Day Surgery around Europe 2016: Rate and recent advanced practices Northern Europe

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AGENDA

- Introduction
- Facts and figures
- Benchmarking and pushing borders..
- The future
- International initiatives

INTRODUCTION

Keypoint - T.H.M.:

- DS is the winning consept – Scandinavia is (also) pushing the borders

- Scandinavia: Denmark, Norway, Sweden and Finland
- Definition Day Surgery: Home same day:

  not 23 hours - owernight..

Future (?)

- All surgery is day-surgery
- Paradigme: Good explication: why should this patient be admittet for surgery…?!

Fast-track surgery – status

lumbar disc op thyroidectomy arthroscop. op mastectomy parathyroid op. adrenalectomy cholecystectomy fundoplication lap/vag hyst. hernia repair	bariatric surg carotid endart. nephrectomy pulm. resection open hysterectomy rad. prostatectomy knee replacement hip replacement	aortic aneurism colonic resection
ambulatory	1 – 2 days	2 – 3 days

Kehlet & Dahl, Lancet 2003;363:1921
Kehlet & Wilmore, Br J Surg 2005;3-4

FACTS AND FIGURES

- Scandinavia: 60 – 70+ % of elective surgery
  - Increasing
    - Less differeces nationally
    - New procedures
    - National strategy
- Examples

Frequency Day Surgery 2010 (IAAS)

Procedure	England	Scotland	Germany	Finland	Sweden	Denmark
Female lap ster.	86 %	N/A	1 %	93 %	77 %	63 %
Cystorectocele	2 %	0.4 %	1 %	14 %	32 %	56 %
Pilonidal cyst	36 %	64 %	28 %	70 %	96 %	92 %
Baker cyst	N/A	N/A	46 %	82 %	94 %	93 %
Cruciate lig. *	22 %	50 %	25 %	80 %	N/A	90 %
Varicose veins	79 %	69 %	52 %	85 %	94 %	99 %
Mastectomy *	4 %	5 %	2 %	5 %	11 %	11 %
Cholecyst lap *	32 %	20 %	N/A	28 %	22 %	63 %
Haemorrhoids	66 %	54 %	32 %	57 %	95 %	92 %
Hernia	66 %	63 %	14 %	63 %	74 %	82 %
TURP *	3 %	3 %	2 %	2 %	2 %	8 %

Norway: negativ economic incentive

- % D.S. 2007 – 2010: 57 to 59 % - constant rise
- DRG ´reform´ 2010: minus 30 to 70 % =>
- % D.S 2010 – 2014: 59 to 57 % ....

Procedyre	Day Surgery	In-hospital 1+	Difference
Vaginal hysterectomy	11.613	40.978	29.364
Lumbar prolaps	11.329	27.439	14.043

Op. Cancer Mammae – (Bodoe-N)

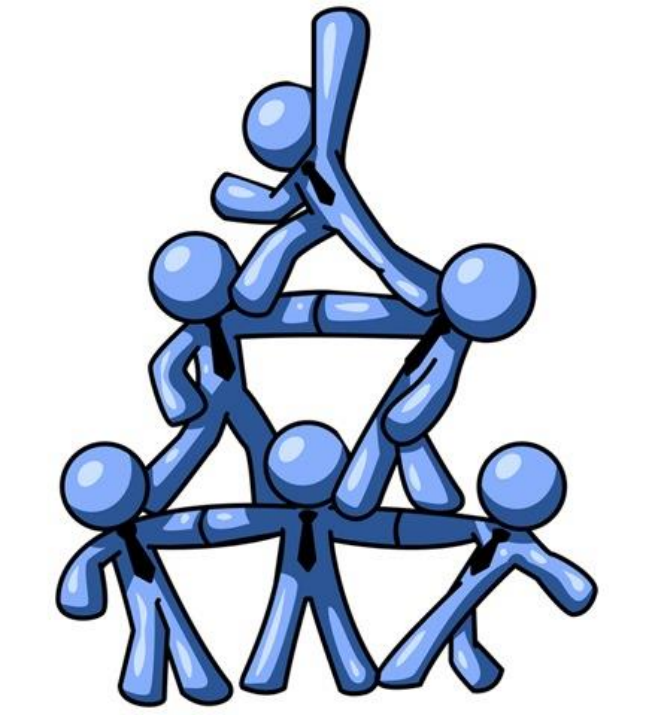
- Driver: It´s better to come home…
- 2005-2012: 956 op. c. mammae in day surgery department - 80 % of all
  - Mastectomy / Lumpectomi
- Exclusion criteria:
  - BMI > 35
  - Serious hearte- and lungdesease (ASA ≥ 3)
  - Former anaesthetic problems
  - Serious motoric disburbancies

Postoperative routine

- < 30 min. to the hospital: home same day
- Others: 1. night on patient hotel nearby
- Medical indication / alone home: first night on ward
- All ptt.: postop. consultation first postop. day at the hospital

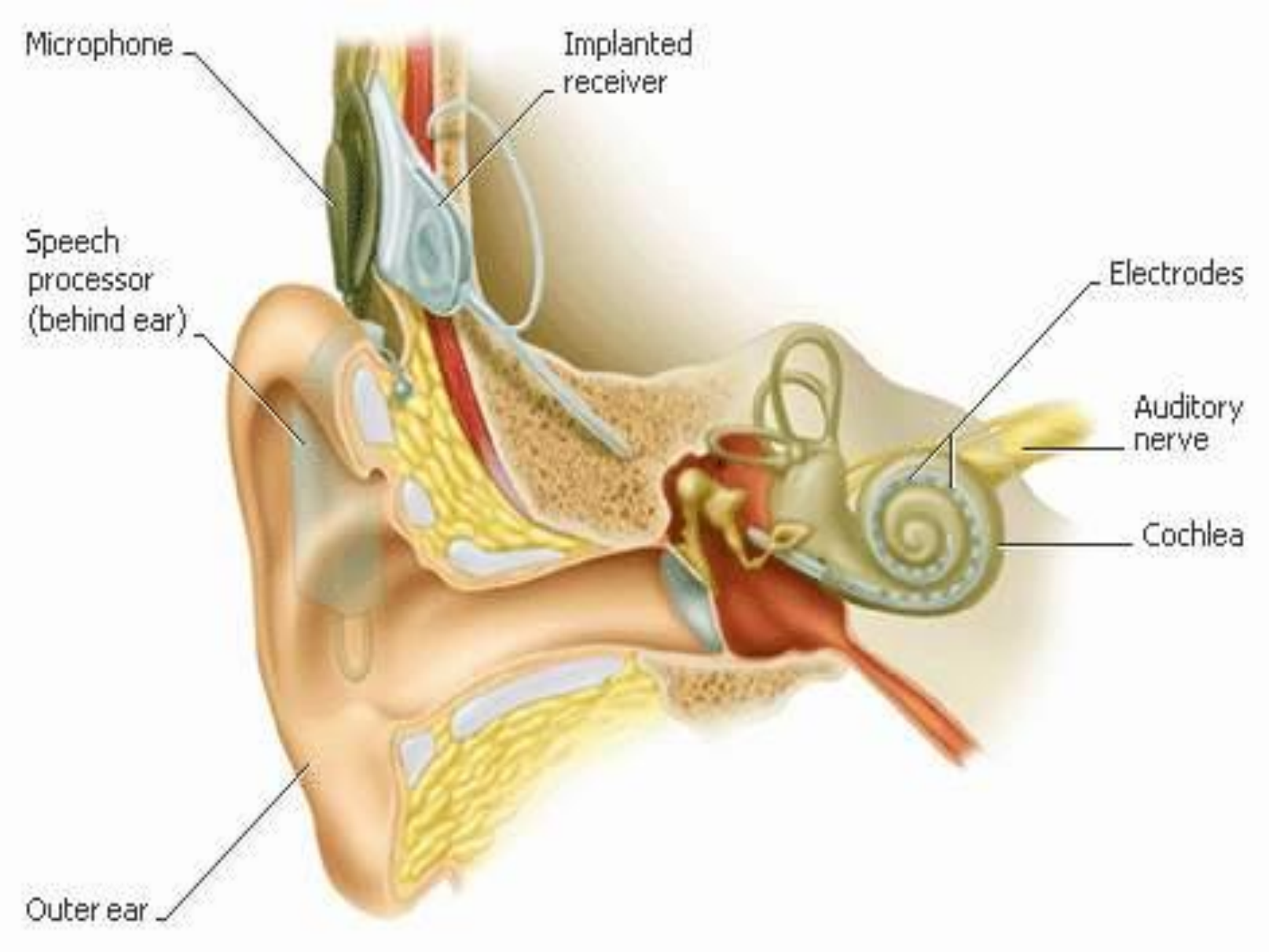
Conclusion

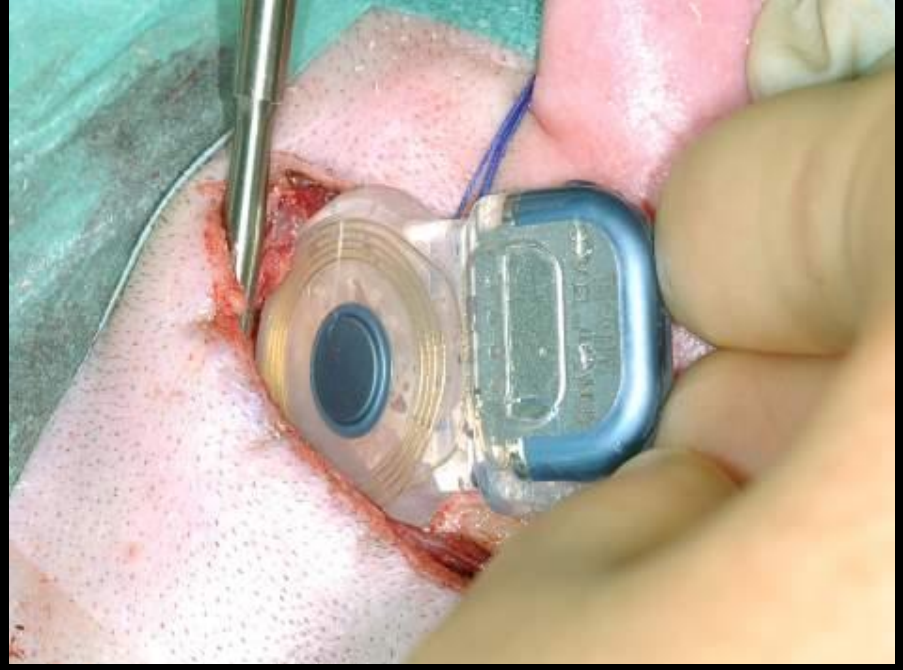
- 80 % DS
- Few not planned admittance postop.
- Few reoperations
- Patients overall highly satisfied:
  - 81 to 93 % (6 quality-questions)

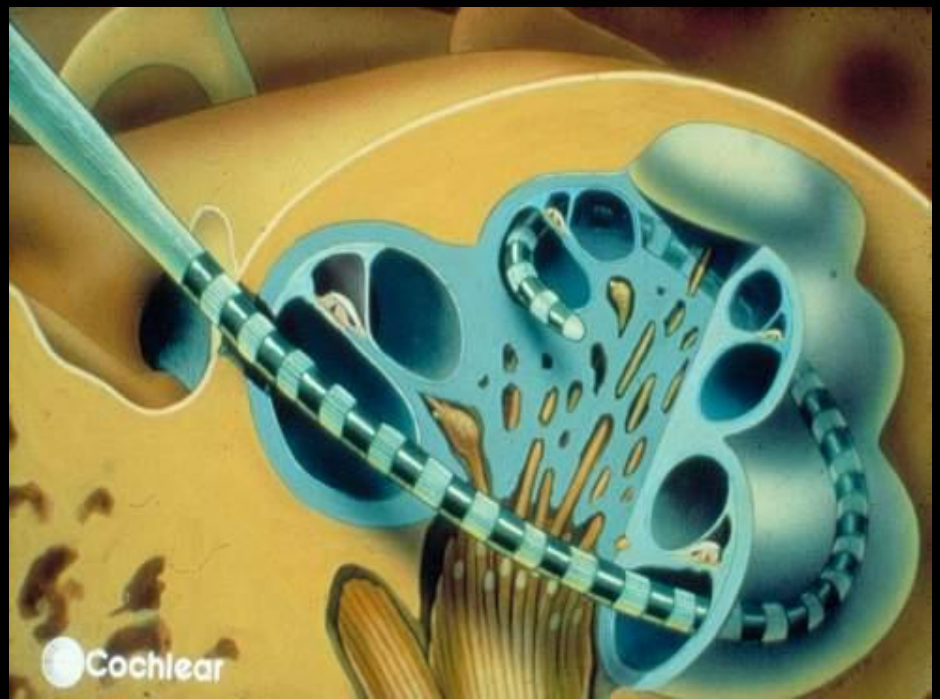


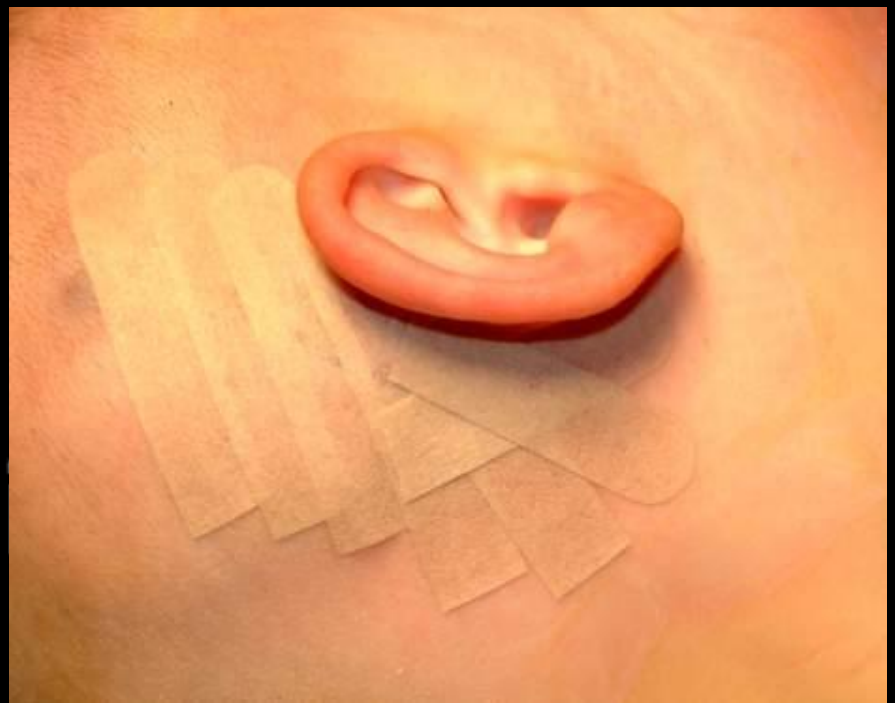
Cochlea implant (Oslo-N)

- Drivers: Economic shortage – fewer beds –adult ptt. less priority
- Before: 5 – 10 days at hospital
- Children and adults
- General anaesthesia


Microphone
Implanted receiver
Speech processor (behind ear)
Electrodes
Auditory nerve
Cochlea
Outer ear




Cochlear



Cochlea implant -2

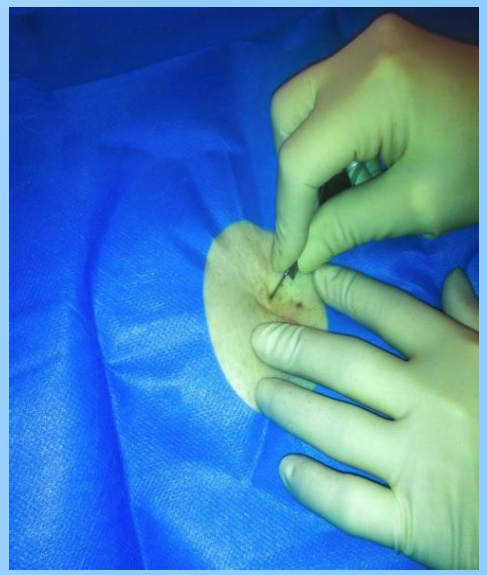
- Now D.S: 80 %
  - Postop. department 2-4 hours
  - Home or
  - Patienthotel if > 1-2 hours to hospital
  - Postop. day 1 control at hospital
- High satisfaction scores
- No more complications
- Staff point of view: OK:
  - Needs good information, planning and fulfils general criteria for DS

Subacute ortopedic fracture surgery

- Driver: all-over quality and logic use of ressurces
- Increasing focus and demanded
- Several hospitals with 1-2 ´planned´ theatres
- 25 % of all?
- Ultrasound blocks

Ambulant treatment of recidiv malignant pleura- and ascites-fluid.

- Celsite Drainaport: first Nordic experience at AHUS. Oslo: internal system with silicon-port for repeated use.
- Typical treatment before:
  - Single drainage with observation for 2-3 days
  - Repeated until death – 10 % of time left..?
  - AHUS: 1200 procedures/year



Celsite Drainaport (2)

- Life expectancy > 3 months
- Local anaesthesia + light sedation/analgesi
- Pleura-port: 28. Ascites-port: 13
- Clinical controll after 10 days
- Drainage at home with ambulating nurse-team when needed
- Total closed system: bath-swim-travel-skiing
- Few complications
- Saved 40.000 NOK/ptt. (4.500 €)
- WIN – WIN - WIN

ASA III-IV patients in day surgery – A descriptive study of 22 patients

Ulf Thyge Larsen & Sven Felsby, Dpt. of Day surgery, Aarhus University Hospital

Serious comorbidity usually contraindicates day surgery, but with a planned setup, **day surgery is possible** in patients with severe cardiopulmonary disease.

Patients with ASA III-IV status referred to a day surgical procedure from 2014 to 2015 were included in the study if anaesthesia with intra-arterial blood pressure monitoring was necessary. 22 patients were included. Infusion of noradrenaline and adrenaline were given in a cubital vein as needed.

No adverse perioperative events were recorded.

Three patients were admitted to ward from the department of day surgery, and two patients were readmitted after discharge, all because of minor surgical complications.
The 13 patients telephoned for follow-up the day after the operation reported well-being.

Patients with ASA III-IV status with need for intravascular blood pressure monitoring may be successfully referred to day surgery.

α_1-antitrypsin-disorder:

FEV_1= 1.35l / PaO_2= 6,4 kPa

Laparoscopic staging of glandels,
Rocuronium + sugammadex +
Invasiv monitoring

Operation time: 10.10 - 11.53

Home at: 14.20

Bladderstone – ASA 3+

Aorta-stenoses, gradient 75 mmHg
Valve-area: 0.8 cm^2

Propofol – Ultiva – LMA
Intra-arteriel pressure
Noradrenalin 0.05-0.2 µg/kg/min
in large Cubital vein.

Fentanyl 25µg + ketorolac 15mg

Operation 120 min.
Postop: On monitor 60 min.
Total observation 135 min.

Tlf. next day: fine condition.

Home alone -Street fit (Herlev-DK)

- Research by Dr. Jens Engbaek
- Study: alone home overnight after DS...?
  - No: Laparoscopic surgery and shoulder-surgery with block

- Driving car next day?

The future

- National strategy
- Norway:
  - ´From severel days to one day´
  - Auditor Generell – help..
  - Change in DRG – financing system?
- Denmark:
  - Danish Regions: 80 % in 2020
  - Building superhospitals – with D.S.-units
- Documentation af quality and quantity
  - Registres
  - Studies
- Apply DS concept to other parts of health sector
- International focus

International focus

- Hvidovre Hospital, Copenhagen – Denmark
  - China: Gansu-province: Intense DS / fast track / short stay development programme

- Ullevål University Hospital. Oslo, Norway. With NORWAC - NGO-humanitarian org:
  - DS – gynecological laparoscopi in GAZA, Palestine

Gynecological laparoscopi in GAZA, Palestine

NO…(?)

- Few ressources generally
- Poor education-level
- Cannot read / understand instruction
- Difficulty with transportation and information
- Lack of sanitary and rehab conditions at home
- Low salaries etc.– nothing to save?
- Threat to working stock

DS in Shifa Hospital GAZA -2

- Never DS before...
- Intens education of local personel
- Team and equipment from Norway
- Period: Sept-2015 to Jan-2016 (4 month)
- 137 women - 84% : DS
  - ASA III: 4 ptt.
  - Age 17 – 55 (mean 28)
  - Admittet medical reasons: 14 / social: 3
- The last 70 pasienter: 97% DS…!
- Admittet: 3 – medical reasons

Gynecological laparoscopi in GAZA, Palestine

NO… YES….

- Few ressources generally
- Poor education-level
- All with grammer-scool +
- Cannot read / understand instruction
- Reads-understand english
- Difficulty with transportation and information
- Lack of sanitary and rehab conditions at home
- Low salaries etc.– nothing to save?
- Can release ressources
- Threat to working stock
- Not quit but change function – lot of tasks
- ++ All have mobil-phone, internett acces ok
- Large families, + unimployment, back up at home is good

Thank you for your time…

Please contact our Scandinavian delegates

- Visits
- Education
- Documentation

WHY AND HOW?

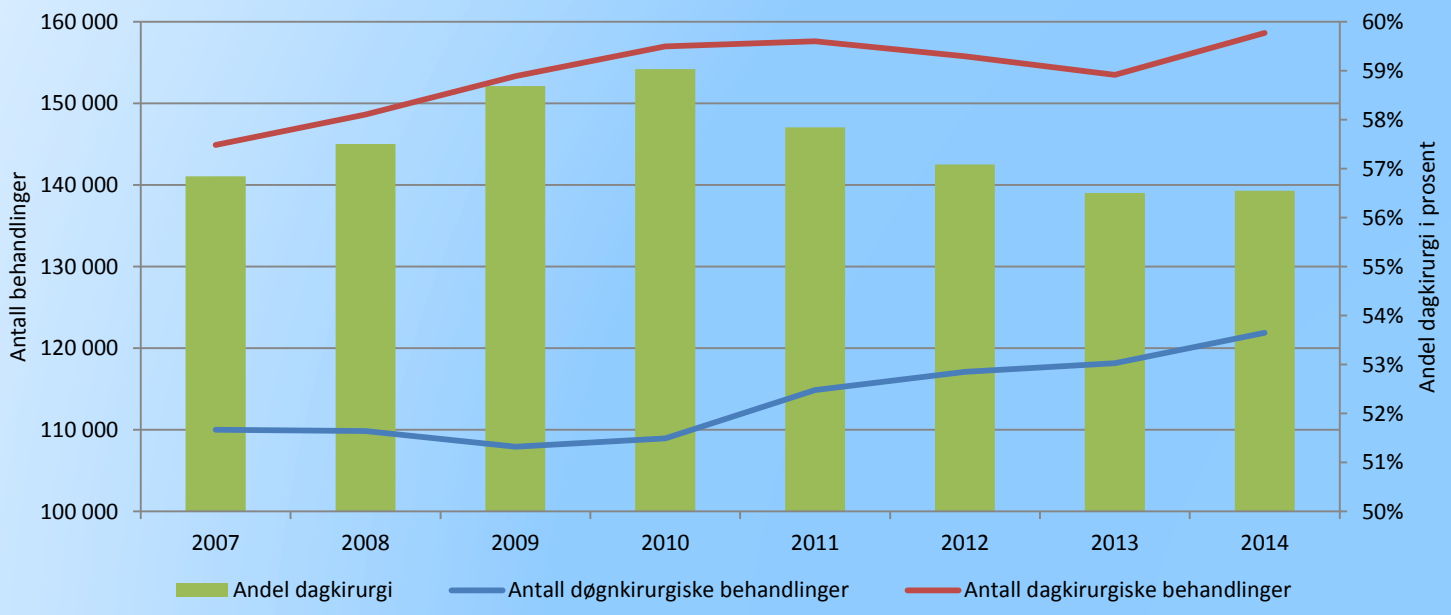
- Competence
- Team-approach
- Political and economic system
  - Public hospitals and clinics
- Physical and organizational capacity
  - Understanding the model…
    - Oslo/Hvidovre/Aarhus
- Demand and expectations from patients
- Win - win – win
  - Use of ressources – effectivity - quality

Den dagkirurgiske utviklingen

Flere dagkirurgiske behandlinger fra 2007 til 2014

…men ikke en dreining fra døgn- til dagbehandling

Et skifte i utviklingen etter 2010



Finansieringens betydning

Hva lønner seg for RHF-ene, HF-ene og avdelingene?
Mangelen på en *satsing* på mer dagkirurgi

Behandlinger	Dagkirurgiske DRG-er		Døgnkirurgiske DRG-er		Prisdifferanse for dag- og døgnkirurgi
	DRG	Pris	DRG	Pris	
Fjerning av livmor Fjerning av eggstokk og eggleder	357O	11 613 kr	357	40 978 kr	29 364 kr
	359O	6 185 kr	359	20 228 kr	14 043 kr
			358	33 151 kr	26 966 kr
			355	33 230 kr	27 045 kr
Skiveprolaps og dekompresjon av nerverøtter	215O	11 329 kr	215C	27 439 kr	16 110 kr
			214C	41 262 kr	29 932 kr
			215B	52 291 kr	40 962 kr
Gallestenoperasjon	494O	9 736 kr	494	20 449 kr	10 713 kr
			493	35 550 kr	15 100 kr
Lyskebrokkoperasjon	162O	4 181 kr	162	11 140 kr	6 958 kr
			163	9 546 kr	5 365 kr
			161	14 090 kr	9 909 kr
Fjerning av mandler	60O	3 234 kr	60	7 384 kr	4 149 kr
			59	7 195 kr	3 960 kr

ENDPOINTS

- Primary endpoint
  - % day surgery
- Secondary endpoint
  - Admittance after daysurgery
  - Reoperations
  - Patient satisfaction

RESULTS

	Operations central op-department	Operations at day surgery department	Admittance ward	Reoperations after DS
2005	33	93	5	1
2006	27	114	7	1
2007	32	130	8	1
2008	27	129	4	2
2009	23	120	5	2
2010	36	121	7	3
2011	28	110	5	1
2012	33	139	7	2
Total 1195 operations	**239**	**956**	**48**	**13**

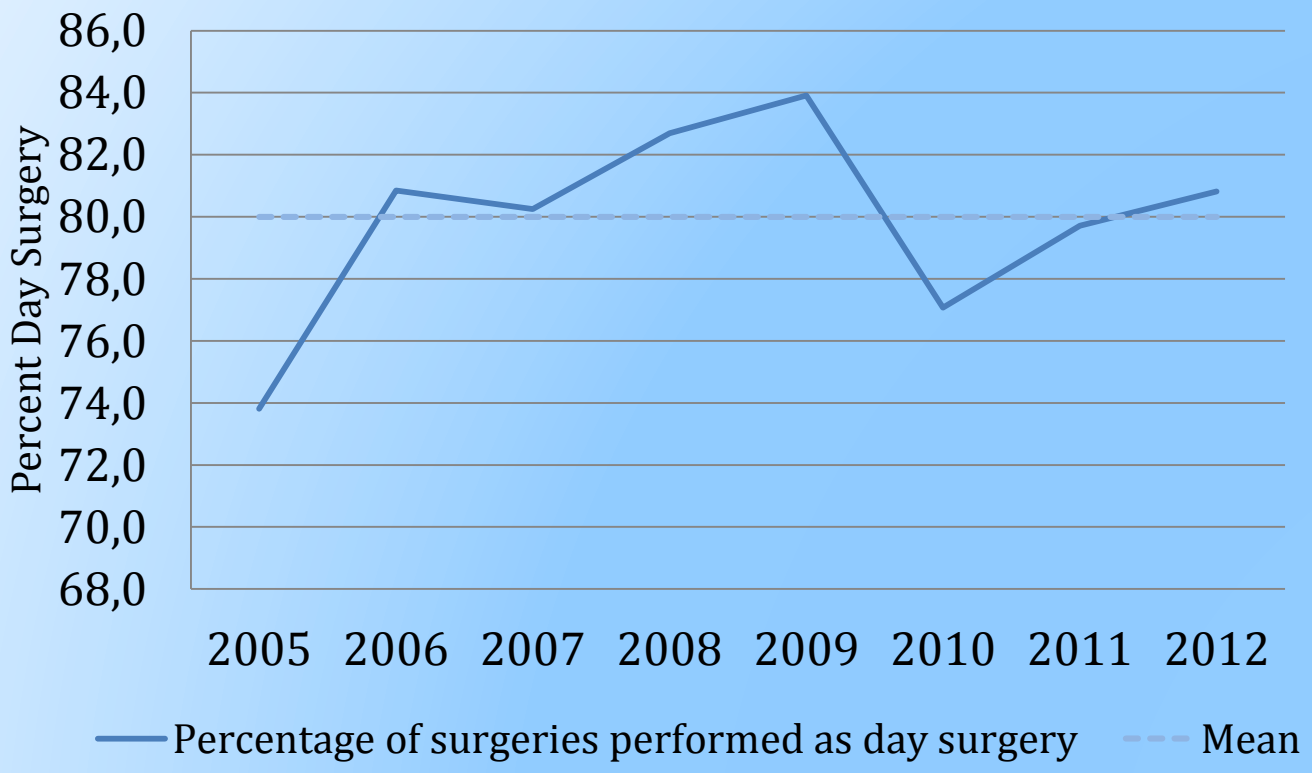
Patient satisfaction

Laparoskopi prosjekt på Shifa Universitetssykehus:

Før prosjektet nesten bare laparotomier
Vanskelig å få inn utstyr
umulig å sende folk ut for å trene
NORWAC prosjekt:
hjelp til selvhjelp: utstyr, opplæring, mester-svenn
3 dager teori kurs, ispedd tørr
trening og demo-
operasjoner, eksamen
Flere dager «hands
on» med 9
4 gynekologer, 3 op.spl, 1 (3) anestesileger
Oppstart uke anestesi+operasjon
Stafett av norske gynekologer utover

- Diagnoser:
- Infertilitet 68 (50%)
- Cyster 31
- Endometriose 19
- Sterilisering 10
- Annet 8

Percent day surgery



Pasientflyt etter CI-utredning

Preop vurdering pol 2-3 uker før op

- generell undersøkelse
- journalskriv
- audiopedagog

Dagkirurgen

- møter kirurgen
- operation
- postop overvåkning 2-4 tim
- hjem / pasienthotell hvis > 1-2 tim vei

Postop pol-besøk

1 dag etter op (lege, sårkontroll)

Overnattning postop

- Fornøyd med å sove på pasienthotell? 15/16
- Fornøyd med å sove hjemme? 19/20
- Fornøyd med å sove på sengepost? 13/15

Oppsummering

CI as DS is:

- sikkert for pasientene
- godt tolerert av pasientene
- effektivt ressursbruk (- 4-5.000 €/DS pt.)

…**forutsatt god information, planlegging, og at pasientene oppfyller generelle kriterier for dagkirurgi.**