

**200**  
1810 – 2010 *Years*



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# **The “Wise List” - a comprehensive concept to select, communicate and achieve adherence to recommen- dations of essential drugs**

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# Disposition

- Challenges in use of drugs
- Wise List concept
- Results
- Implications



# Areas for improvements



- Improve trust to Drug and Therapeutics Committees and the adherence to their recommendations
  - Wide variation in prescribing of generic drugs across institutions and countries- 100 USD billion dollar can be released 2008-13
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**We can only afford drugs that  
have effects**

# Disposition

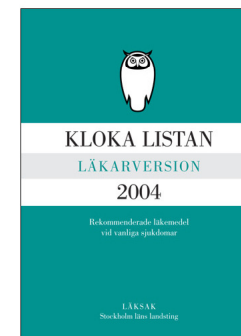
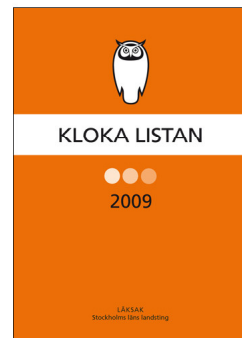
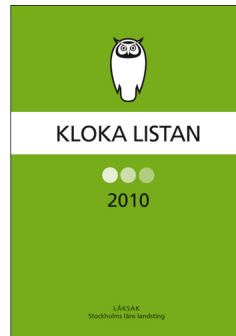
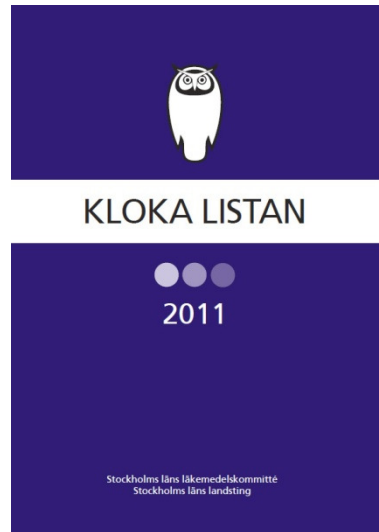
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# Stockholm model for Wise Use of Drugs

- **200 recommendations of essential drugs, "Wise List", communicated widely**
  - Shared goals and a drug policy strategy 2003-12
  - Independent Drug and Therapeutic Committees
  - Computerised decision support- "knowledge at point of care"
  - Interactive continuous medical education and follow-up of drug use
  - Systematic introduction of new expensive drugs
-

# The "Wise List" concept





# Selection criterias

1. Medical suitability
  - solid study end points from pivotal studies
  - patient value
  - usually one firsthand choice (mostly generic)
2. Safety
3. Pharmaceutical suitability
4. Cost-effectiveness
5. Environmental and gender aspects if valid

NO DRUG LESS THAN 2 YEARS ON THE MARKET

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# Heart and vessels

## Hjärta och kärl



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Rekommendationerna av hjärt-kärlläkemedel gäller lika för män och kvinnor.

### Prevention av hjärt-kärlsjukdom *Prevention*

Motivera patienter med hypertoni, övervikt eller diabetes till livsstilsförändringar som bas för kardiovaskulär prevention.



#### Livsstilsåtgärder

#### *Lifestyle*

- Rökstopp. Strukturerad rökavvänjning, eventuellt med nikotinersättningsmedel; [www.slutarokalinjen.org](http://www.slutarokalinjen.org).
- Fysisk aktivitet
- Balanserad kost

#### Blodtryckssänkande läkemedel

Behandla blodtryck bättre – sätt upp målblodtryck tillsammans med patienten, kombinera mera och följ upp.



**Hypertoni** sid 36

#### Lipidsänkande läkemedel

Välj simvastatin för prevention av hjärt-kärlsjukdom hos högriskpatienter med ordinära till måttligt förhöjda kolesterolhalter.



Simvastatin är väldokumenterat för reduktion av morbiditet och mortalitet. För kardiovaskulär prevention hos patienter utan avancerade lipidrubbingar bör risken och inte kolesterolnivån styra behandlingen.

Rekommenderad simvastatindos är 20–40 mg/dag som kardiovaskulär prevention till det stora flertalet högriskpatienter med ordinära till måttligt förhöjda kolesterolhalter. Den högre dosen är bäst dokumenterad. Den ger även något större kolesterolsänkning och bör eftersträvas om den tolereras, men ska inte ges till alla patienter.

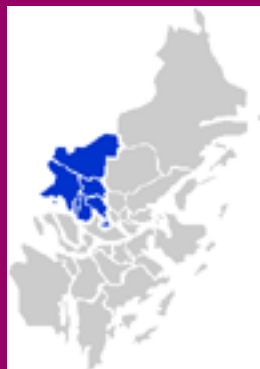
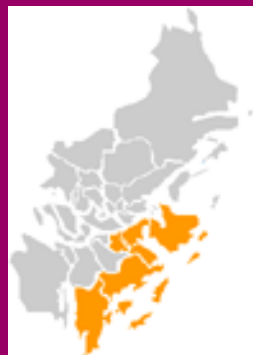
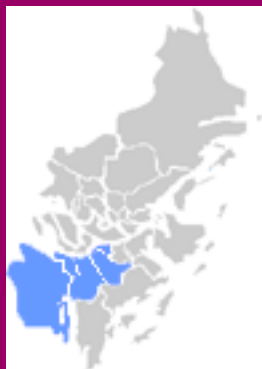
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# Wise List issued by a regional Drug and Therapeutics committee

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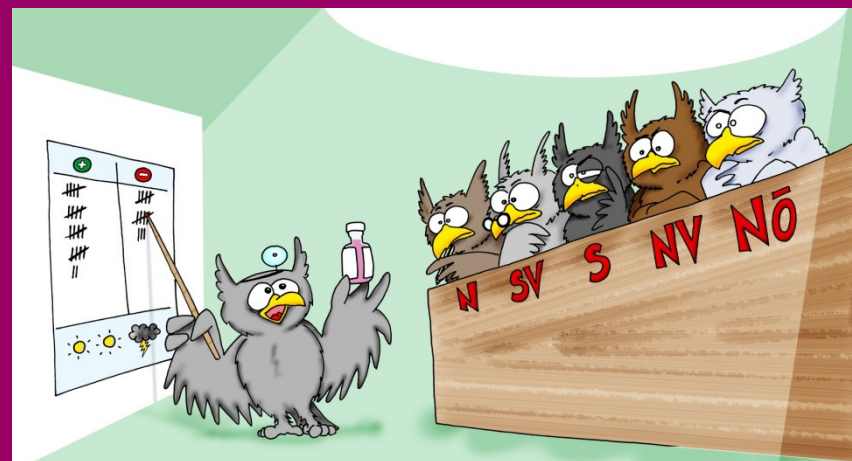


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Recommendations by 24 expert groups

**LAK  
SAK**



# Key elements I



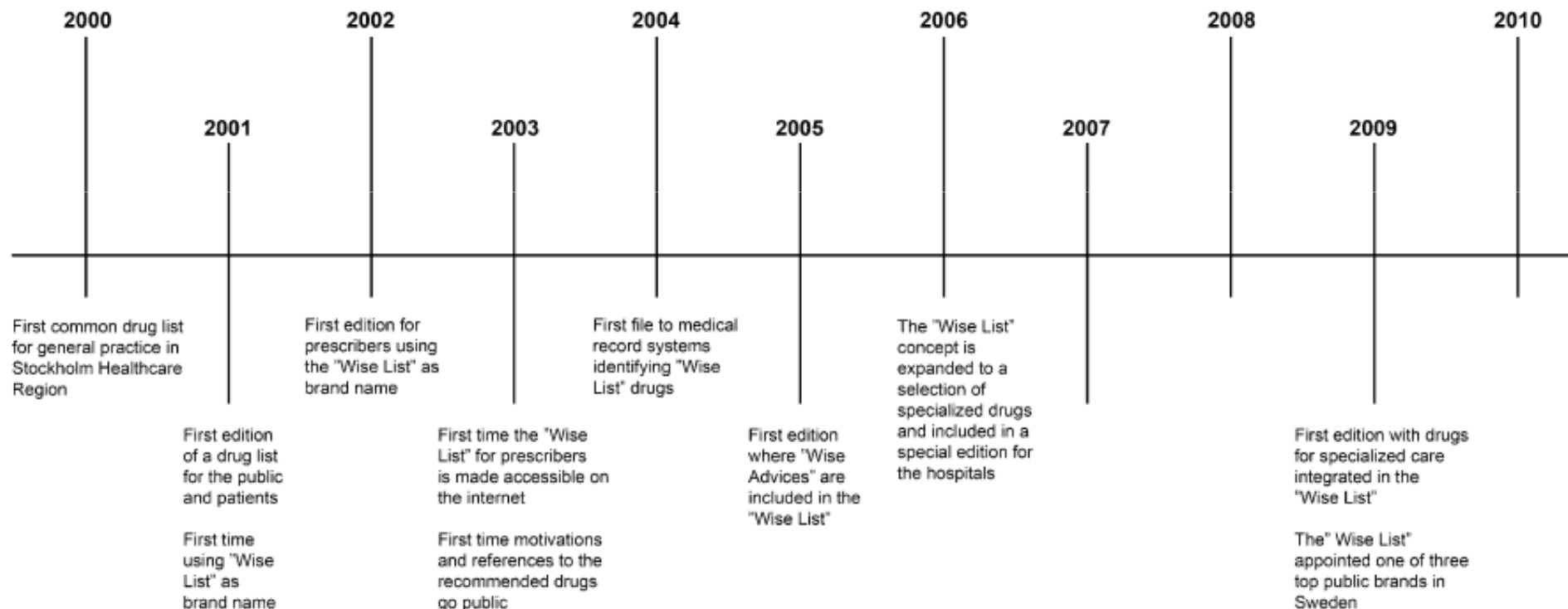
- Involvement of medical opinion leaders
  - Strict policy for handling "Conflicts of Interest"
  - One 'Wise List' for ambulatory and hospital care
  - Strict evidence-based criteria for essential drug recommendations with motivations
  - A comprehensive communication, branding and marketing strategy with a key role for experts
-

# Key elements II



- Targeted 'Wise List' editions for professional and public needs
  - Feedback to prescribers and chief physicians of prescribing
  - Medical leadership and operative resources
-

# Longterm



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# Constant number of drug substances in the "Wise List"

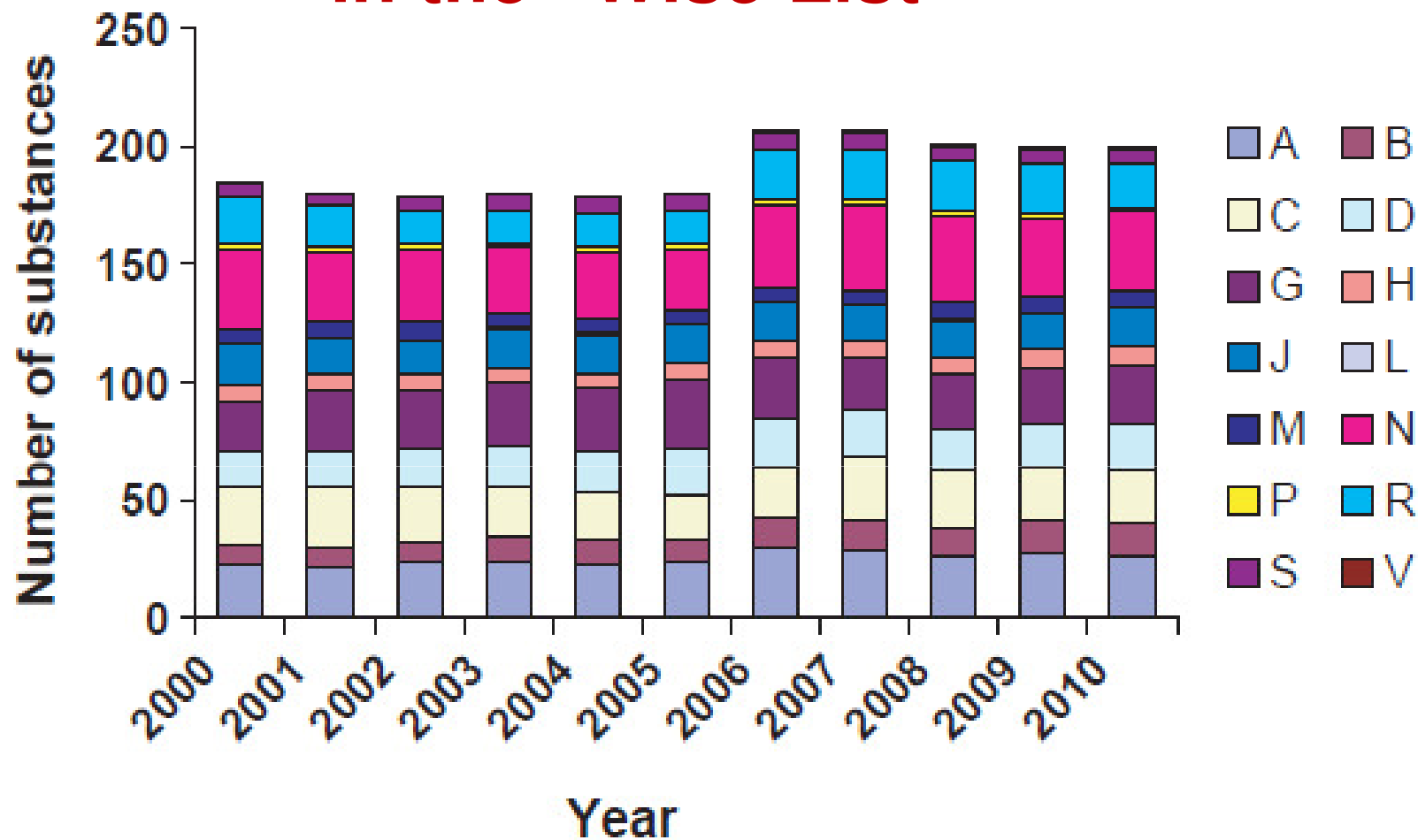


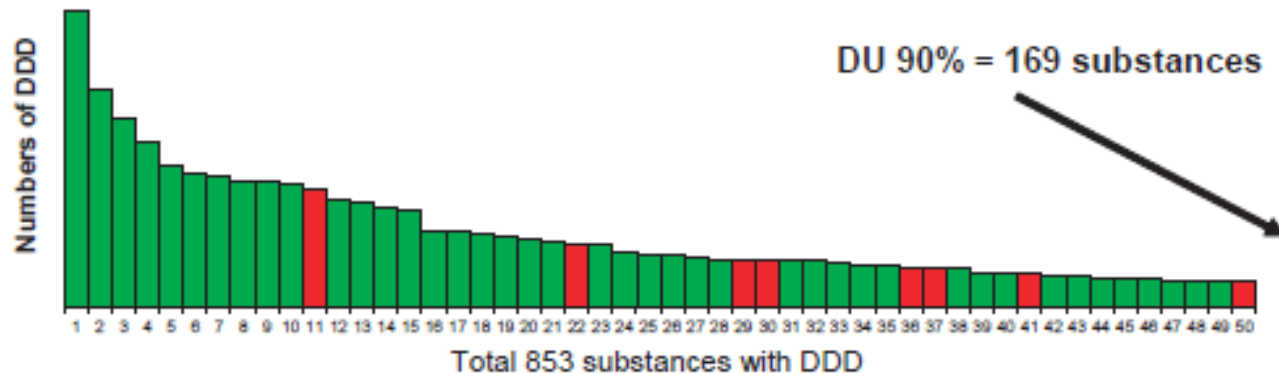
Fig. 3. The number of substances included in the 'Wise List' in Stockholm summarized by ATC groups 2000–2010. From 2009, 100 additional substances were added for specialist care (not shown).



# Adherence to guideline within DU 90% (69% to 77 % from 2003-9)



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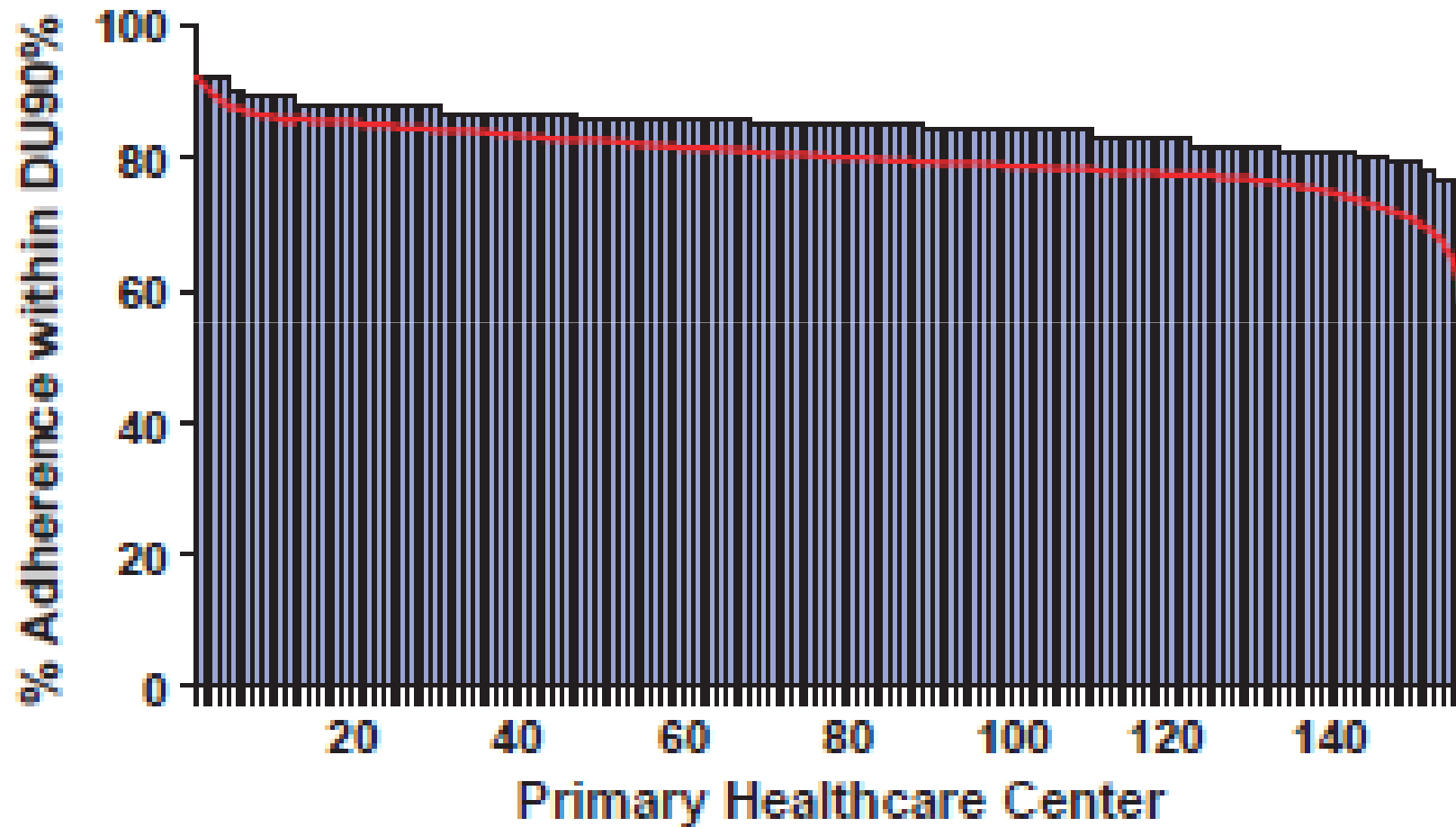
	SUBSTANCE	(DDD)	DDD	% TOT	Rx	COST	COST/DDD
1	Acetylsalicylic acid	1 tablet	39 894 782	4,9%	650 808	22 995 814	0,58
2	Simvastatin	30 mg	29 455 125	3,6%	438 802	26 731 380	0,91
3	Enalapril	10 mg	25 632 413	3,2%	296 329	18 111 103	0,71
4	Furosemide	40 mg	22 513 352	2,8%	409 630	18 091 910	0,80
5	Omeprazol	20 mg	19 140 338	2,4%	399 298	30 122 076	1,57
6	Cyanocobalamin	1 mg	18 125 259	2,2%	319 737	11 711 704	0,65
7	Amlodipine	5 mg	17 685 421	2,2%	165 634	10 209 168	0,58
8	Metoprolol	0.15 g	17 160 653	2,1%	498 845	72 421 602	4,22
9	Levothyroxine sodium	0.15 mg	17 030 980	2,1%	405 353	23 094 330	1,36
10	Ramipril	2.5 mg	16 743 688	2,1%	95 412	8 323 952	0,50
11	Felodipine	5 mg	15 807 331	2,0%	177 725	13 901 701	0,88
12	Candesartan	8 mg	14 695 169	1,8%	118 979	59 427 671	4,04
13	Zopiclone	7.5 mg	14 059 603	1,7%	426 875	16 073 585	1,14
14	Paracetamol	3 g	13 597 335	1,7%	621 717	35 916 832	2,64
15	Citalopram	20 mg	13 065 325	1,6%	266 993	12 672 896	0,97
16	Sertraline	50 mg	10 178 236	1,3%	119 262	11 241 414	1,10
17	Hydroc.thiazide + amiloride	*	10 145 923	1,3%	120 927	5 066 822	0,50
18	Calcium combinations		10 047 562	1,2%	206 568	24 983 957	2,40
19	Propiomazine	25 mg	9 729 948	1,2%	174 248	12 173 527	1,25
20	Metformin	2 g	9 297 143	1,2%	152 190	18 415 868	1,98

# High adherence to recommendations



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From 83 to 87% in primary care (2003-2009)



# ”Wise List” known by everyone in Stockholm



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- Strong brand in Stockholm, nationally and increasingly internationally



# Disposition

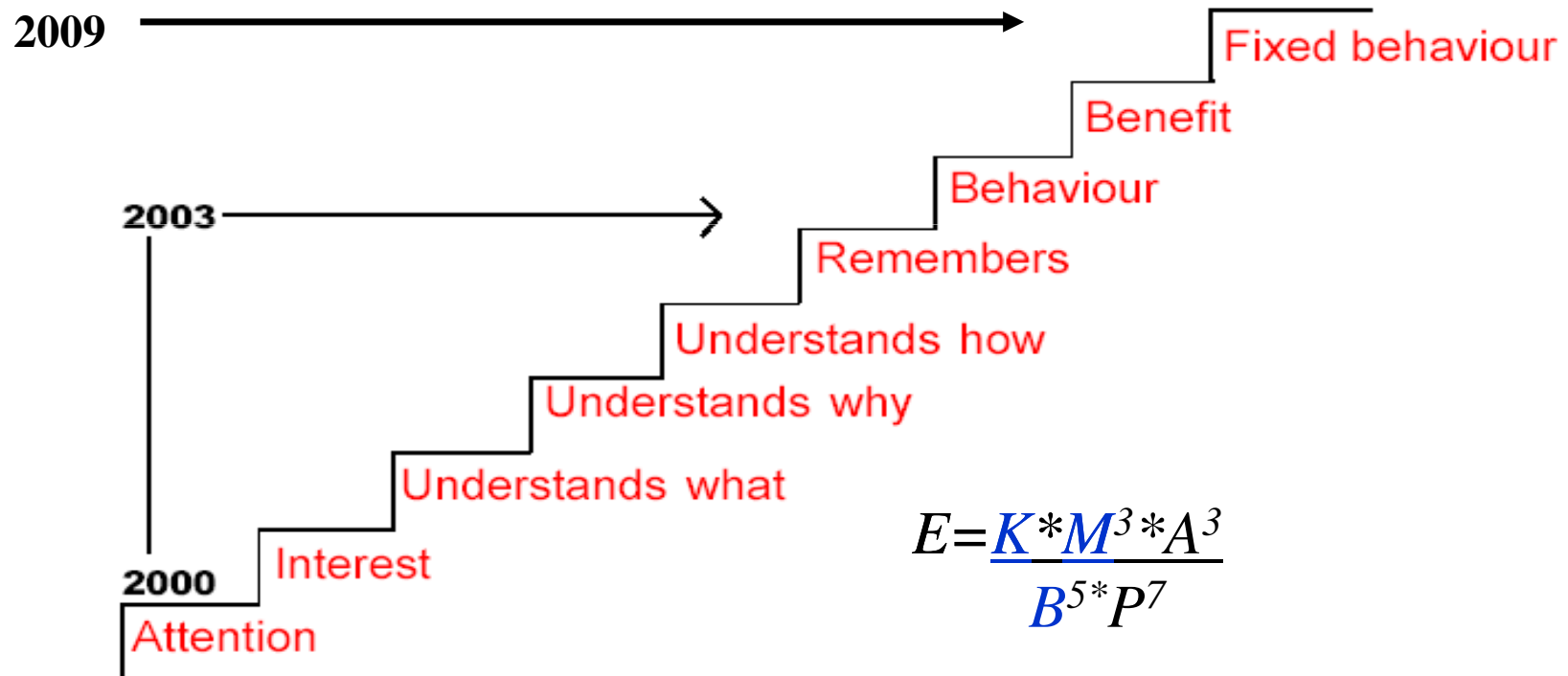
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## Effects about 160 million USD 2009 (drug costs 1100 USD)

- 30 million USD for rebates.
  - 100 million USD for improved adherence compared to 2005
  - 30 million USD for e-prescribing (time gain)
  - Improved knowledge, decision support, introduction of new medicines?
-

# Change in behaviour and improved adherence to recommendations take time (McGuire)



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## **Joint project**

**Gustafsson LL and Malmström R together with Wettermark B, Godman B, Andersén-Karlsson E, Bergman U, Hasselström J, Hjemdahl P, Julander M, Jägre I, Ringertz B, Schmidt D, Stiller CO, Sjöberg S, Sjöqvist F, Törnqvist E, Tryselius R, Vitols S, von Bahr with a number of experts and staff at Stockholm Healthcare Region and Karolinska Institutet.**

***The “Wise List”-a comprehensive concept to select, communicate and achieve recommendations of essential drugs in ambulatory care in Stockholm. Basic & Clinical Pharmacology & Toxicology 2011;108:224-33.***