Innovations from abroad: Opportunities for Estonia

Anne Staehr Johansen, PhD

Outline

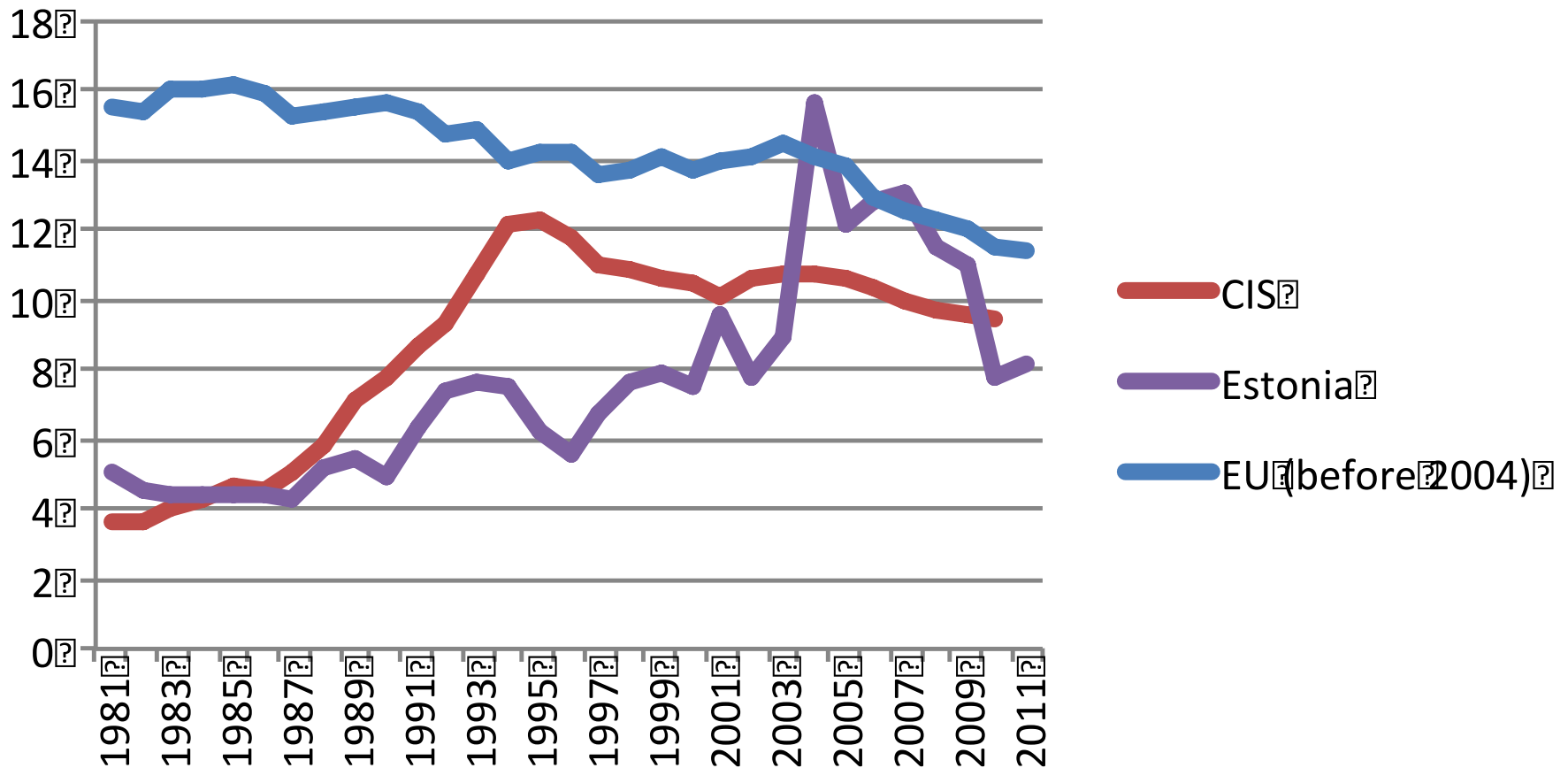- Innovations from abroad
  - Successful diabetes management
  - Registry-based quality and learning systems
- Critical elements for success
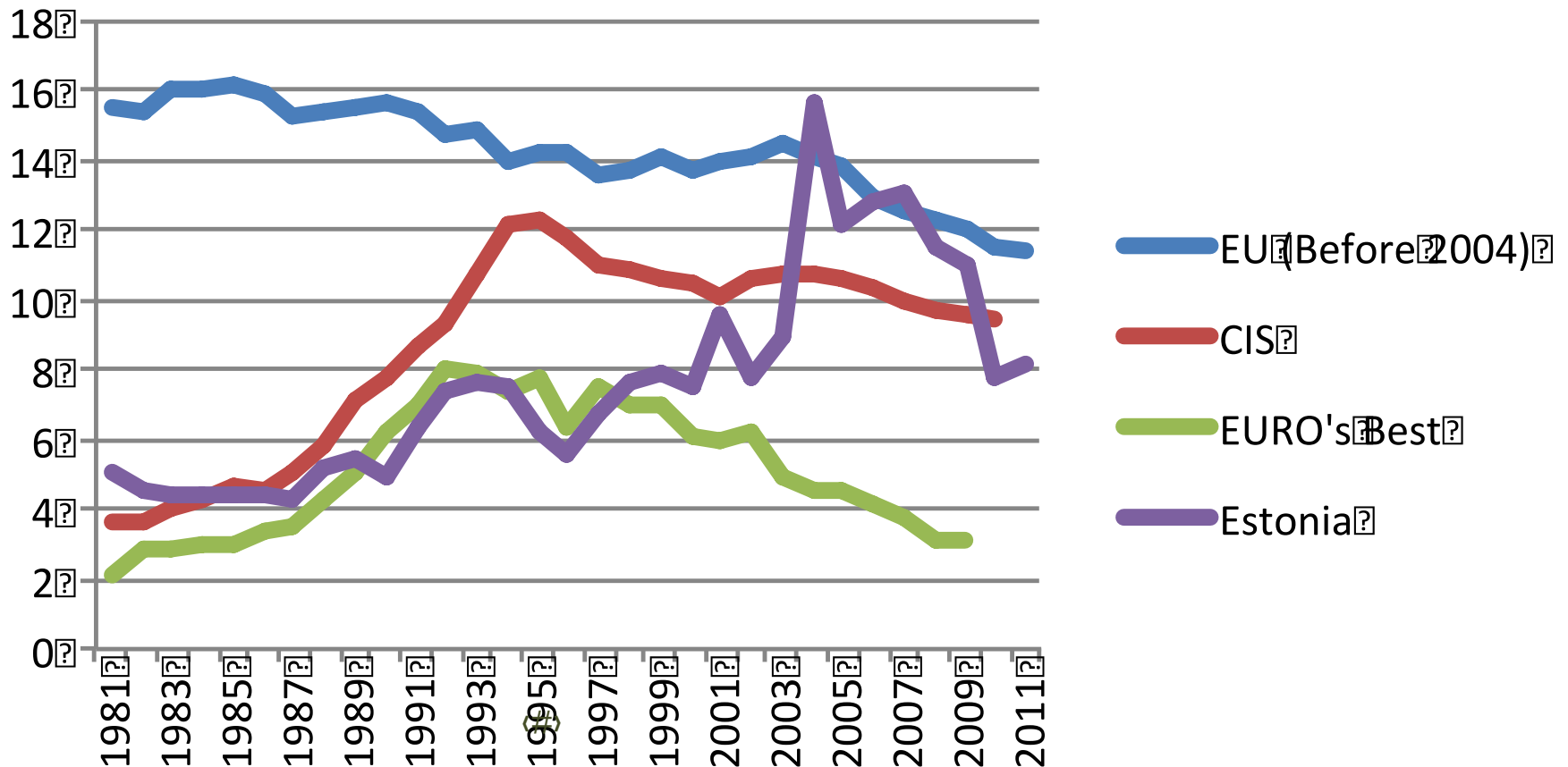- Conclusions

Successful diabetes management

Trends in diabetes mortality (all ages)

SDR per 100,000

Trends in diabetes mortality (all ages)

SDR per 100,000

Why the decline in diabetes mortality?

Critical factors in achieving success

- New human resources
  - Specialized therapeutic nurse education programmes
- Patient education
  - 90+ patient education schools
- Specialized foot clinics
- Outreach to and training of GPs
- Evidence-based clinical guidelines
- Case-based diabetes registry

Critical factors in achieving success (2)

☐ National diabetes registry:
96% of all diagnosed diabetics w/ evidence-based indicators, HgA1c, but also complications!

☐ Regular use of data, analysis to learn from best performers and identify system challenges w/ recommendations to MOH for changes

Eliminating preventable diabetes care complications in Estonia could save:

50,000,000+

Registry-based quality and learning systems

- Danish Data Capture System for management of NCDs in primary health care
- Swedish rheumatology quality registry

# The Danish General Medicine's Quality Unit (DAK-e)

- DAK-e's Mission: **To improve the quality work of general practice**

- Operates the Danish General Practice (GP) Database

- Prepares quality reports for GPs with their own results

- Trains "Quality Ambassadors" who support GPs in their quality work

Danish General Practitioner Database

- Electronic patient record system and national registries
- Quality development system based on *clinical guidelines and quality indicators*
  - COPD
  - CVD
  - Depression
  - *Diabetes*
  - Heart failure

Danish General Practitioner Database

Network Architecture
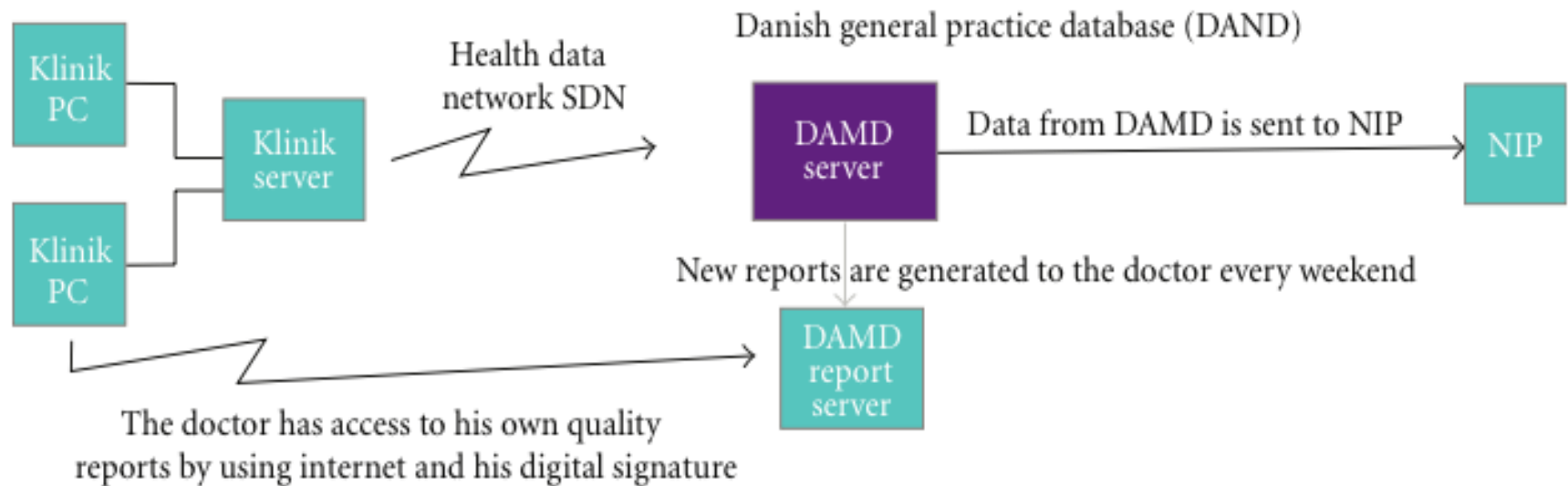
The Danish Data Capture Module

Sentinel Datafangst

| Patients with Diabetes M | Benchmark page 1 | Benchmark page 2 | |

Patients with Diabetes Mellitus. (Constructed/anonymous name list)

51 patients out of 1797 patients (2.8 %)   Data extracted: Tuesday 10 April 2012 10:36:26

| How to read data | Improve quality | Print this page |

| First Name	Personal id	Age	HbA1c	Treatment given as	S-Chol	U-Alb	Lipid lower¹	ACE/ Ang II inhib¹	BP	Drugs for BP	BMI	Smok-ing	Last GP	Re-spons-ability	Birth month	Last annual control
Allan	301072-xxxx	39	7.1	p	4.5↑	*			110/85	0	24	yes	bt	GP	10	23 nov 2011
Anders	031049-xxxx	62	7.1↑	p	4.7↓	4.9	yes	yes	135/75	1	24	yes	bt	GP	10	14 dec 2011
Bent	090640-xxxx	71	6.7↓	i	4.2	3.7		yes	165/80	1	18		vd1	GP	6	26 maj 2011
Bente	221139-xxxx	72	6.0↓	p	6.1	31.2	yes	yes	175/95	3	36	no	bt	GP	11	28 okt 2011
Birgit	060840-xxxx	71	8.5↑	i	6.8↑	*	yes	yes	124/77	2		no	bt	GP	8	19 aug 2011
Birthe	090459-xxxx	53	4.6↓		4.2↑	10.3			140/80	0	37	no	bt	GP	4	18 maj 2011
Bjarne	231175-xxxx	36	6.8↓		7.1↑	*			134/98	0	27		bt	hosp	11	
Brian	220440-xxxx	71		i			yes	yes	151/78hj	4			np	hosp	4	
Camilla	251173-xxxx	38		p			yes	yes	151/98	3			bt	hosp	11	
Carsten	230933-xxxx	78	7.4↑	p	5.1	*	yes	yes	140/85	2	23	no	bt	GP	9	22 aug 2011
Charlotte	121025-xxxx	86	6.0↓	p	5.1↓	26.0	yes	yes	164/86	2	36	no	bt	GP	10	28 okt 2011
Christian	130137-xxxx	75	10.2↑	p	3.9↑	*	yes	yes	140/80	3	32	yes	bt	GP	1	26 maj 2009
Claus	280139-xxxx	73	7.0↑	p	5.3↑	17.3		yes	150/90	3	34	no	bt	GP	1	10 feb 2012
Erik	190637-xxxx	74	6.1↓	p	5.7↓	3.4		yes	105/70	1	32	no	bt	GP	6	29 jun 2011
Finn	141141-xxxx	70	6.8↑		4.2↓	58.3	yes	yes	140/78	3	34	no	bt	GP	11	17 nov 2010
Flemming	110143-xxxx	69	6.6↓		4.6↑	*	yes	yes	149/94	1	26	no	bt	GP	1	25 jun 2012

14

GPs Can Benchmark Their Results

Sentinel Datafangst

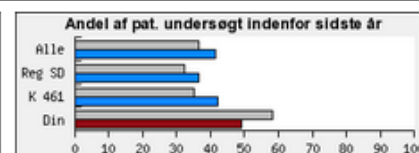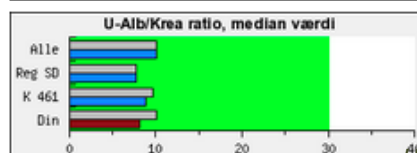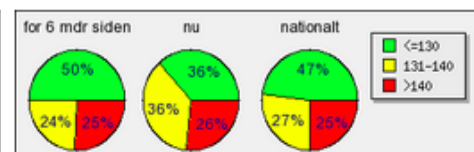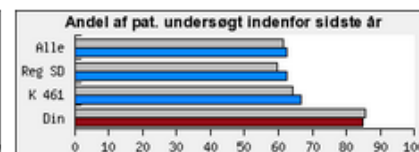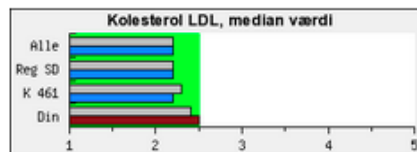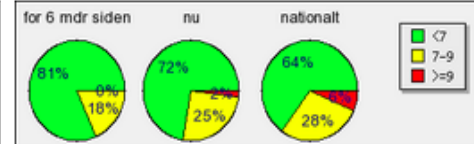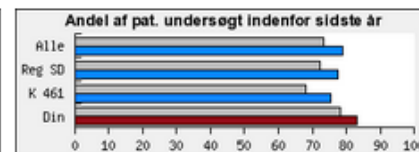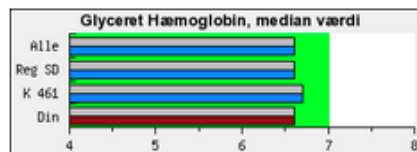Patients with Diabetes M | Benchmark page 1 | Benchmark page 2

Your Diabetes treatment in comparison with other practices

The gray bars show the value for 6 month ago.
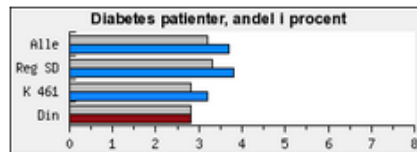
All = All patients treated by a GP who uses Data capture
= Region South
K 461 = Municipality of Odense
Din = Your population

The gray bars show the values a year ago.
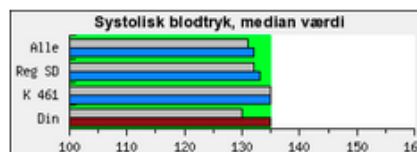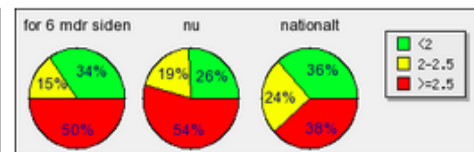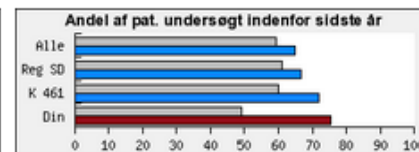
The gray bars show the value for 6 month ago.

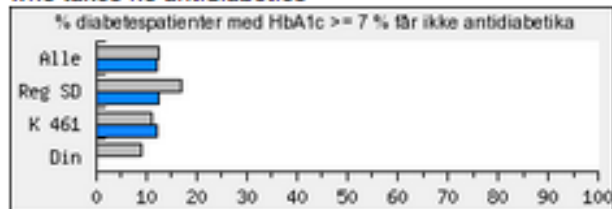# GPs Can Benchmark Their Performance

Sentinel Datafangst

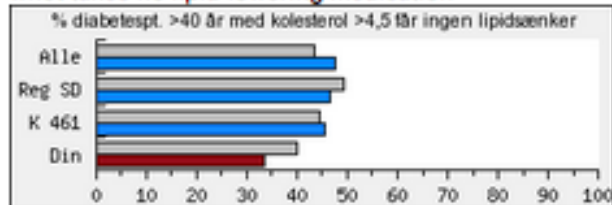| Patients with Diabetes M | Benchmark page 1 | Benchmark page 2 | |

Performance indicators

**Percentage of diabetic patients with HbA1c > 7 %
who takes no antidiabetics**

% diabetespatienter med HbA1c >= 7 % får ikke antidiabetika

Alle
Reg SD
K 461
Din

0 10 20 30 40 50 60 70 80 90 100

All = All patients treated by a GP who uses Data capture
= Region South
K 461 = the municipality of Odense
Din = Your population

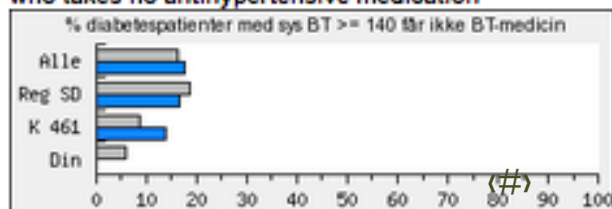The gray bars show the values a year ago.

**Percentage of diabetic patients with a S-Cholesterol >= 4,5
whot takes no lipid-lowering medication**

% diabetespt. >40 år med kolesterol >4,5 får ingen lipidsænker

Alle
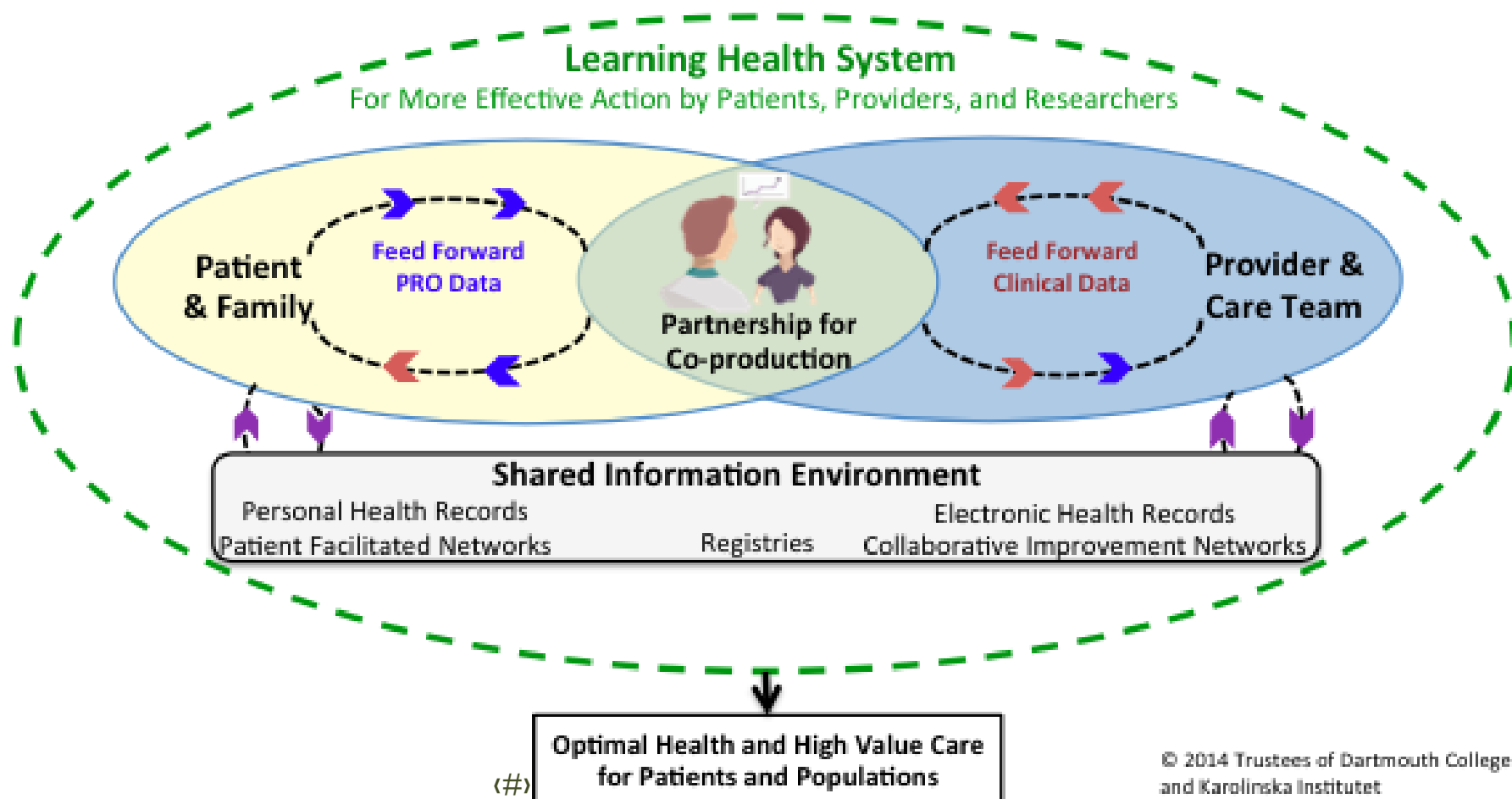Reg SD
K 461
Din

0 10 20 30 40 50 60 70 80 90 100

This is the DSAM's current standard we have chosen to use

**Percentage of diabetic patients with systolic BP >= 130 mm Hg
who takes no antihypertensive medication**

% diabetespatienter med sys BT >= 140 får ikke BT-medicin

Alle
Reg SD
K 461
Din

0 10 20 30 40 50 60 70 80 90 100

‹#›

The Swedish Rheumatology Quality Registry and Learning System

Outline

- Innovations from abroad
  - A successful diabetes management program
  - Registry-based quality and learning systems
- Critical elements for success
- Conclusions

Critical elements for success

- Clinical databases/quality registries are tools for quality improvement, <u>NOT</u> for control and punishment

- Must be easy to use, privacy must be protected, and add value

- Requires on-going support for implementation and use

- Requires a process for learning from those who do well ("good apples approach")

- GPs and Funders seen <u>as partners</u>

Conclusions

- Great opportunity to improve clinical outcomes and save costs

- Need for clinical databases and quality learning systems

- Also requires patient education programs, specialized HRH (dieticians, therapeutic patient educators, podiatrists, etc.)

Thank you!