National Quality Registers in Sweden

Sweden is not **one** country concerning health care!

21 independent counties /regions

- Different definitions of primary care
- Different financing systems (capitation, FFS) including different P4P systems
- Different medical record systems
- Different systems for follow up
- Different quality indicators

Swedish knee – and hip artroplasty registers in an international perspective

Göran Garellick

Swedish Hip Arthroplasty Register

Swedish Knee Arthroplasty Register

the idea of a national register

...serious consideration should be given to establishing a central register to keep a finger on the pulse of total implant surgery on a nation-wide basis...

NJR in the US started in 2007

Sir John Charnley 1972

Artroplasty registers in the nordic countries

- Knee 1975
- Hip   1979

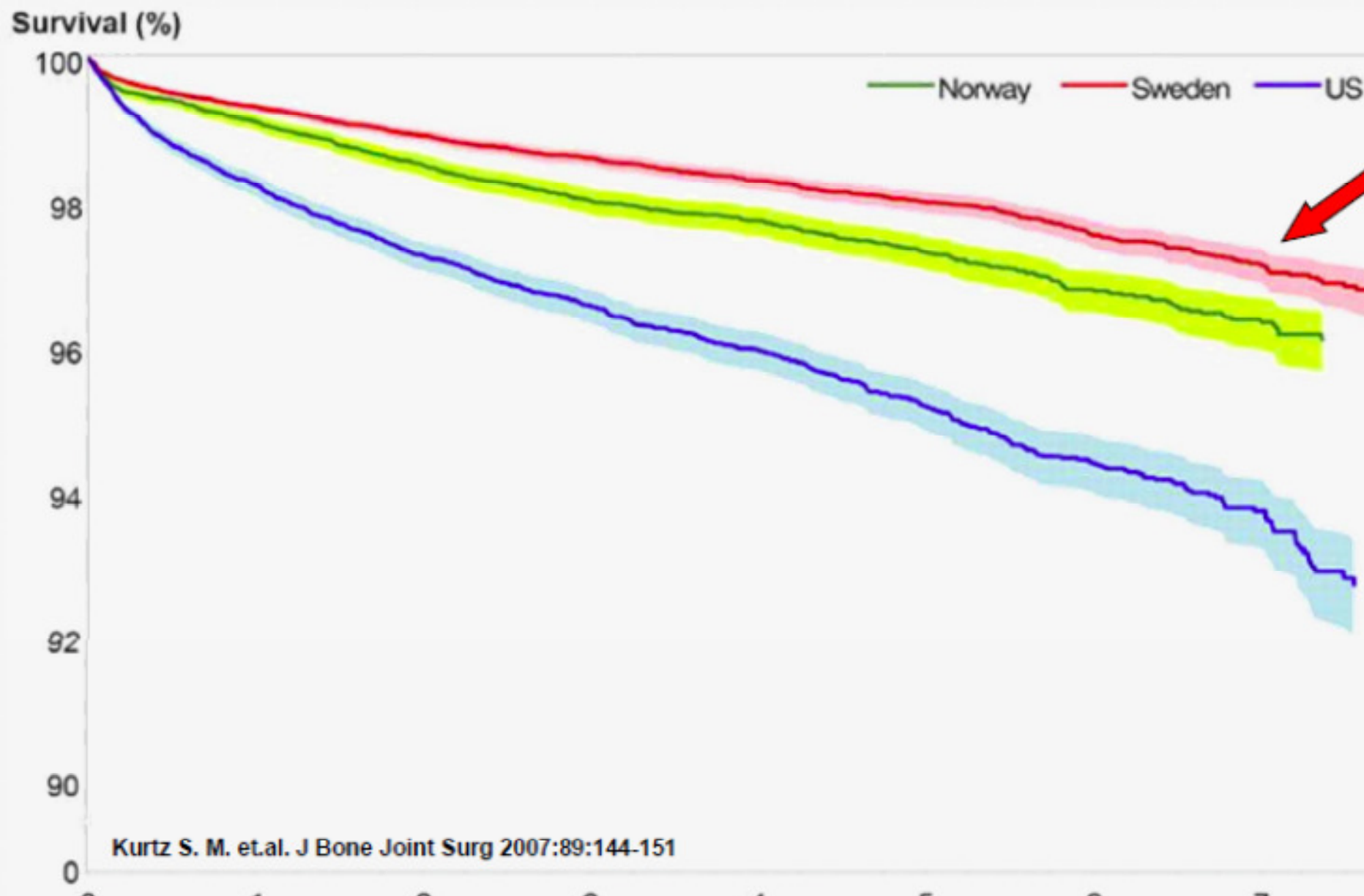- Hip   1987
- Knee 1994

- Hip & Knee 1980

- Hip   1995
- Knee   1997

The lowest reported frequency of reoperations in the world

Fig. 4 Survivorship curves (with 95% confidence intervals) for total hip arthroplasty implan
in the United States, Sweden, and Norway.

Kurtz S. M. et.al. J Bone Joint Surg 2007:89:144-151

Medical Device Alert

Immediate action / update

Ref: MDA/2010/069   Issued: 07 September 2010 at 13:00

Device

DePuy ASR™ hip replacement implants.

Problem

Recall of ASR hip replacement implants due to increased rates of revision.

Action

- Do not implant DePuy ASR hip replacements.

- Return all unused ASR hip replacement implants to the manufacturer.

- Inform all patients implanted with ASR hip replacements about this recall and schedule them for a follow-up visit.

Note: the recommendations in this MDA replace the advice given in MDA/2010/044.

Action by

- Medical directors.
- Orthopaedic surgeons.
- Staff involved in the management of patients with joint replacement implants.

What happened later on ?

• ASR surface replacement on 93 000 patients.

• Cost in the US 8,100 000 000 $.

• If US had had an artroplasty register these problems would have been detected in 6-8 months.

The successes of the artroplasty registers

- Has created high expectations of the benefits from quality registers.

- They have become a model for quality registers

Differences between registers "surgical" and "medical"

- New procedures with lack of evidence

- What is the outcome of different procedures?

- The register is creating new evidence on the procedures studied

- Procedures based on evidence.

- Adherence to guidelines?

- Do the results in reality match those in randomised trials/guidelines?

Sweden
90 national quality registers

- Aimed for one diagnosis or one procedure

- Created and managed by hospital specialists / researchers with great knowledge about that diagnosis or procedure.

- Knowledge about primary care and improvement processes?

8 Quality registers also for use in primary care

Disease	% PC-units connected	Patients reported from Prim Care
• Diabetes	90 %	250 000
• Heart failure	6 %	16 984
• Chron. Obstr Lung Dis	25 %	1 739
• Leg ulcers	2 %	500
• Dementia	10 %	248
• Palliative care	15 %	1000
• Risc detection in elderly people	??	(47 000)

Pressure and P4P is used to make primary care report to registers

- Diabetes   Mandatory
- Heart failure   P4P
- Chron. Obstr Lung Dis
- Leg ulcers
- Dementia   Mandatory -P4P
- Palliative care   Mandatory -P4P
- Risc detection   Mandatory -P4P
  in elderly people

GPs are reluctant:

- "The most important qualities of general practice are not in the registers."
- "Registers are not aimed for people with multiple diseases."
- "The results are to often used to tell public and politicians that GPs are bad doctors."
- "Registers are not adapted for improvement in general practice."
- "Time is better spent curing patients than entering data twice"

pvkvalitet.se   (pcquality.se)

Welcome to pvkvalitet.se

Here you can register your own results and get instant feedback,
both comparisons with other health centres or over time.
The aim is to make it more fun and easy to measure, compare
and improve quality in primary care.
We offer quality indicators for prevention, investigation, treatment
and rehabilitation of patients in primary care.
We will also provide tools for local quality improvement.

pvkvalitet.se stöds ekonomiskt av

SFAM Svensk Förening för Allmänmedicin

FORSS Forskningsrådet i sydöstra Sverige

Strama Samverkan mot antibiotikaresistens

LANDSTINGET i Jönköpings län Primärvårdens FoU-enhet www.lj.se/fouenheten

Det finns en styr & utvecklingsgrupp med representanter från de deltagande landstingen.
Kontaktperson är Sven Engström Primärvårdens FoU enhet i Jönköping.

Anmäl din enhet för att få ett inloggningskonto

Klicka här om du vill veta mer om pvkvalitet

Logga in
Användarnamn:
Lösenord:

Logga in

Glömt lösen

eva.arvidsson@ltkalmar.se

sven.engstrom@lj.se

pvkvalitet.se

- Easy to use
  - Spend time improving quality – not data registering!
    - analysis of a random sample of 40-60 patients
- Immediate feed-back
- Compare results
  - with guidelines
  - with other health centres
- Easy to follow results over time

Registrera basuppgifter

Registrera kvalitetsindikator

Tonsillitis

Cystitis in women

Asthma

COPD

Heart failure

Leg ulcer

LRTI

Atrial fibrillation

Urinary incontinence

Otitis media

Rapporter

Byt lösenord

Logga ut

For each indicator there is a backgroud of scientific references to the choice of indicators There is also a detailed instruction on how

Tonsillitis
Cystitis in women
Asthma
COPD
Heart failure
Leg ulcer
LRTI
Atrial fibrillation
Urinary incontinence
Otitis media

Select the diagnosis you want to benchmark

Astma

[Background](#)

Criteria: What is important for good quality?

1. Att registrera diagnosen.
2. Rätt behandling.
3. Rätt uppföljning.

Indicators: What should be measured?

1. Andel av befolkningen 20-74 år som har diagnosen astma.
2. Andel som har sökt akut/oplanerat för astma.
3. Andel där rökning har dokumenterats på sökbart sätt.
4. Andel som har inhalationssteroid.
5. Andel som har kontrollerats med spirometri

Measurement method

1. Sök i datorjournalen ut en lista på alla patienter med minst ett besök med diagnosen astma (J45.-P) under de senaste 2 åren
2. Granska journaler på ett slumpurval ur listan. 10-20 journaler per läkare eller totalt 40 per vårdcentral.
3. Notera på [registreringsformulär](#).
   a. Om det finns uppgift om att patienten sökt akut/oplanerat för astma under de senaste 12 månaderna. (Det som du kan utläsa ur journalen, oavsett om de sökt på VC/JC, sjukhuset eller någon annanstans).
   b. Om rökning dokumenterats med sökord tobak/rökning/motsvarande) de senaste 2 åren eller att de sedan tidigare är "dokumenterade icke rökare".
   c. Om patienten har inhalationssteroid.
   d. Om patienter med inhalationssteroid har kontrollerats med spirometri under de senaste 24 månaderna.

4. Summera registreringsformuläret och mata in resultatet nedan.

Standards: What goals should we aim for?

Välj period i listan

2011-01-01 - 2011-12-31

Enhetsgemensam data för perioden finns ej

Rapporter
| Signatur | Edit |

Obs! Välj rätt period innan du klickar för en ny registrering eller matar in enhetsgemensamma data.

| Åter | Enhetsgemensamma data | Ny registrering |

Asthma Background

Criteria: What is important for good quality?

1. To register diagnosis
2. The right treatment
3. The right follow-up

Asthma

Criteria: What is important for good quality?

Indicators: What should be measured?

1. Percentage of population aged 20-74 who have the diagnose asthma
2. Proportion who had emergency/unplanned visits for asthma
3. Proportion for whom smoking is registered in the records
4. Proportion treated with inhaled corticosteroids
5. Proportion who had a check up including spirometry

Standards: What goals should we aim for?

Asthma

Background

Criteria: What is important for good quality?

1. All registered diagnoses
2. ...
3. ...

Measurement method

1. Search for all patients with the diagnosis last year in digital records
2. Select a random sample of 10-20 patients/GP or nurse or 50-60/ health centre
3. Check in the patient records for answers to each indicator

Check in the selected sample of patients with asthma:

- Emergency/unplanned visits for asthma in primary care or at hospital in the last year?

- Smoking documented with the keyword tobacco/smoking in the last 2 years (or already "documented non-smoker")?

- Treated with inhaled corticosteroids?

- Had a check up including spirometry last 2 years?

Registration form   *för pvkvalitet.se*   Asthma

Health centre ....   GP ....   Period ....

Ålder och kön finns med för att ni själva vid tveksamheter skall kunna hitta tillbaka till den patientens journal

Patient	Emergency/ unplanned visits last year		Smoking registred		Have inhaled cortico-steroids		Spirometry last 2 years		Notes
	Yes	No	Yes	No	Yes	No	Yes	No	
1									
2									
3									
4									
5									
6									
7									
34									
35									
Sum									

- Note indicators in the form for each sample patient
- Summarize the results

Background

Registration form
- Note indicators in the form for each sample patient
- Summarize the results

Input form

- Enter results into web form
- Feedback in 10 seconds

Andel av astmapatienter som sökt akut senaste 12 mån p.g.a. sin astma

Data-Spridning
max: 100%
75e perc.:57.62%
medel: 45.01%
25e perc.:18.75%
min: 8%
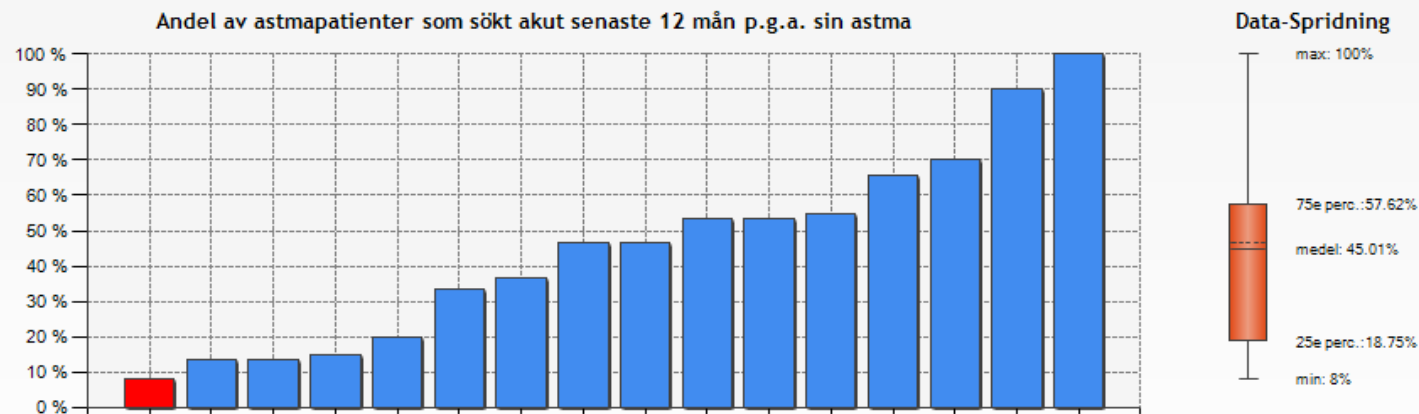
Proportion who had emergency/ unplanned visit for asthma last year

Andel patienter som undersökts med spirometri de senaste 24 mån

Data-Spridning
max: 100%
75e perc.:43.3%
medel: 38.53%
25e perc.:26.42%
min: 10%
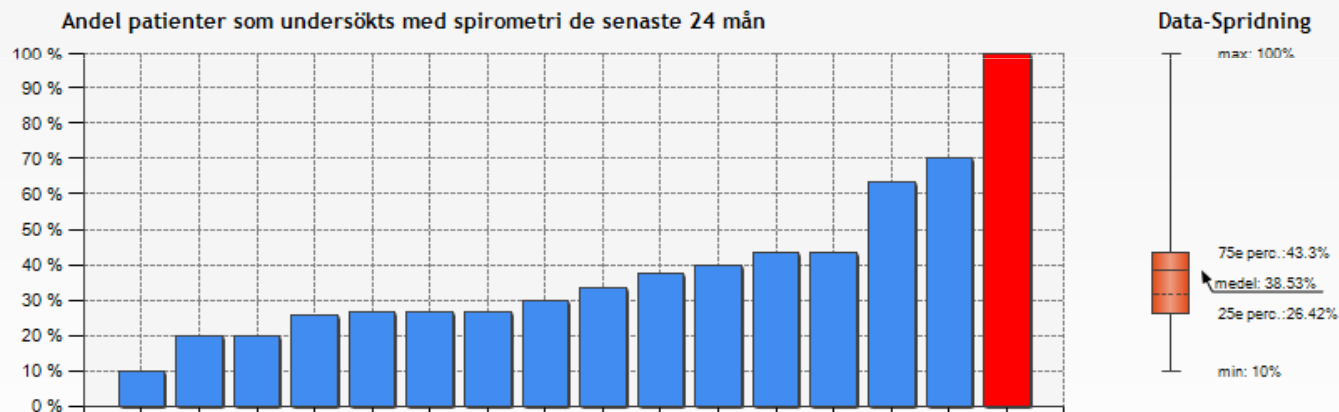
Proportion who had a check up including spirometry last 2 years

One click away every diagram has a background with references that motivates the indicator and the targets set.

pvkvalitet.se in March 2012

- 310 Health Centres participating
- 50 000 patients reviewed

= 1200 local improvement projects supported!

These initiatives from GPs have had difficulties to get ecomomic support

Does not match the definition for a quality register.

- No personal identities registered and thus not possible to follow patients over time

- Aimed for improvement not for research.

2012 Governmental investment in quality registers

Increase in funding from 80 milj. SEK /year

To 320 milj. SEK /year

A great project initited in primary care now had got funding..

Aims:

- Feedback adapted for the needs of practitioners in health care and of the stakeholders.

- Easy to deliver data from the medical record.

- No P4P

- People working in primary care must experience personal benefit from the register.

  This creates motivation to deliver complete and true data for improvement and research

Feedback

- Benchmarking with ideals and other units.

- Capacity to allow users to chose data and presentations.

- Identification of your patients needing change in care.

- Opportunity to regain you own supplied data

ADAPTED FOR USE IN ANY MEDICAL RECORD SYSTEM

Diabetes overview

How do we manage our patients? ▶

Does our routines work ? ▼

◀ What happens to our patients?

							Your unit		All Units	
Number of patients						Goal attainment				
Estimated prevalence 5%										
Estim			?		HbA1c < 6,0	Antal				
					All	182		49	%	%
Dia			%		Diet	24		92	%	%
			%		Tabl	86		42	%	%
			%		Insulin	28		25	%	%
					Insulin + tabl	28		36		
Controls made										
HbA1c	99,5	%	?	%	BT < 130/80	Antal				
BMI	95	%	?	%	All	170		58	%	%
BT	96	%	?	%	No antihypertensives	24		58	%	%
Cholesterol	57	%	?	%	With antihypertensive	124		37	%	%
TG	53	%	?	%						
Mikroalb	55	%	?	%	LDL < 2,5	Antal	Totalantal			
Rettinal exam after 20000101	27	%	?	%	All	36	182	20	%	%
Waist	7	%			<all tested	36	95	38	%	
Foot exam.	65	%	?	%	without lipid lowers	10	61	16	%	%
Tobacco	70	%	?	%	without lipid lowers	24	80	30	%	%
Physical activity	64	%	?	%						
% with complications								128	16	%	? %
Ischemisk heart. Dis	16,4	%	?	%						
Cerebrovaskulär Dis.	8,2	%	?	%						
Retinopathi	19	%								
Loss of vision	1	%	?	%						
Amputation	0	%	?	%						

Patients with cholesterol > 6,0		
	Cholesterol	Lipid lowering drugs
19XXXXXX-XXX	6,6	
19XXXXXX-XXX	6,1	x
19XXXXXX-XXX	6,7	x
19XXXXXX-XXX	6,2	x
19XXXXXX-XXX	6,3	x
19XXXXXX-XXX	6,8	
19XXXXXX-XXX	7,2	x
19XXXXXX-XXX	6,1	
19XXXXXX-XXX	6,4	x
19XXXXXX-XXX	6,9	x
19XXXXXX-XXX	7,8	x
19XXXXXX-XXX	6,3	
19XXXXXX-XXX	6,2	

Your distribution of cholesterol values

- ■ < 5 mmol
- ■ 5-6 mmol
- ■ > 6,0 mmol
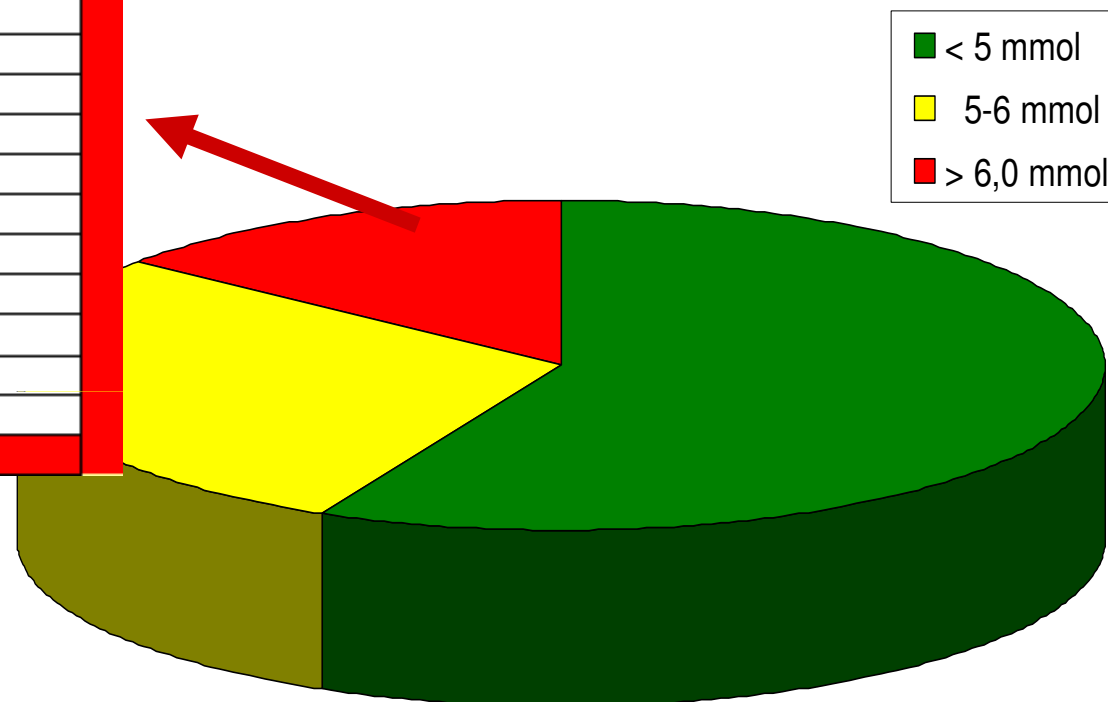
Which patients need change of care What's to do ?

X

PERSNR	ÅLDER	KÖN	HBA1C-ERY	Biguanid	Sulfonylurea	Glitazioner	Insulin	BMI	SYSTOLBT	DIASTBT	Anti HT	KOLESTEROL-P	LDL-KOLSTEROL-P	TG-FP	Lipidsänkare.Namn	IHD ?	TOBAK
	23	Man	5,2				Ja	24,03	120	55		4,2	2,2	0,88			Icke-rökare
	31	Kvinna	6,2				Ja	36,3									Icke-rökare
	50	Kvinna	4,9				Ja	28,11	135	85		5,9	4	0,74	Ja		Icke-rökare
	51	Man	11,2	Ja	Ja		Ja	25,68	125	70		5,6	3,7	1,2			Rökare
	53	Man	7,9	Ja	Ja				155	80	Ja	4,6					Uppgift saknas
	53	Man	5,7				Ja		115	75		4,8	3,3	1,3			Icke-rökare
	53	Kvinna	6,1	Ja			Ja	26,47	134	80		5,6					Icke-rökare
	54	Man	7,2	Ja			Ja	31,24	150	90	Ja	5,5	3,4	2,2	Ja		Icke-rökare
	55	Kvinna	6	Ja	Ja		Ja	31,4	120	70	Ja	4,1	2	2,4	Ja		Rökare
	56	Man	5,8				Ja	35,67	160	90	Ja	4,9			Ja	Ja	Fd rökare
	57	Kvinna	7,5	Ja			Ja	33,21	160	80	Ja	4,8	2,4	2,6	Ja	Ja	Uppgift saknas
	57	Kvinna	6,6				Ja	35,14	145	85		3,6	1,9	0,59			Rökare
	57	Man	6,4	Ja			Ja	36,07	155	85	Ja						Rökare
	57	Man	6,5	Ja			Ja	34,77	140	70		5,2	3,1	2		Ja	Icke-rökare
	58	Man	7	Ja			Ja	34,02	120	58		4,3			Ja	Ja	Uppgift saknas
	58	Man	5,9	Ja	Ja		Ja	38,2	140	80		4,5		2,8			Icke-rökare
	60	Kvinna	4,9				Ja	28,3	135	60		5,7	2,7	2,8		Ja	Fd rökare
	62	Kvinna	7,3				Ja		150	80		4,4	1,3	3,9	Ja	Ja	Icke-rökare
	63	Kvinna	5,6				Ja	37,84	160	80					Ja	Ja	Fd rökare
	64	Kvinna	6,6	Ja			Ja	26,39	155	80		4,4	2,4	0,58	Ja		Icke-rökare
	66	Kvinna	5,9	Ja			Ja	40,16	115	50		5,4	2,7	1,9			Icke-rökare
	66	Man	7,2	Ja	Ja		Ja	26,09	120	80		4,6	2,4	2,2	Ja	Ja	Icke-rökare
	67	Kvinna	4,9	Ja			Ja	28,86	160	50		4,5	2,2	1,5	Ja		Icke-rökare
	70	Kvinna	6,2				Ja	42,19	170	90	Ja	6,5	3,7	2			Icke-rökare
	71	Man	5,6				Ja	28,77	160	90	Ja	5,4	3,5	3,1			Rökare

An idle dream in a country where
health care is managed by
21 autonomous counties?