-led discharge:

- to ensure a timely, effective discharge, improving discharge planning and reducing delays in the discharge process (patient reach discharge criteria according to appropriate protocols)
- to facilitate discharge earlier in the day
- to avoid patients waiting unnecessarily (next Consultant round)
- to enable nurses' to develop confidence and maximize the use of their skills and knowledge
- to ensure practice is safe and does not put the patient at risk

Discharge criteria

Vital signs stable for at least 1 hour
Correct orientation as to time, place and person
Adequate pain control and has supply of oral analgesia
Understands how to use oral analgesia supplied and has been given written information about these
Ability to dress and walk where appropriate
Minimal nausea, vomiting or dizziness
Has at least taken oral fluids
Minimal bleeding or wound drainage
Has passed urine (only after certain procedures not required for most)
Has a responsible adult to take them home
Has an agreed carer at home for next 24 hours
Written and verbal instructions provided about postoperative care
Knows when to come back for follow up (if appropriate)
Emergency contact number supplied

Post Anaesthesia Discharge Scoring System (PADSS)

Parameters	*Result*	*Points*
Systolic blood pressure	*<20% of preoperative value*	*2*
	20-40% of preoperative value	*1*
	>40% of preoperative value	*0*
Ambulation	*Walking without vertigo possible*	*2*
	Walking with assistance possible	*1*
	No walking possible, vertigo	*0*
Nausea, Vomiting	*Minor*	*2*
	Moderate	*1*
	Severe	*0*
Pain	*Minor (VAS 1-2)*	*2*
	Moderate (VAS 3-4)	*1*
	Severe (VAS >4)	*0*
Bleeding	*Minor*	*2*
	Moderate	*1*
	Severe	*0*

PADSS-postanesthesia discharge scoring system

Preoperative assessment is key to success in Day Surgery

Anesthetic Preassessment Breakout Group Programme

Introductions: Anesthetic delegates introduce themselves and indicate their current area of work. They also discuss what they would value from this session. 10 minutes

Discussion: Each delegate to indicate their anesthesiological selectioin criteria for Day Surgery. What are the criteria and exclusion criteria?
Each delegate can explain their individual barriers to the group with group discussion. 15 minutes

Short presentation on an approach to anesthetetic selection criteria for one day surgery (JHE) 20 minutes

Discussion: Who is responsible for anesthesic preassessment and who should execute it; what are anesthetic barriers now and possibly in the future? 15 minutes

Anesthetic Breakout Group

Jan Eshuis and Luc van Outryve, IAAS
Zsolt Iványi and Göböl Zsolt, HAAS

European Commission

Preoperative assessment is key to success in Day Surgery

Day Surgery Definition

Definition

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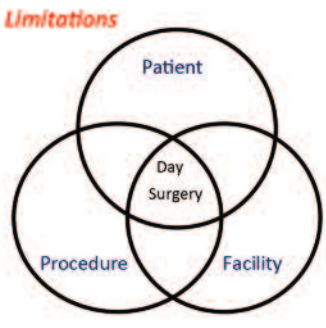
Preassessment: when and who?

- Not on day of Surgery! >> then only final check
- Ideally 1-3 weeks before
- Direct contact, telephone, online query
- In conjunction with or after referral surgeon >>> separate anesthesiological consult
- Nurse and anesthesiologist
- Goal: Risk estimation, evaluation, improvement, p rovide information
- Med. hist. and phys. examination, evt. external consultations, lab, EKG **on indication**
- Informed consent, note that

Selection Criteria



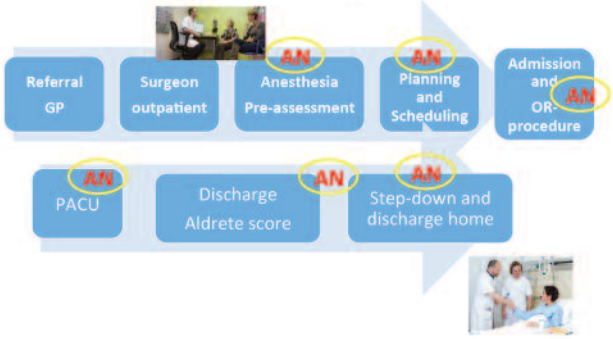
Focussing on Selection Criteria

• APART from:

- Procedures

- Facilities

Simplified basic pathway ASU: involvement anesthesiologist



Patient selection in modern Day Surgery traditional criteria

The Procedure	Duration, opening cavity, blood loss, pain, elective vs semi-acute,
The Patient	Age: 3 mo, 6 mo, upper limit?, ASA, BMI to??, understanding, psychology, no substance abuse
Social	Distance, Adult escort, Home situation GP, Phone, understanding
The Facility	Hospital based, Freestanding Office based

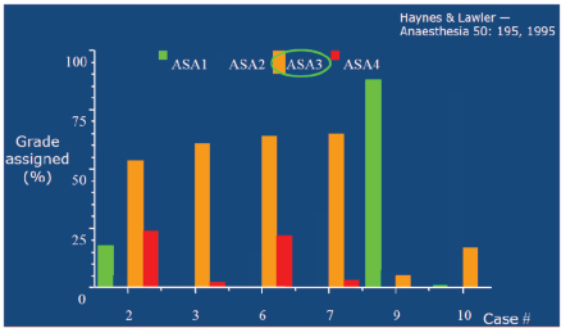
Patient selection in modern Day Surgery

ASA 3 suitable if no other contraindications
ASA 4 may be suitable

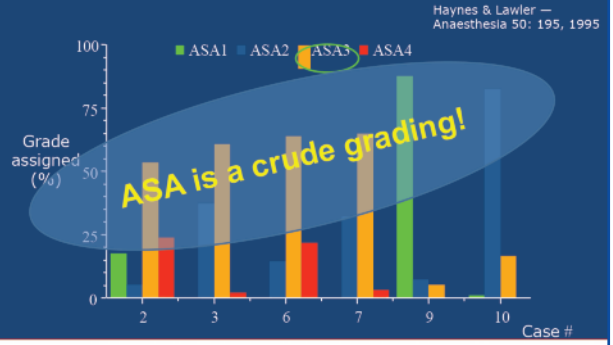
assess on individual basis

Must be stable & well-controlled
Nature of disease
- effect on surgery
- effect of surgery

ASA Classification a LIMITED instrument



Ambulatory Anesthesia Patient Selection: Limitation ASA-Class.

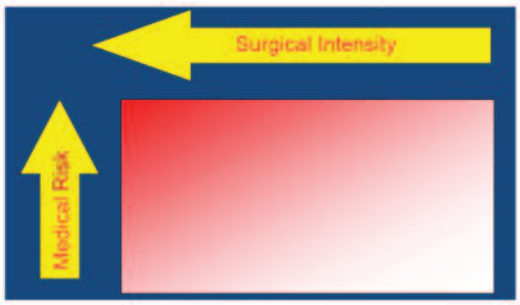


International Association for Ambulatory Surgery

What is a day surgery patient?

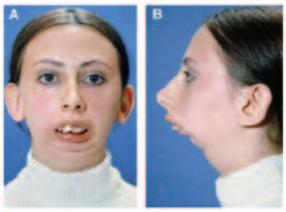
- Why not everyone?
- Why not every operation?
- Anesthesiologist should ask: *is there any reason that this patient is NOT a one day surgery patient*

Modern patient selection: Individual, Medical Risk (ASA) against Surgical invasivenes



What conditions should be screened?

- Difficult Airway: be prepared



- Prior anesth. history
- Physical examination
- Equipment
  - Supraglottic devices
  - Videolaryngoscopes
  - Fiberoptic bronchoscopes
- Call for help possible?

Common 'Comorbidities' and One Day Surgery which might rise questions

- Hypertension
- Diabetes Mellitus
- Obesity
- Obstructive Sleep Apnea OSAS
- Anticoagulating agents
- Frailty in the elderly
- Pregnancy
- Breast feeding

Hypertension

There **is little evidence** for an association between admission arterial pressures of less than 180 mmHg systolic or 110 mmHg diastolic and Perioperative complications

Medication: stop ACE inhibitors and Diuretics D.O.S.
Rest medication continue; B-blocker

Hypertension, hypertensive heart disease and perioperative cardiac risk
Howell SJ, Sear JW & Foëx P. BJA:2004;9: 570-583

Systematic review and meta-analysis of 30 observational studies

Diabetes Mellitus

- Absolute compatible with One Day Surgery
- Cave comorbidities cardiac, renal function
- (preop assessment Na, K, Creat, HbA1c, EKG)

- Preop. Glucose
- Recommendation 4-10 mmol/L
- Cancel when hyperglycemic syndromes
- D.O.S. Stop Methformin, Insulin
- Night dose previous OR: 75%
- D.O.S. soberness

Diabetes

	LIKELY to eat within FOUR hours post-operativel	
	TYPE 1	TYPE 2
Pre-op	Omit morning insulin	Omit morning oral hypoglycaemics
Pre and Per-op	If blood glucose >12mmol/L then commence Insulin infusion (see below for blood glucose <4mmol/L.)	
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If initial blood glucose < 4mmol/L give 4 dextrose lozenges and repeat blood sugar in 30 minutes

Diabetes

- Inpatient surgery and blood sugar controlled with advice from diabetologist team
- No evidence that GKI is necessary following minor or intermediate surgery
- In fact we now no longer start GKI on any patient that will be able to eat within 4 hours

Real contraindications for One Day Surgery are patients who:

- have problems with their social circumstances
- are not fit for surgery or anaesthesia
- have any one of a number of specific contraindications for day surgery

Obesity

The **Hungarian** Central Statistical Office revealed some shocking numbers: 54% of the **Hungarian** nation is **obese** or **overweight**. As it turns out, **Hungary** has the highest **obesity** rate in Europe, and only the people of the United States, Mexico and New-Zealand are heavier than **Hungarians**, Index.hu and Népszava report.

Is obesity a contra-indication for One Day Surgery?

NO!

(if without gross comorbidity)

Obesity

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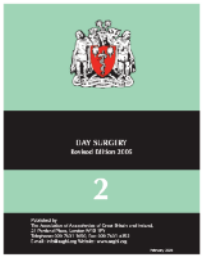


'Obesity is not an absolute contraindication for day care in expert hands and with appropriate resources.'

Obesity with and without comorbidities

- Obesity BMI 30-50 without
- + Metabolic Syndrome (Ht,Hyperglycemia, central obesity, dyslipidemia)
- +OSAS, DM, CAD, ASA-status
- Super-obesity BMI > 50

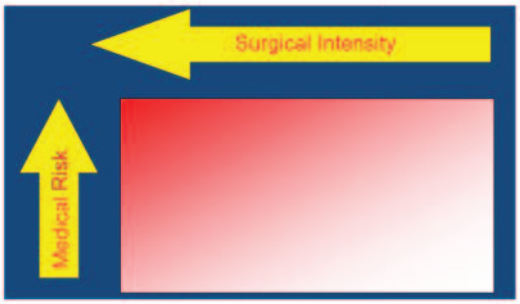
- Candidate for One Day Surgery
- Increased risk
- Often underdiagnosed!
- Difficult airway, CPAP-mask
- No One Day Surgery (except very minor procedures?)
- In unstable comorbidities: no one day surgery....

STOP BANG questionnaire for OSAS estimation

Item	Question
1. Snoring	Do you snore loudly (louder than talking or loud enough to be heard through closed doors)?
2. Tired	Do you often feel tired, fatigued or sleepy during the daytime?
3. Observed	Has anyone observed you stop breathing during your sleep?
4. Blood Pressure	Are you being, or have been, treated for high blood pressure?
5. Body mass index	Is your body mass index > 35 kg/m²?
6. Age	Are you > 50 years old?
7. Neck circumference	Is your neck circumference > 40 cm?
8. Gender	Are you male?

>3 high risk for OSAS; <3 Low risk for OSAS

Modern patient selection: Individual, Medical Risk (ASA) against Surgical invasivenes



Cardiovascular diseases and routine testing

- No routine EKG, US, cardiac function, lab
- Only on indication in active CV disease as
  - recent Myocardial Infarction <60 days,
  - unstable Angina Pectoris, ischemic heart disease:
    continue aspirin, statin, evt. beta-blocker
  - symptomatic arrhytmias > evaluation, optimisation
    carefully considerans anticoagualants
  - severe aortic or mitral stenosis
  - heart failure class 4 no One Day surgery;
    ejection fraction > 30%

Pulmonary diseases in One Day Surgery

- Oxygen?
- Inhaler and other medication
- Physical fitness
- Coughing, secretions, fever
- Tests: art. bloodgas, X-thorax, VC and FEV1
- Asthma, COPD
- Smoking
  - Stop on or better 4 weeks before Day of surgery
  - Wound, CO > oxyHb

Pregnancy and Breast Feeding

- Anesthesia not significant risk for mother and child
- However surgery increases risk on miscarriage or preterm labor
- Surgery only when necessary
- Fetal monitoring in ambulatory setting: pre-and postprocedural fetal heart rate and contractions before going home
- X
- Breastfeeding compatible with anesthesia and surgery
  - Probably pump and discard milk prior to breast feeding

Elderly patients in one day surgery

- Less chance on delirium or cognitive dysfunction
- Chronic medication
  - Beta blockers cont., not starting; Statins
- Frailty
- Hypertension, smoking, hypecholesterol, ECG
- Congestive heart failure, EJF<35%
- Pulmonary: asthma, COPD, OSAS, CPAP therapy
- Social environment

Liver, renal, thyroid diseased patients

- End stage renal patients:
  - dialyse day before procedure, possibility lab electrolytes
- Thyroid:
  - goiter, risk diff. airway; correction hyperthyroidism
- Liver disease:
  - Acute liver failure / hepatitis no candidates
  - Chronic liver disease: preop info, low Child-Pugh and MELD scores may undergo One Day surgery

Medication stop or continuing?

- Most chronic medication continued
  - esp. existing beta-blockers and statins
- Calcium-channel blockers +/-
- Angiotensine converting enzyme Inhibitor and angiotensin-receptor-blockers for Ht stop on DOS.
- Anticoagulants
  - NOAC's stop 1 or 2 days before (renal function!)
  - Vit K-antagonists stop 5 days before (bridging?)
- Antiplatelet
  - Clopidogrel, ticlopidine:
    - depending indication, cardiology
  - Aspirin
    - low dose continue for most procedures, stop 7 days before in use for primary prophylaxis without vascular disease

Selection and special attention in children

- Fasting
- Age ex prematurity
- Upper respiratory tract infections
- Sickle cell disease
- Congenital heart defects
- Malignant hyperthermia
- Down's syndrome

Selection and special attention in children premature infants

- Ex prematurity: apnea and periodic breathing
  Additional risks: anemia, hist. bradycardia and apnea

All ex-preterm infants with PCA <55 weeks include: 6 mths safe limit
Include all ex-preterm infants with anemia

- PCA = Post Conceptual Age (in weeks)

CJ Coté, in Miller Anesthesia

Selection and special attention in children infection airway

- runny nose
  DD:
  Allergic, vasomotor
  infectious
  upper respiratory tract
  lower respiratory tract

Selection and special attention in children infection airway

- Advice NS Morton, 1997:

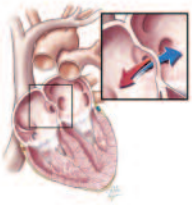
	postponement
Active infect upper airway	2 weeks
Active infect lower airway	4 weeks
Pertussis, measles	6 weeks

Intubation 12% more likely complications

Selection children: heart murmur

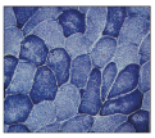
- Pt with congenital heart defect, proceed with one day surgery treatment **if:**

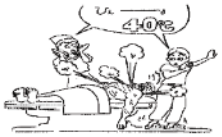
pathophysiology known
clinically stable
no decompensation
no cyanosis
(SaO2 <90% with FiO2 21%)
Surgery limited influence,
antibiotic prophylaxis



Selection children; Malignant Hyperthermia (MHS)

A One Day Surgery procedure at MHS-patient can if:
Non triggering agents are used
dantrolene present
Monitoring and blood gas analysis is possible
Postop. at least 4 hours of recovery room time
Good clinical care possible, "Hospital-based"





Selection in children: Down Syndrome

One Day Surgery as under control and are known:

Cong. heart defects ASD, VSD (60%); a.b.profylaxe
pulmonary hypertension
anatomy airways
Airway irritability, bronchitis
Atlanto-axial stability (10-20% different)
Analgesia and sedation
"Hospital-based"

Is it clear who is not suitable ?

- Many "grey areas"
- What is right for one unit and its local population or even one specialty may not be right for another!

Questions ?

European Commission

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