

Consequences of urological cancer treatment – an overview–

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Hippocrates

- *Primum non nocere*



Decision on treatment

- Balance between benefit and risk
 - Higher risk can be accepted in cancer surgery
 - Inform patients about risk of surgery
 - Shared decision between surgeon and patient





Radical cystectomy (RC)

- 30 day mortality 3%
- 90 day mortality 8%
- High perioperative blood loss
- Long operative time
- Long hospital stay
- High risk for complications
 - Approximately 35%
 - Major = 10%
 - Minor = 25%



RC complications

- Gastrointestinal
 - Bowel leakage
 - Bowel obstruction
- Urinary leakage
- Infections
 - Recurrent pyelonephritis
 - Fungal infections



RT for bladder cancer

- 30 day mortality 0,3%
- 90 day mortality 1,7%
- Recurrence in 44%
 - Salvage cystectomy for 20%
 - Mortality higher after salvage RT
 - 30day = 9%
 - 90 day = 16%
- Complications
 - Gastrointestinal
 - Genitourinary



RC vs RT for bladder cancer

- Comparable 5 year survival
 - 37% for both treatments
- RT better tolerated
- Both RT and RC valid as primary treatment
- For elderly and frail patients
 - Less is more



Case 1 - Bladder cancer

- 75 year old female
 - DM II
 - High blood pressure
 - Psoriasis
- Diagnosed 2018 with T1G3 TCC
 - TURBT + second look TURBT
 - 6 + 3 BCG installations
- BCG cystit



BCG cystitis

- Failure to various treatments
 - Bladder dilatation
 - Tuberculous treatment
 - Antibiotic and fungal treatment
 - Pain killers
- Severe symptoms
 - Pain in suprapubic region
 - Frequent voiding
 - Hematuria



Cystectomy in May 2019

- Robotically assisted
 - Discharged 2 days after surgery
 - Symptoms resolved completely
 - No complications to surgery
 - No signs of recidive

Radical prostatectomy (RP)

- Retropubic (RRP)
- Laparoscopic (LRP)
- Robotic-assisted (RARP)





Adverse effects of RP

Urinary incontinence

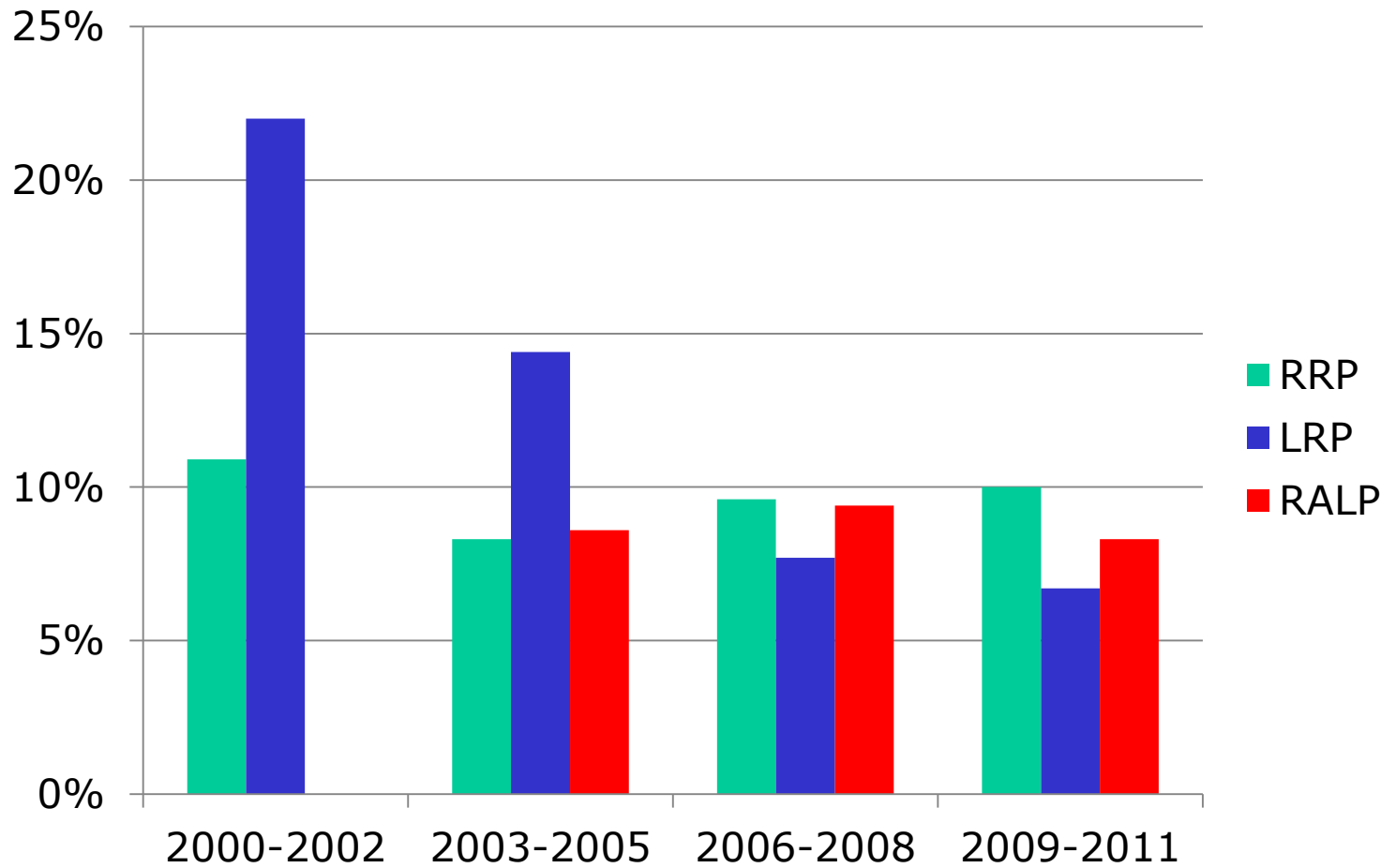


Erectile dysfunction





Readmission rate

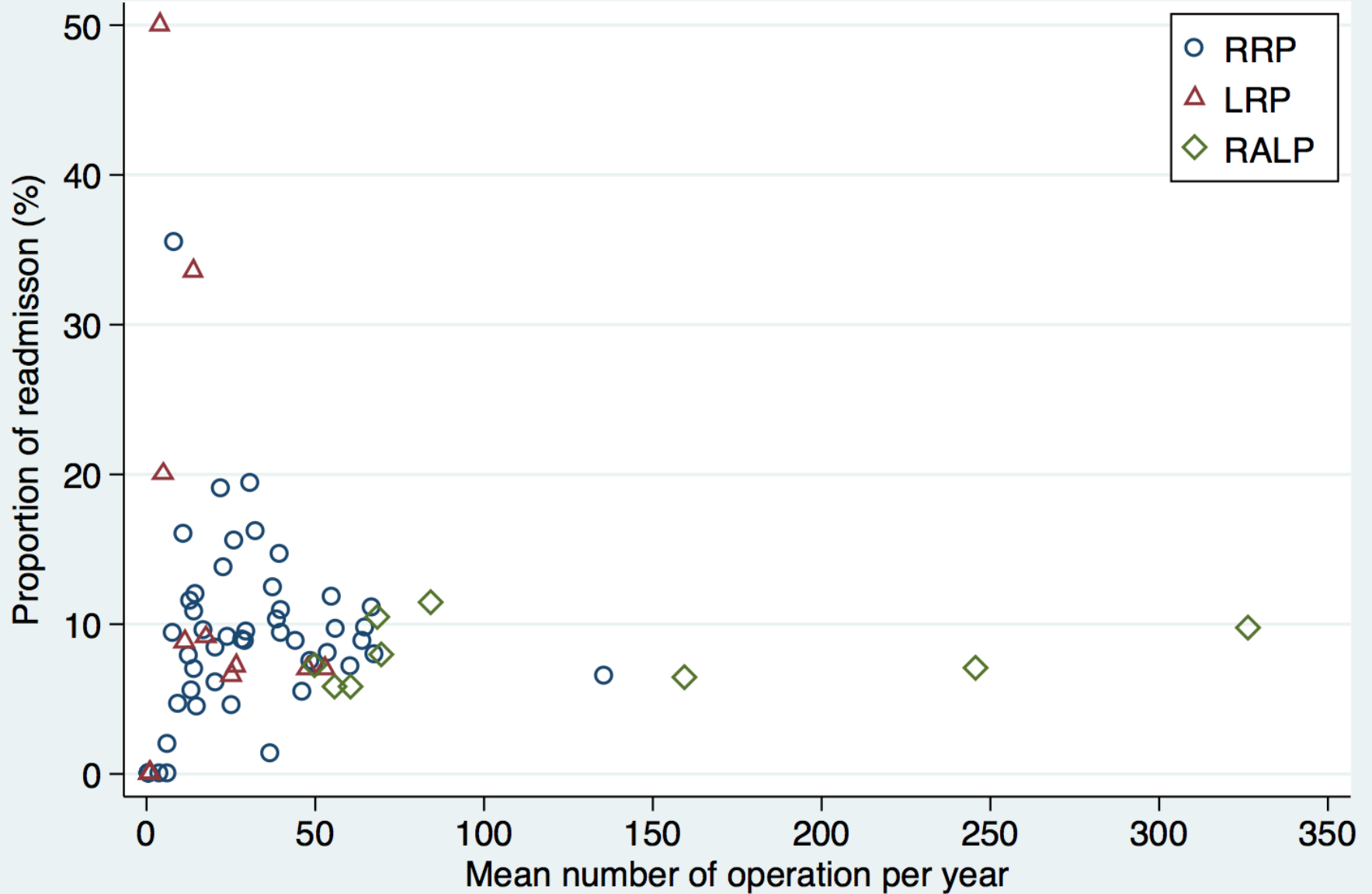




RRP vs RARP

- 19,712 men included 2004-2014
 - 11,212 RRP
 - 8,500 RARP
- Adverse events mostly similar
- RARP:
 - Anastomotic stricture ↓
 - Incisional hernia ↑

Surgical volume and readmission



Radiotherapy (RT)

- External beam radiotherapy



Adverse effects RT

Genitourinary



Gastrointestinal



Long term adverse events

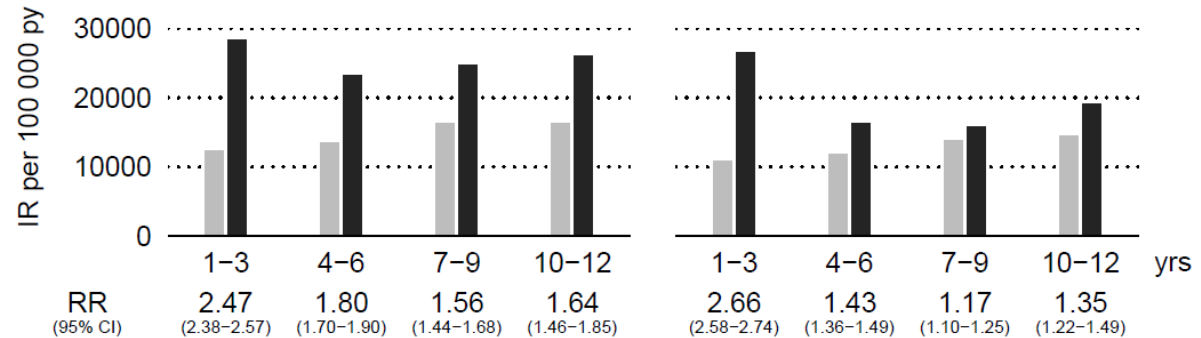
Surgery vs. Radiotherapy

■ Controls
■ Cases – localized intermediate
and high risk PCa

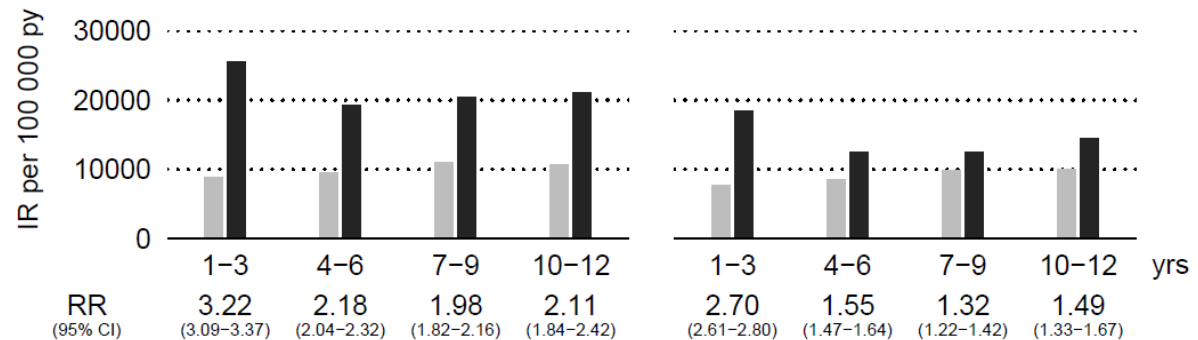
RT

RP

All diagnoses



All procedures





RALP vs. RT

- Oncological result comparable
- Adverse events different
 - RALP
 - ED and urinary incontinence
 - RT
 - Genitourinary and Gastrointestinal
 - Long term adverse events more common
- Which adverse events can the patient accept?



Nephrectomy

- Partial (PN) or radical (RN)
 - Similar overall survival
 - Better renal function after PN
- Open or laparoscopic
 - Risk of complications comparable
- 30 day mortality 0.5%
 - Increases with higher age and stage
 - Has decreased over time

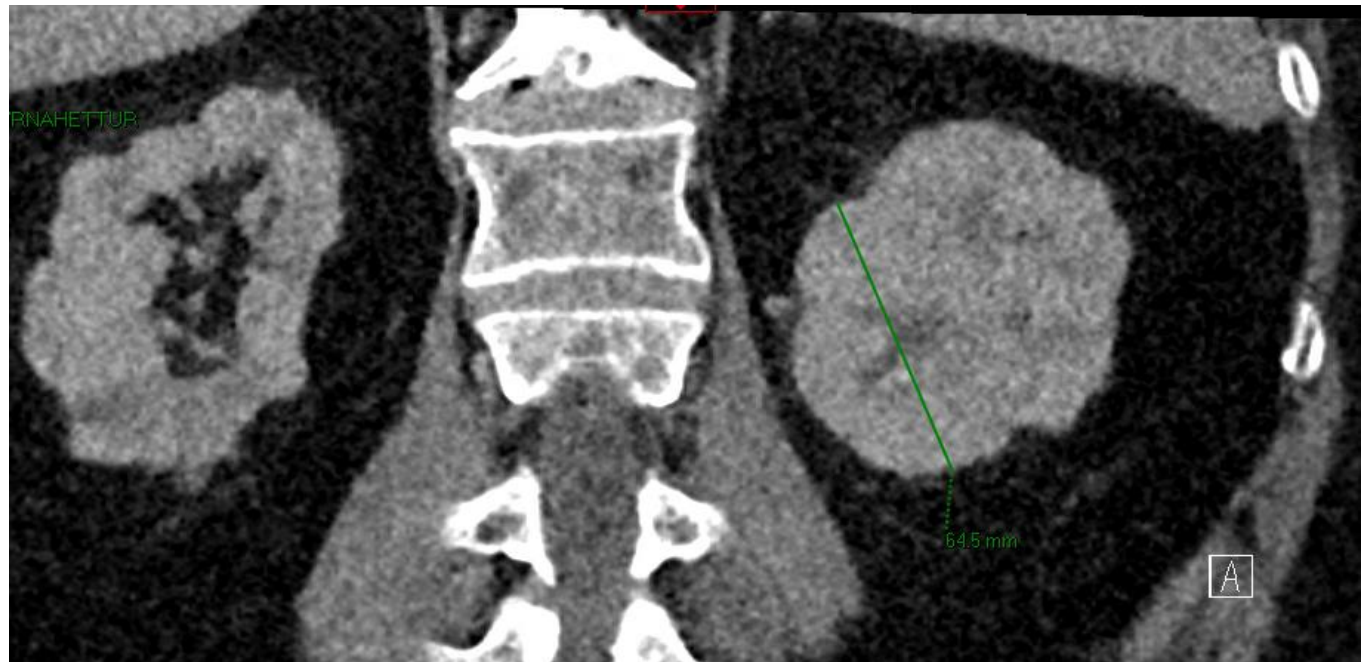


Case 2 - Kidney cancer

- 72 year old male
 - High blood pressure
 - Paroxysmal a. fib
 - Recurrent cellulitis left leg
 - Empyema 2015
 - BPH
 - Sleep apnea
- 6,5 cm tumour left kidney
 - Incidental finding on CT thorax

Further investigation

- Pre-op GFR = 84ml
– Kreatinin 81 $\mu\text{mol/L}$
- Biopsy from tumour
– RCC Fuhrman grade 2





Case 2 cont.

- Robot assisted radical nephrectomy
 - 18. November 2019
 - No early complications
 - Discharged 19. November 2019
- Readmitted to local hospital
 - 23. November 2019
 - Nausea and vomiting
 - Admitted to surgical ward

Post-operative ileus

- Laparotomy 25. November 2019
 - Hernia in one of the surgical ports
 - Ileus resolved after surgery
- ICU post-op
 - A. Fib
 - Kidney failure
- Now recovered





Complications

- Part of the game
 - But can be reduced
 - High volume centres
 - ERAS
 - Quit smoking
- Select patients carefully
 - Other treatments for high risk patients
 - Inform patients on the risk pre-op



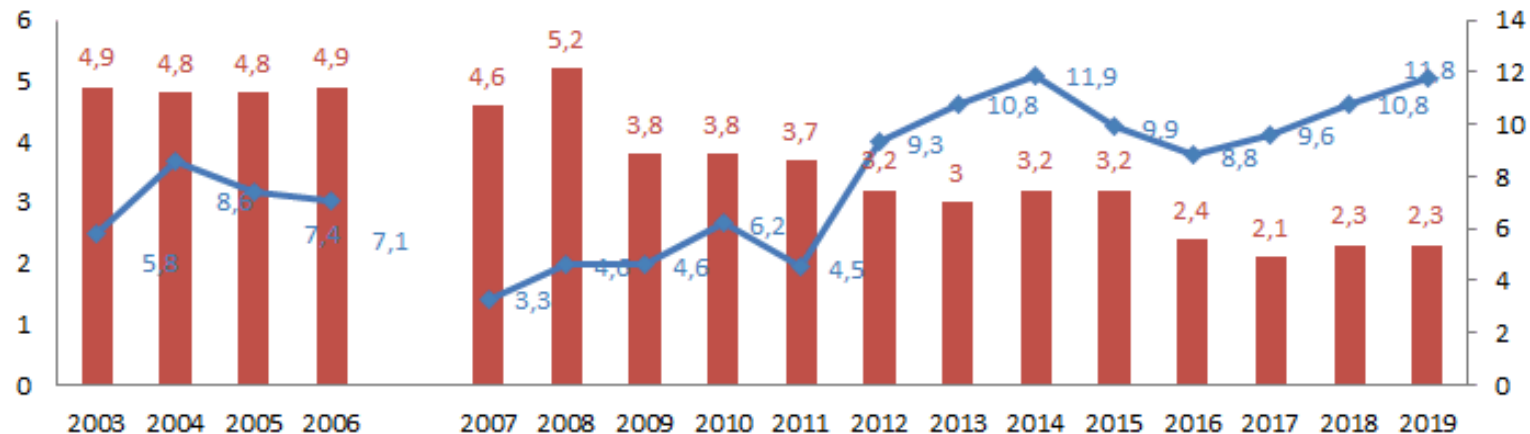
What to do?

- Keep the risk of complications low
- Surgical audit
 - Know your complications
- Quality indicators
 - Compare your complications with others and over time

Hospital stay vs. Readmissions

Landspítali Reykjavík

- Red = Hospital stay (days)
- Blue = Readmissions (%)






Surgical audit - RALP

- An example of electronic form
 - Saved in patient charts
 - Registered post-operatively

[Vista](#) [Prenta og Vista](#) [Prenta](#) [Endurnýja gögn](#) [Samantekt](#) [Hætta við](#)



NÝTT!Fylgikvillar blöðruhálskirtilsbrotnáms
Starfrænnir og skv. Clavien-Dindo

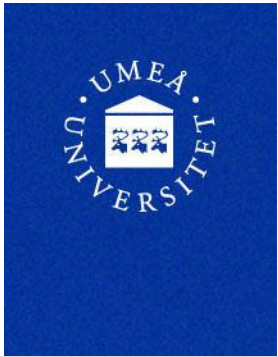
Sækja Reglugljóð

Grunnupplýsingar

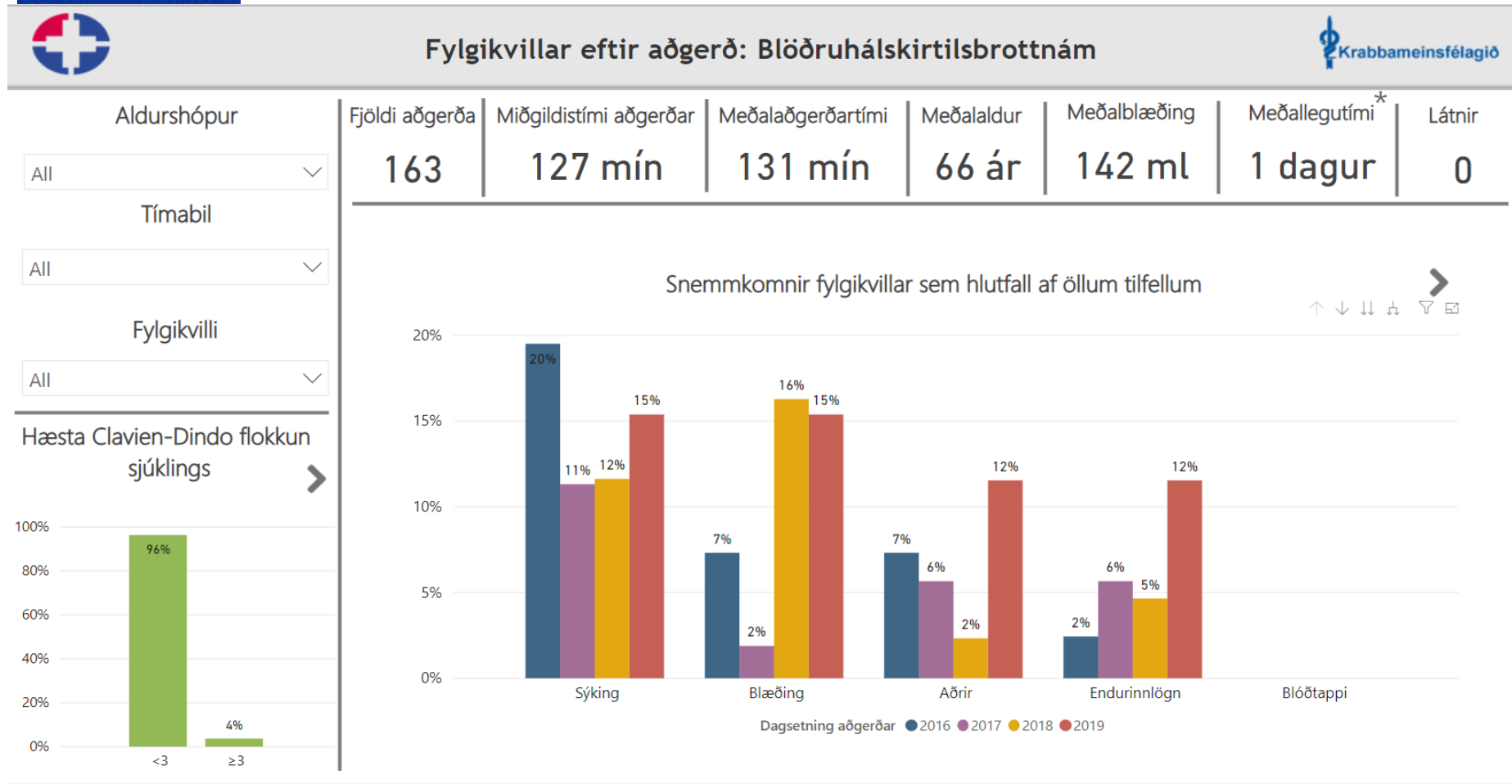
Kennitala 3107445579	ASA-flokkun <small>HREINSA/CLEAR</small> ▼	Aðgerðardagur blöðruhálskirtilsbrotnáms ▼
Nafn sjúklings Guðmundur Birnir Sigurgeirsson	IIEF-stig(ristruflanir) ▼	RALP <small>HREINSA/CLEAR</small> ▼
Aldur við greiningu ▼	Stinningarhæfni fyrir meðferð <small>HREINSA/CLEAR</small> ▼	Fjöldi legudaga ▼
Hæð(cm) ▼ cm	IPSS-stig(spurningar 1-7) ▼	Aðgerðartími ▼
Þyngd(kg) ▼ kg	IPSS-lífsgæði(spurning 8) ▼	Blæðing í aðgerð ▼
BMI(kg/m2) EOG tengja ▼ kg/m2		

Þvagleggstaka

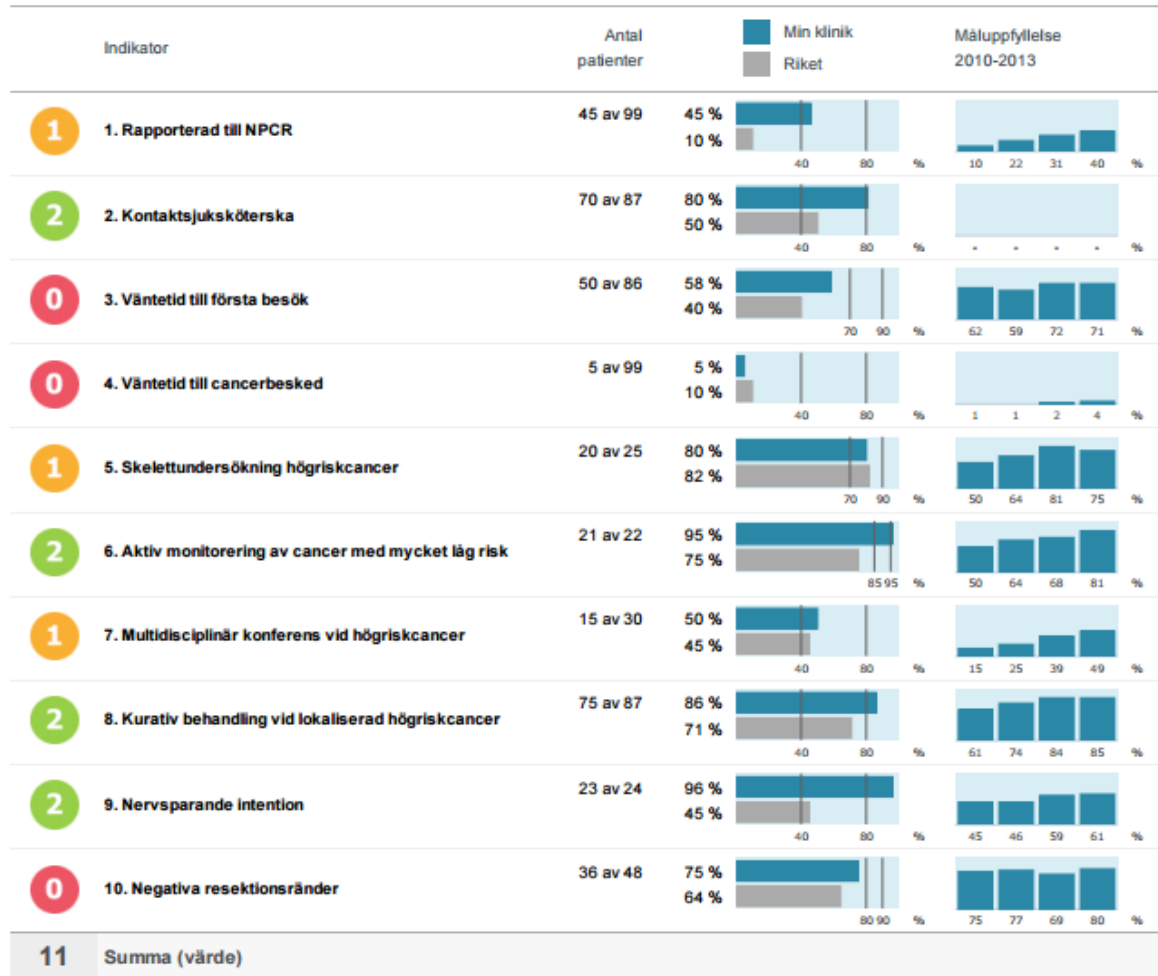
Dagsetning þvagleggstöku ▼	Þvagleggstími ▼ dagar	Hafa komið upp vandamál eftir aðgerð? <input type="checkbox"/> Já <input type="checkbox"/> Nei Ef já, þá hvaða: ▼
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Monitoring of results



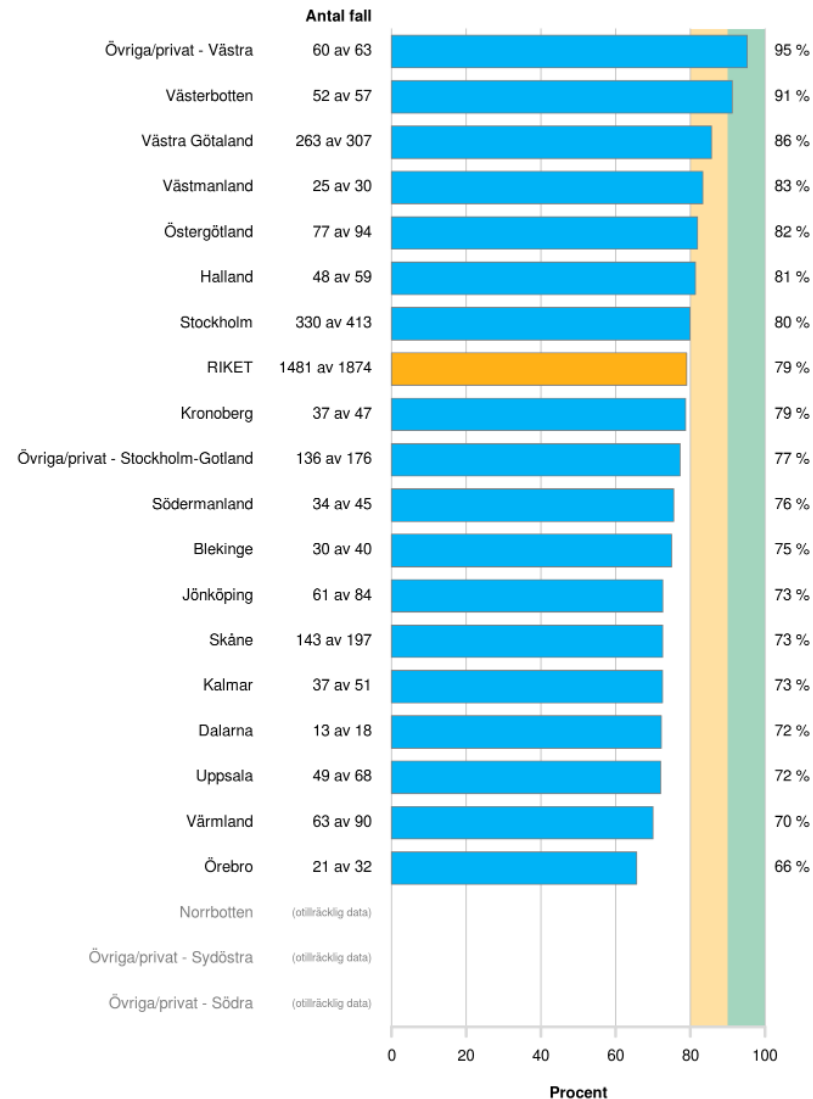
Quality indicators





Quality report in Sweden

Negative surgical border





Murphy's law

Anything
— that can
go wrong...
will go
— wrong —





Case 3 - Vasectomy

- 44 year old male
- Healthy
 - No medication
 - No riskfactors for infection
- Vasectomy December 2019
 - No problems during surgery
 - Out-patient care

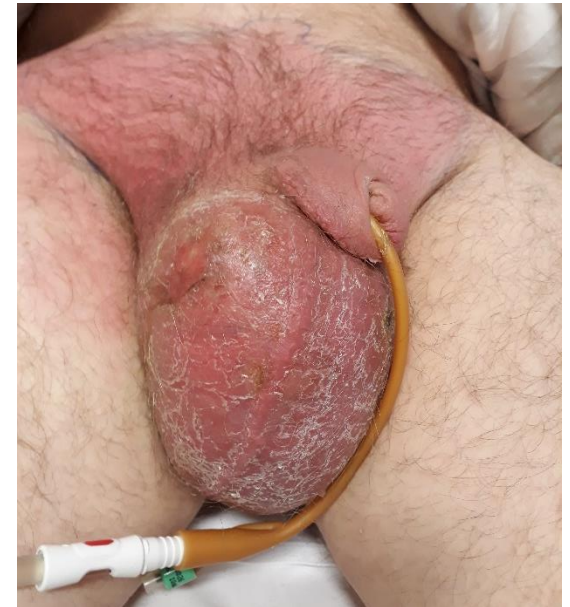


Two weeks after surgery

- Increased pain in scrotum
 - Post-op infection
 - Admission to local hospital
 - Iv antibiotics
- No response to treatment
 - Strep. Pyogenes in culture
 - Antibiotics changed
- Still not responding
 - Admitted to university hospital

On admission

- Septic
 - High fever, tachycard and hypotensive
- Acute surgery
 - Necrosis
 - Recession scrotal wall
- PAD
 - Necrotizing fascitis





Case 3 cont.

- Recovered after surgery
 - Vital signs stable
- Plastic surgeons take over treatments
 - Fish skin treatment
 - Skin transplant
- Currently discharged

Thank you

