

# iGuide – erfarenheter och resultat inom RJL



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# Background

2013/59/Euratom

## **Art 58 c**

Member States shall ensure that referral guidelines for medical imaging, taking into account the radiation doses, are available to the referrers

# Background

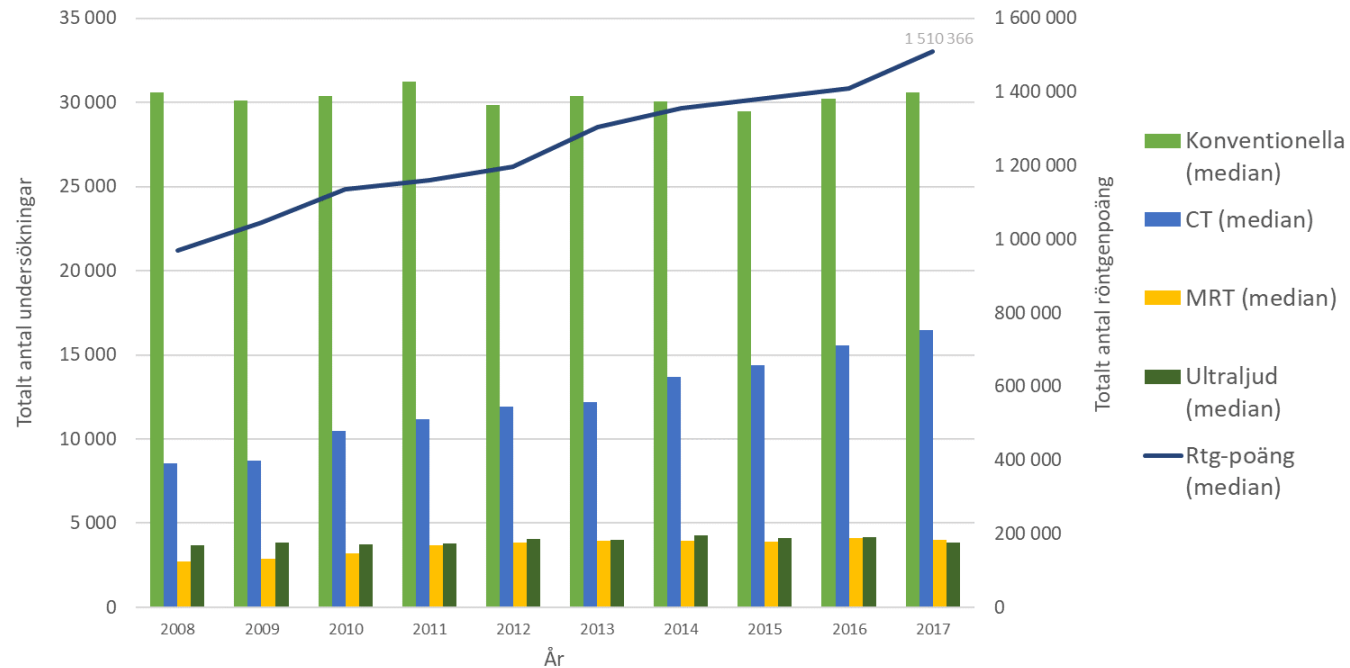
- US (ACR Select)
- Europe: provided by European Society of Radiology (non-profit)
- Pilots in Barcelona, Croatia, Germany, Holland
- Sweden: Region Jönköpings län (Jönköping, Eksjö, Värnamo)
- More regions are interested (Östergötland, and nationally)
  
- Swedish Radiation Authority supports electronical CDS
- Swedish Society of Radiology, Swedish College of General Practice, Swedish Society of Clinical Physiology and Swedish Society of Nuclear Medicine support implementation of iGuide

# About the pilot in Jönköping

- Internal Medicine department in Eksjö, four GP clinics in the region
- Financially supported by Swedish Radiation Authority
- Start April 2017, phase 2 Nov 2018
- Questionnaire before and after

# Why referral guidelines?

Totalt antal undersökningar 2008 - 2017  
Medianvärde baserat på 21 röntgenkliniker



# Why referral guidelines?

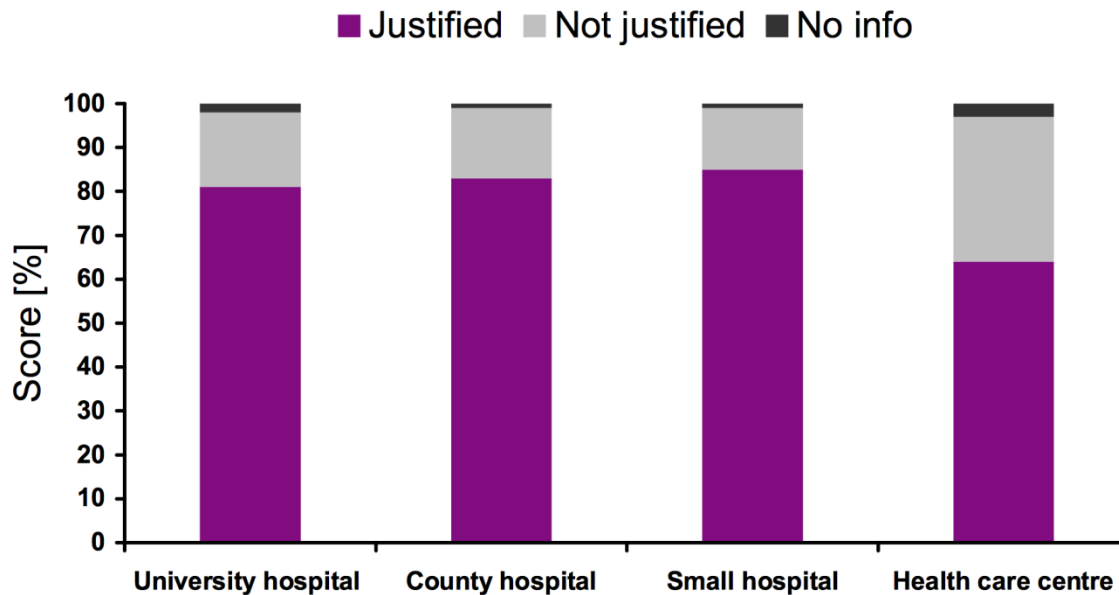


Figure 1 Judgement of justification for prescribers from different types of organisations.

Source:

<http://www.stralsakerhetsmyndigheten.se/Global/Publikationer/Rapport/Stralskydd/2009/S>  
SM-Rapport-2009-03.pdf

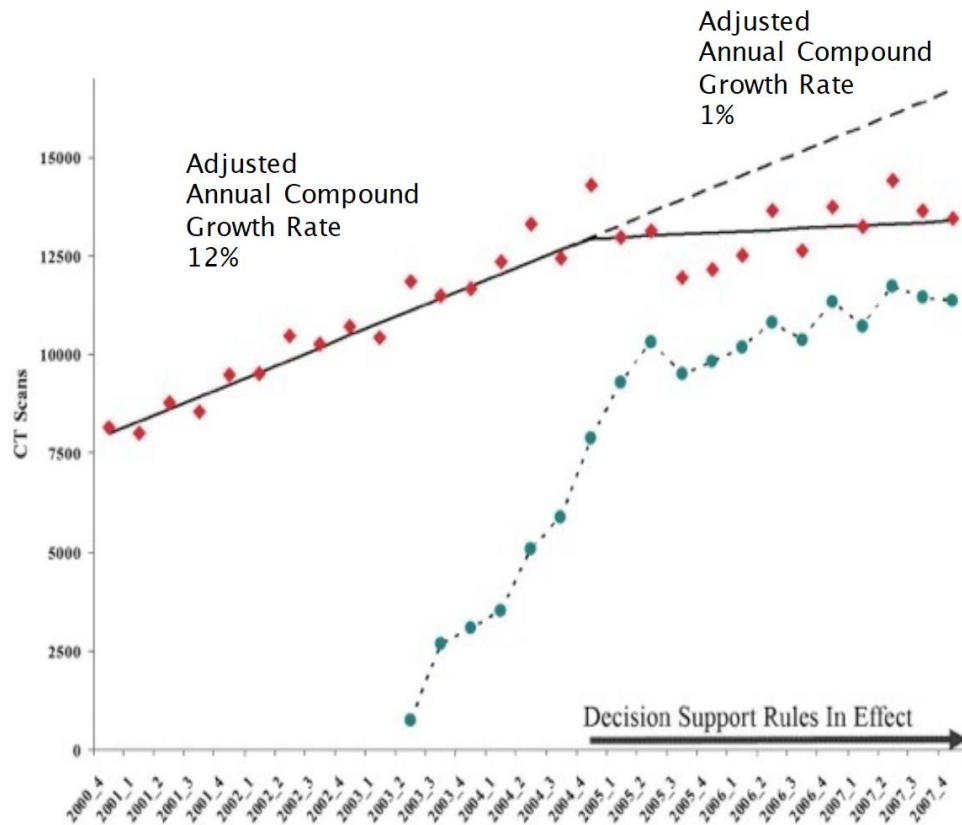
# Why referral guidelines?

## Massachusetts General Hospital High Cost Imaging

Effects of CDS  
2000 - 2007

Quarters 2000-2007

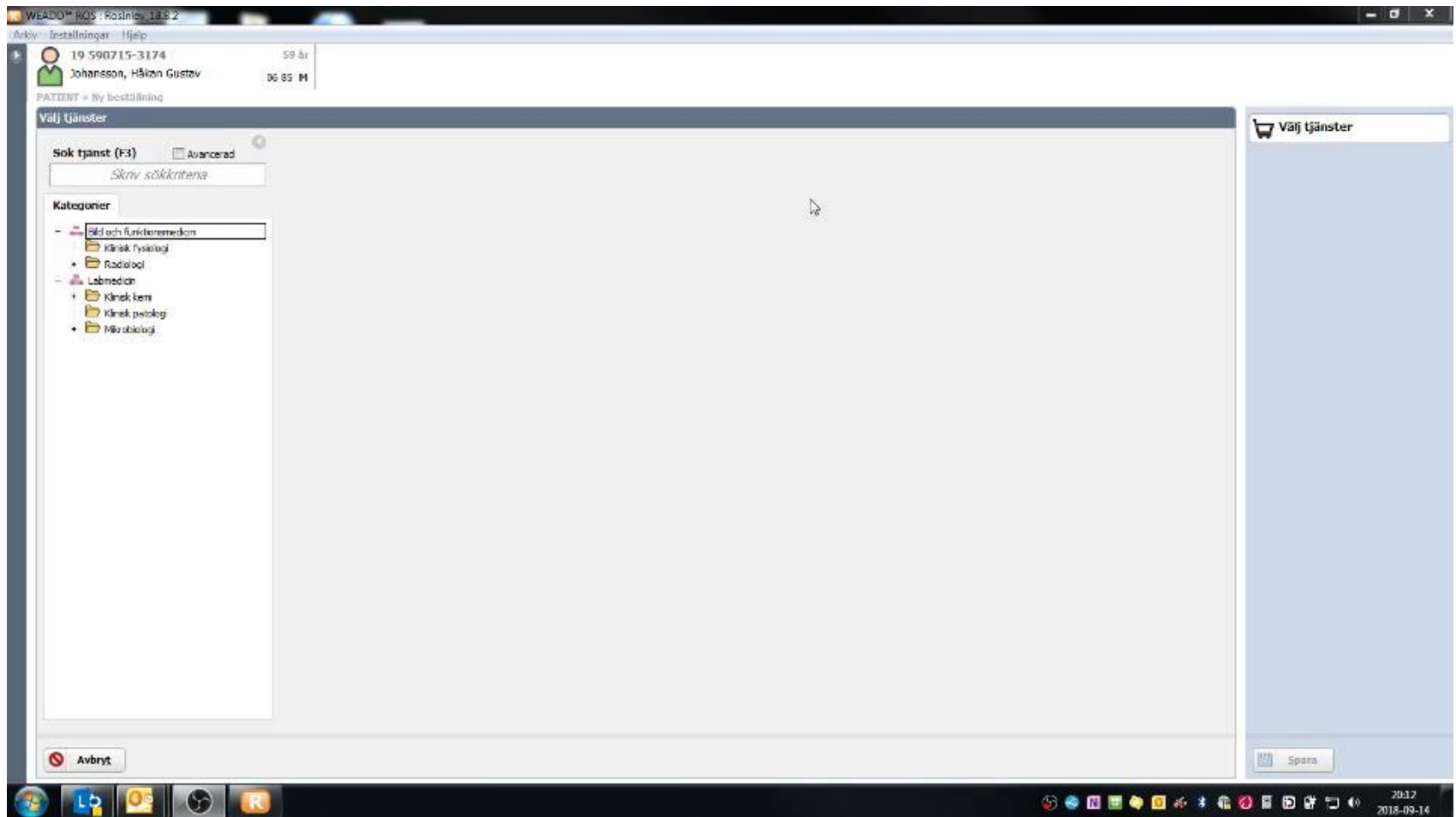
- ◆ = Total exams
- = Ordered with ROE



# Considerations when implementing

- Integration (technical)
- Acceptance
- Time & money





# Source

ESR Ind	ESR Exam ID	Procedure Name	Indication	BodyArea	CPT	Modal	Rule Sc	RJL procedures
3073698	114538	XRAY, abdomen	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	74000	XRAY	1	
3073698	114045	CT, abdomen, wo iv contrast	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	74150	CT	8	
3073698	114044	CT, abdomen, w iv contrast	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	74160	CT	1	
3073698	114952	CT, abdomen, wo/w iv contrast	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	74170	CT	8	RAD0192, CT, adrenals
3073698	114085	MR, abdomen, wo iv contrast	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	74181	MR	8	MR, abdomen, liver-pancreas-spleen
3073698	114082	MR, abdomen, wo/w iv contrast	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	74182	MR	1	MR, abdomen, liver-pancreas-spleen
3073698	114129	US, abdomen, adrenal	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	76775	US	1	
3073698	114191	NUC, abdomen, adrenal, MIBG	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	78075	NUC	2	
3073698	114188	NUC, iodocholesterol, abdomen, adrenal	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	78075	NUC	1	
3073698	125057	PET-CT, skull base to mid thigh, FDG	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen	78815	PET-CT	8	
3073698	114223	INV, biopsy, abdomen, adrenal	Adrenal mass, <4cm, incidental, history of malignancy	Abdomen		INV	5	

# For radiologists

----- ESR iGuide -----

Undersökning: Hypofarynx och esofagus

Indikationer: dysfagi/sväljningssvårigheter, orofaryngeal, utan känd orsak

Poäng: 6

DSN: 3634602

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----- ESR iGuide -----

Undersökning: CT hals/torax

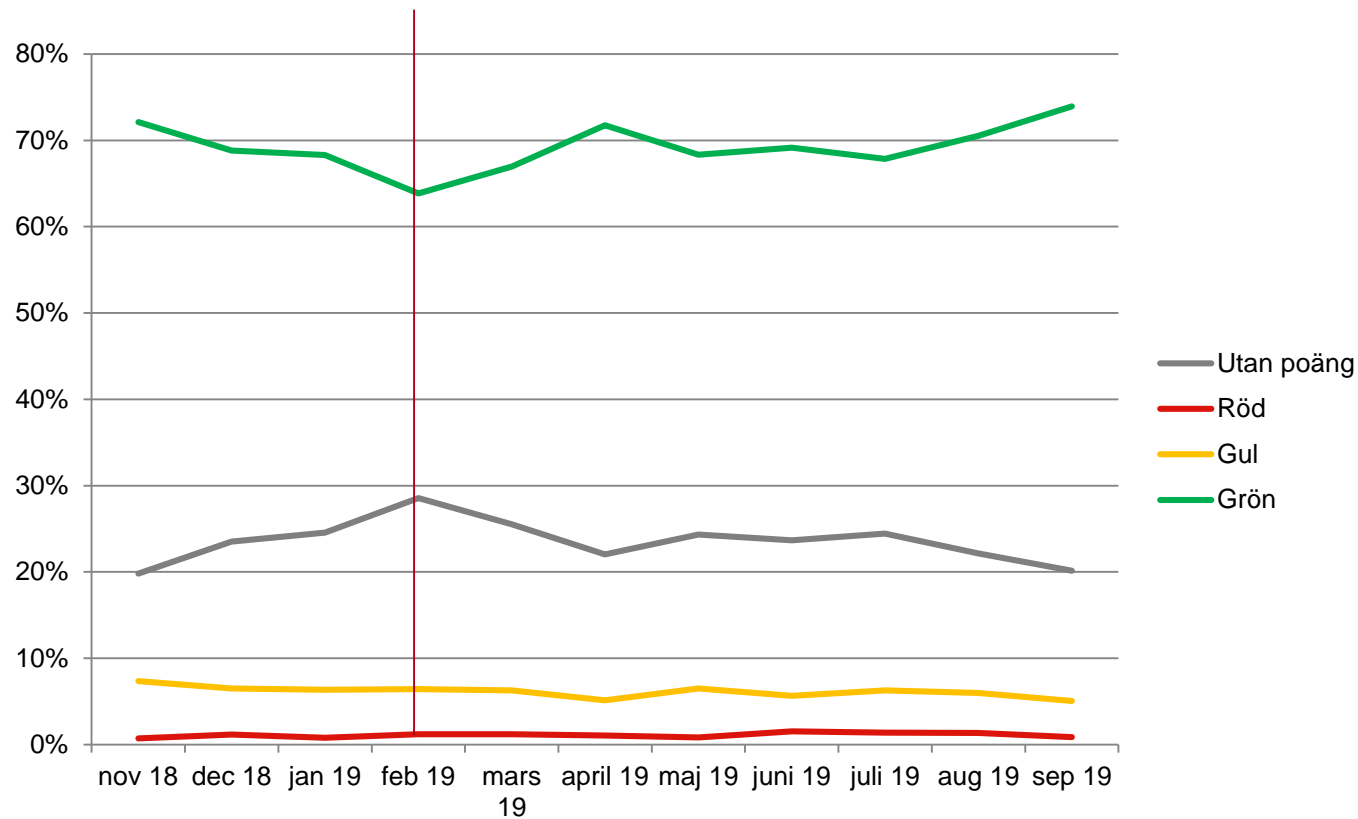
Indikationer: Lymfadenopati?

Poäng: -

DSN: 3634732

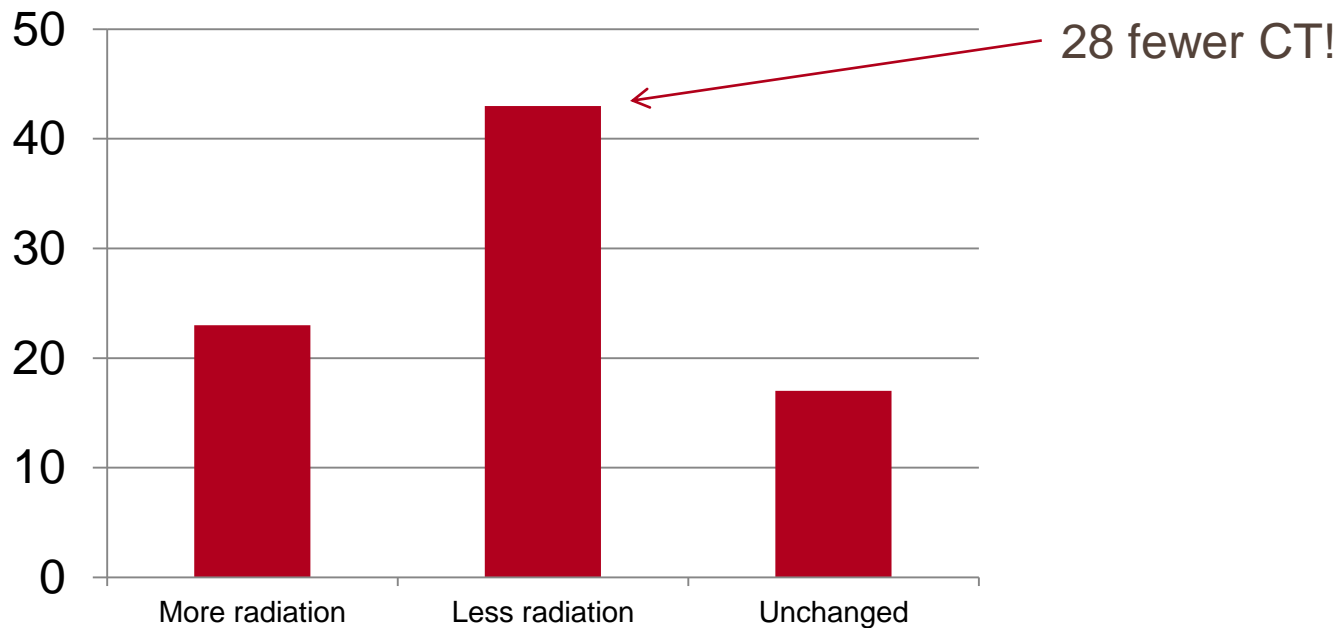
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# Results - justification

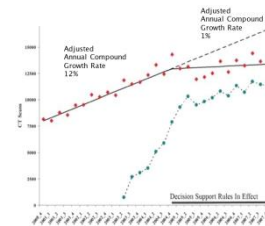
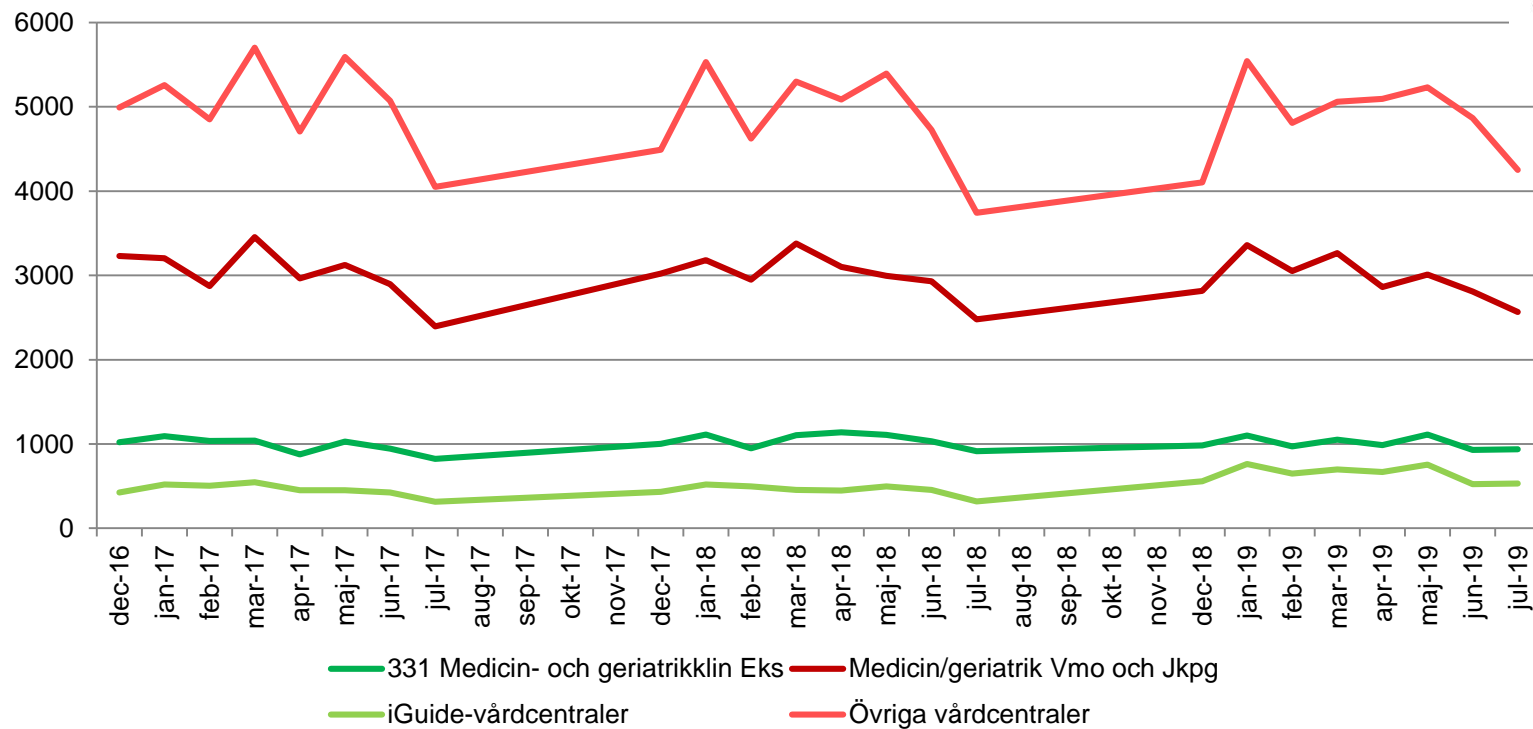


# Results – changed exams

Total of 14,452 exams, 84 changed (0,81%)



# Results - referrals

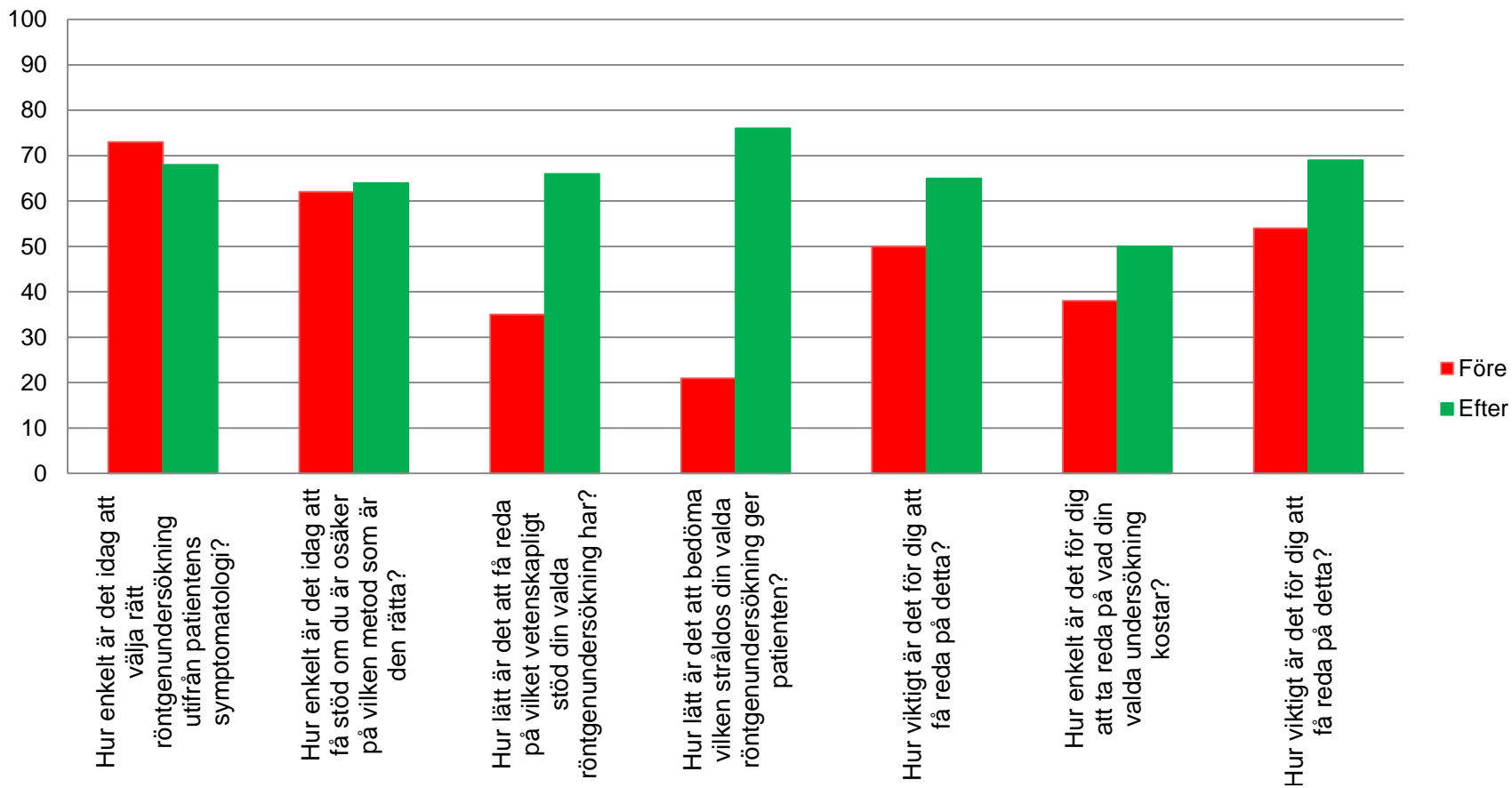


# Results - clinicians

## Opinions

- Hard to find right indications
- Good to have support
- Doesn't take too much extra time
- Takes too much extra time
- Suggestions:  
(top 10 indications, synonyms, more indications)

# Resultat - clinicians





# Results - radiologists

## Opinions

Few

Not much help so far

# Future

- Improve
- More clinics locally
- At least one more pilot
- National spread