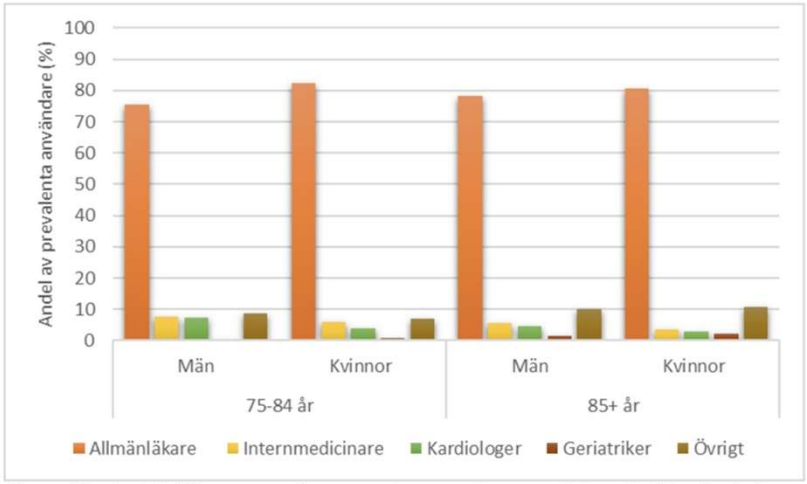
SCORE2

bristfälligt underbyggt perspektivskifte på kardiovaskulär risk

Varför skattas vi ha allt högre risk trots sjunkande risk?

David Gyll, ST-läkare i allmänmedicin, Svartbäckens VC, Uppsala
Medlem SFAMs råd för hållbar diagnostik och behandling
Jäv: 0

1



Figur 12: Andel (%) av prevalenta statinanvändare uppdelat på olika förskrivarens specialitet per kön och åldersgrupp i region Stockholm under år 2019. (Första recept under år 2019)

Statinbehandling av äldre för primär- och sekundärprevention i Region Stockholm
Camelia Kalantaripour, masteruppsats, 2020

2

Kardiovaskulära preventionens födelse

3

December 11, 1967

Effects of Treatment on Morbidity in Hypertension

Results in Patients With Diastolic Blood Pressures Averaging 115 Through 129 mm Hg

JAMA. 1967;202(11):1028-1034. doi:10.1001/jama.1967.03130240070013

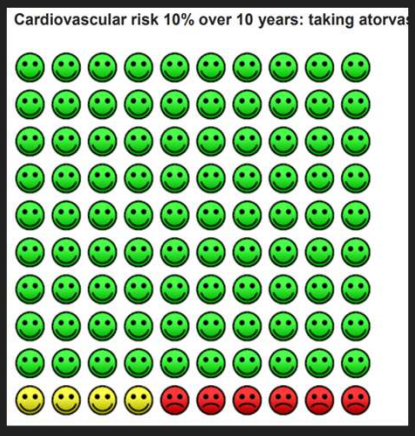
A group of 143 male hypertensive patients with diastolic blood pressures (at the clinic) averaging between 115 and 129 mm Hg were randomly assigned to either active (hydrochlorothiazide plus reserpine plus hydralazine hydrochloride) or placebo treatment. Twenty-seven severe, complicating events developed in the placebotreated patients as compared to two in the active group. Four deaths occurred in the placebo-treated group and none in the actively treated patients. Other complications in the placebo group included grade 3 or 4 hypertensive retinopathy, congestive heart failure, increasing azotemia, cerebrovascular thrombosis, transient ischemic attacks, cerebral hemorrhage, myocardial infarction, and severely elevated blood pressure. Severe complications in the active-treatment group were one cerebrovascular thrombosis and one case of multiple drug toxicity. Male

4

Study	Year	Primary question/issues	Conclusion of the study/impact
VA-1st	1967	Is severe hypertension (dias) 115–129 treatable	Yes, less stroke/CHF ARR ca 30 %, 1,5 år
VA-2nd	1970	Same question for moderate BP (90–115)	Treated group less stroke/CHF
HDFP	1979	Goal-oriented BP therapy better than usual therapy?	Yes. Targeting BP goal of dias 90 reduced CVA by 36% more
MRFIT	1982	Lowering BP and lipid and stopping smoking may reduce CHD mortality	No difference in CHD mortality 17.9 vs. 19.3% (per 1000)
MRC	1985	Hypertension treatment in younger patients (35–64) is beneficial also?	Yes. Total CV events 286 in treated group vs. 352 in control ($p < 0.05$)
EWHPE	1986	Hypertension treatment in exclusively older people (60) beneficial?	Yes. Mortality reduction 26% decrease in CV mortality 43%
SHEP	1991	Is treatment of systolic hypertension beneficial	Treating isolated systolic hypertension over 160 prevented stroke (ARR 3%), MI, and all CVD >60 år; 4,5 år

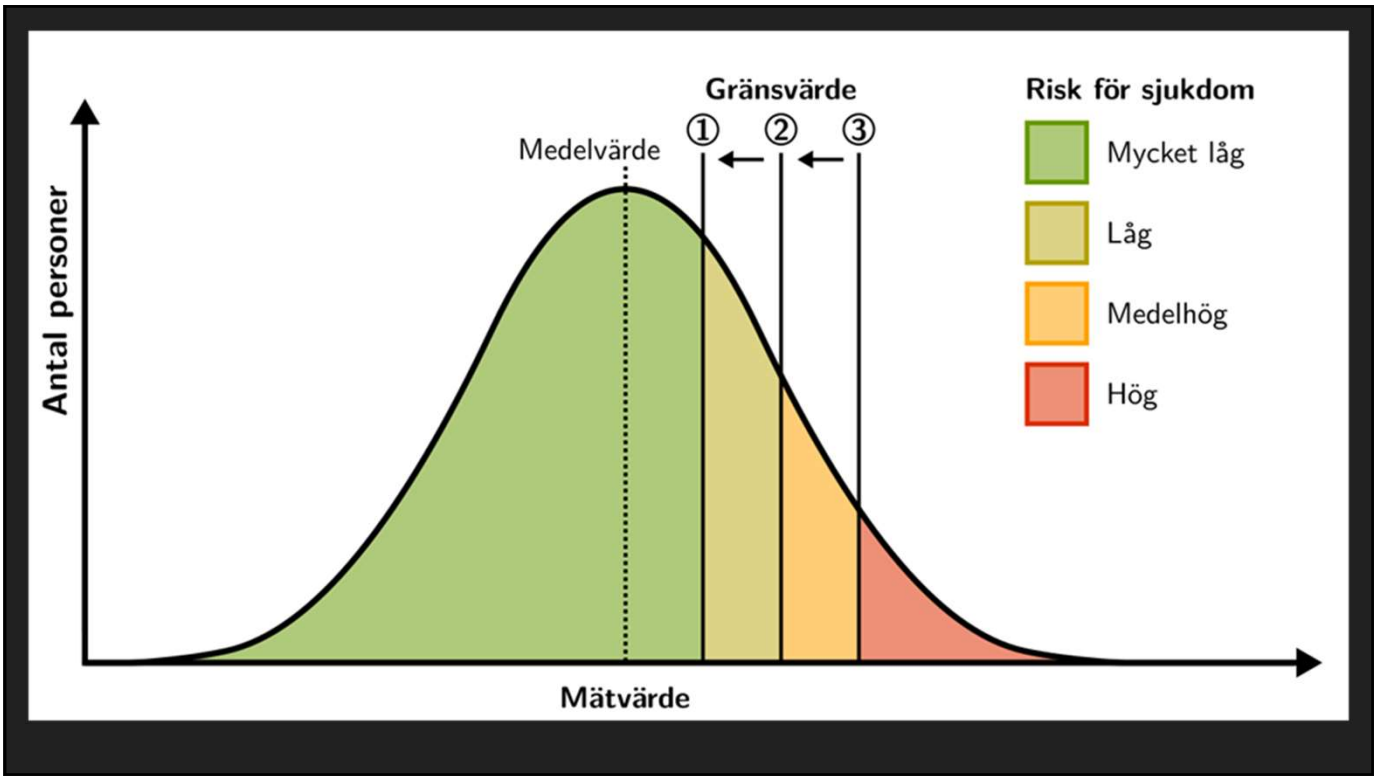
Saklayen, Mohammad G, and Neeraj V Deshpande. "Timeline of History of Hypertension Treatment." *Frontiers in cardiovascular medicine* vol. 3 3. 23 Feb. 2016, doi:10.3389/fcvm.2016.00003

5

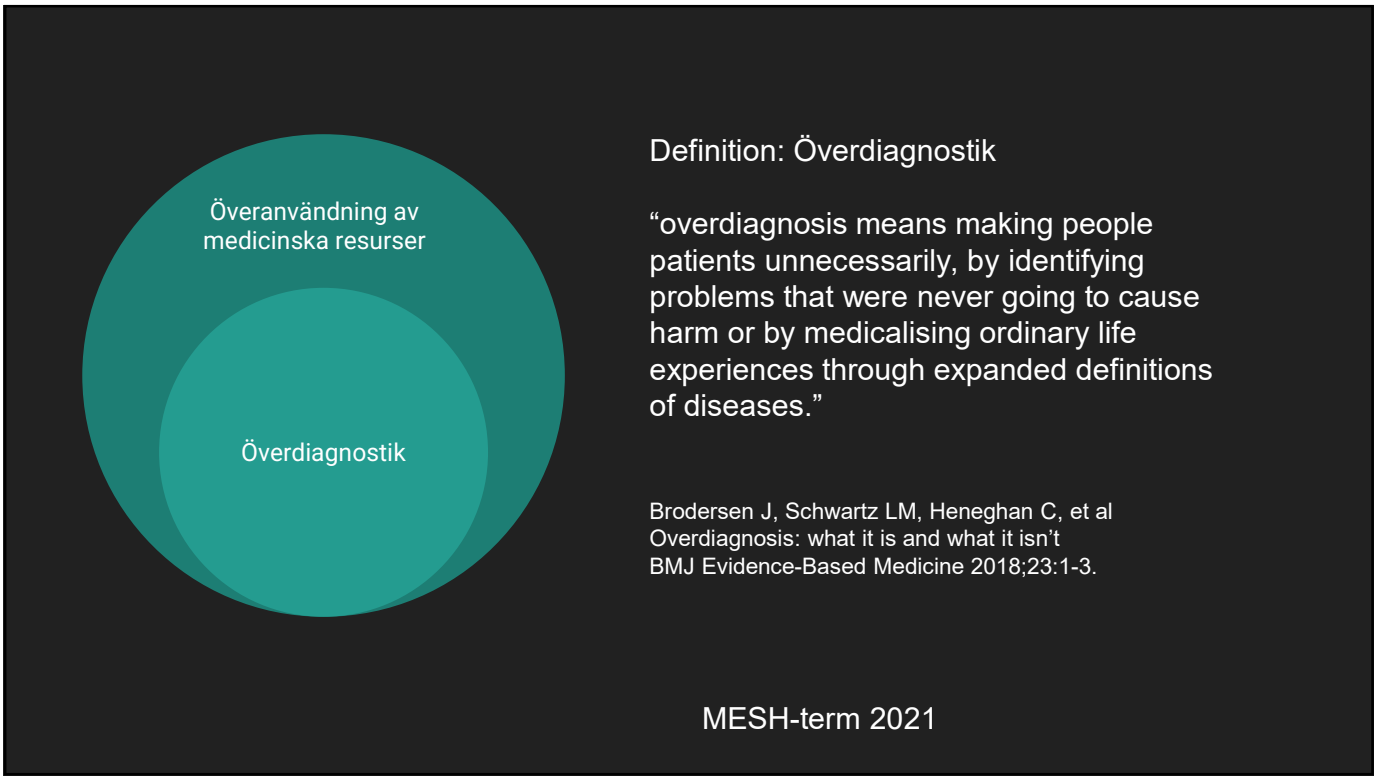


- Utan behandling 10 %, med behandling 6 % - 10-årsrisk
- Relativ riskreduktion 40 %; Absolut riskreduktion 4 %

6



7



Definition: Överdiagnostik

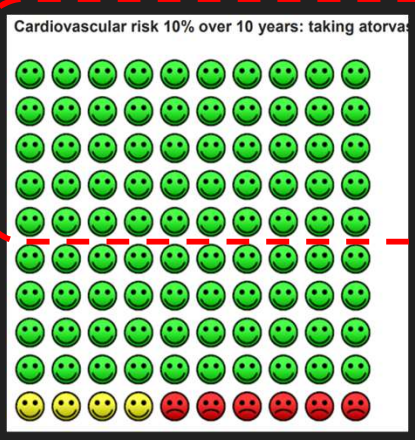
"overdiagnosis means making people patients unnecessarily, by identifying problems that were never going to cause harm or by medicalising ordinary life experiences through expanded definitions of diseases."

Brodersen J, Schwartz LM, Heneghan C, et al
Overdiagnosis: what it is and what it isn't
BMJ Evidence-Based Medicine 2018;23:1-3.

MESH-term 2021

8

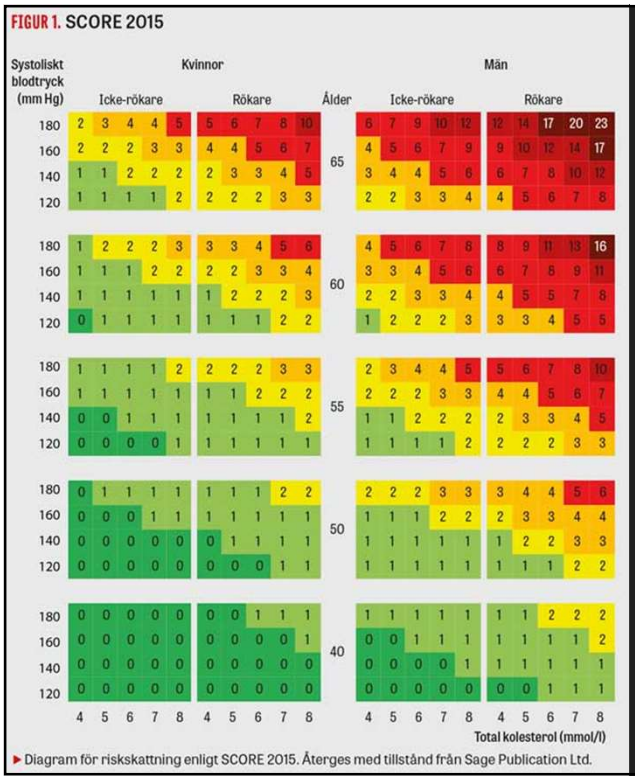
Exempel



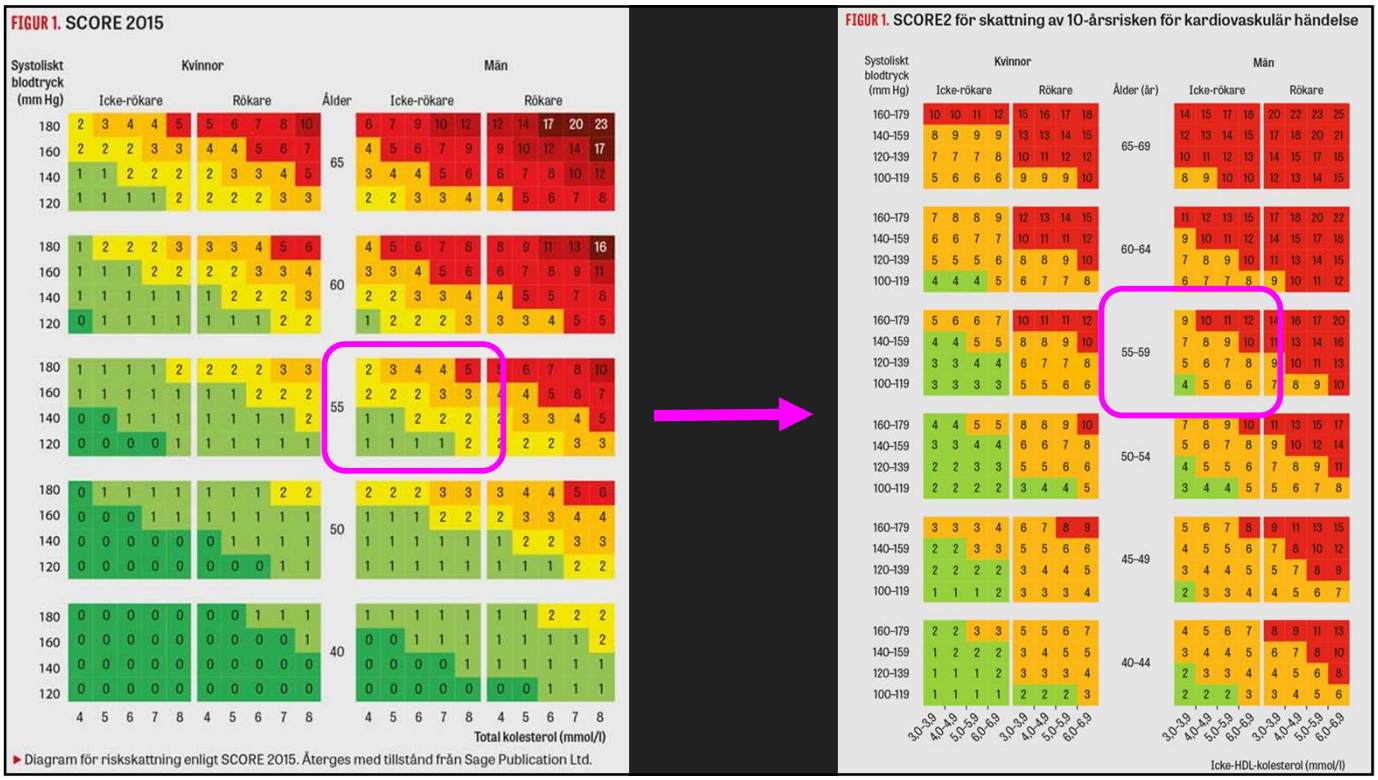
Överdiagnostik?

- Utan behandling 10 %, med behandling 6 % - 10-årsrisk
- Relativ riskreduktion 40 %; Absolut riskreduktion 4 %

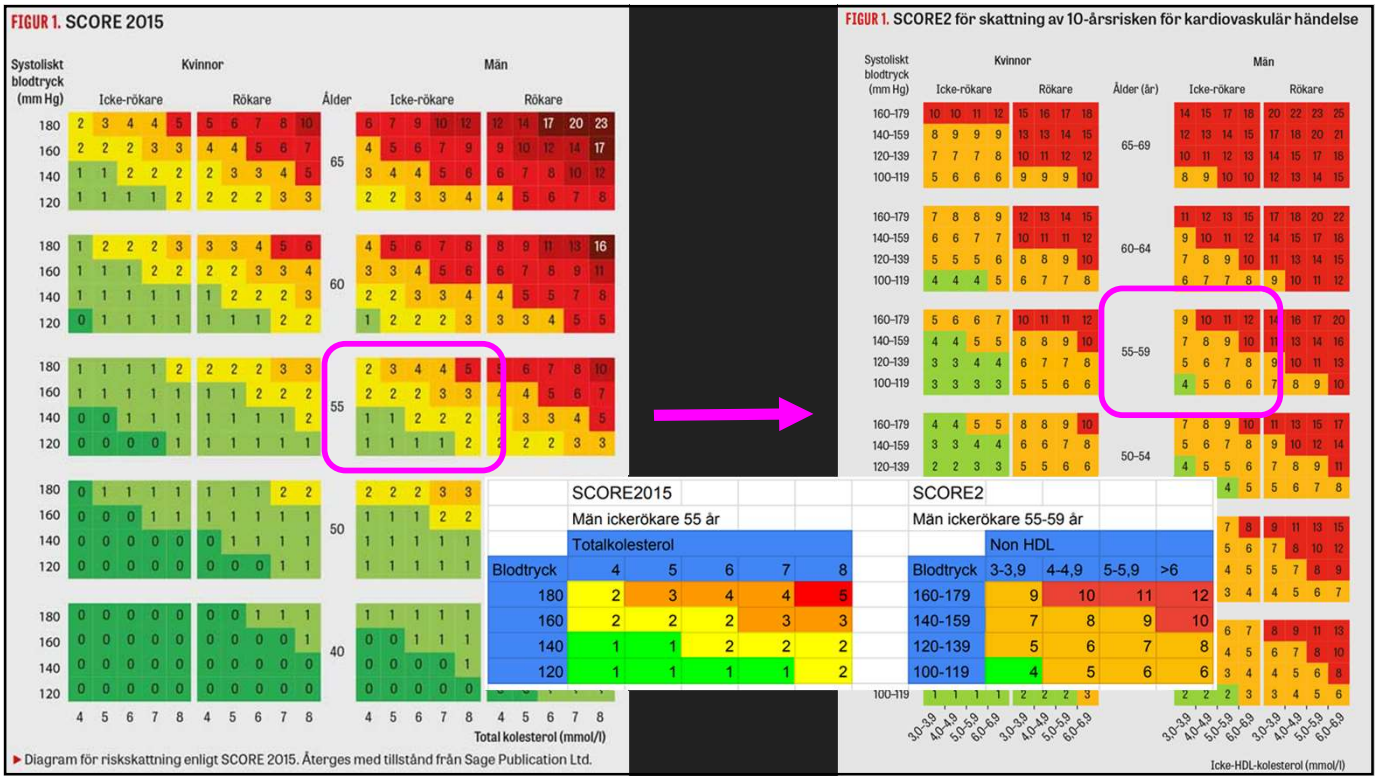
9



10


FIGUR 1. SCORE 2015
Systoliskt blodtryck (mm Hg)
Kvinnor
Män
Icke-rökare
Rökare
Ålder
Total kolesterol (mmol/l)
► Diagram för riskskattning enligt SCORE 2015. Återges med tillstånd från Sage Publication Ltd.
FIGUR 1. SCORE2 för skattning av 10-årsrisken för kardiovaskulär händelse
Ålder (år)
65-69
60-64
55-59
50-54
45-49
40-44
Icke-HDL-kolesterol (mmol/l)

11


FIGUR 1. SCORE 2015
Systoliskt blodtryck (mm Hg)
Kvinnor
Män
Icke-rökare
Rökare
Ålder
Total kolesterol (mmol/l)
► Diagram för riskskattning enligt SCORE 2015. Återges med tillstånd från Sage Publication Ltd.
FIGUR 1. SCORE2 för skattning av 10-årsrisken för kardiovaskulär händelse
Ålder (år)
Icke-HDL-kolesterol (mmol/l)
SCORE2015
Män ickerökare 55 år
Totalkolesterol
Blodtryck 4 5 6 7 8
180 2 3 4 4 5
160 2 2 2 3 3
140 1 1 2 2 2
120 1 1 1 1 2
SCORE2
Män ickerökare 55-59 år
Non HDL
Blodtryck 3-3,9 4-4,9 5-5,9 >6
160-179 9 10 11 12
140-159 7 8 9 10
120-139 5 6 7 8
100-119 4 5 6 6

12

SCORE2015					
Män ickerökare 55 år					
	Totalkolesterol				
Blodtryck	4	5	6	7	8
180	2	3	4	4	5
160	2	2	2	3	3
140	1	1	2	2	2
120	1	1	1	1	2

SCORE2				
Män ickerökare 55-59 år				
	Non HDL			
Blodtryck	3-3,9	4-4,9	5-5,9	>6
160-179	9	10	11	12
140-159	7	8	9	10
120-139	5	6	7	8
100-119	4	5	6	6

SCORE 2015
Uppskattar 10 års risk för kardiovaskulär död

SCORE2
Uppskattar 10 års risk för kardiovaskulär HÄNDELSE

13

SCORE2015					
Män ickerökare 55 år					
	Totalkolesterol				
Blodtryck	4	5	6	7	8
180	2	3	4	4	5
160	2	2	2	3	3
140	1	1	2	2	2
120	1	1	1	1	2

SCORE2				
Män ickerökare 55-59 år				
	Non HDL			
Blodtryck	3-3,9	4-4,9	5-5,9	>6
160-179	9	10	11	12
140-159	7	8	9	10
120-139	5	6	7	8
100-119	4	5	6	6

SCORE 2015
Uppskattar 10 års risk för kardiovaskulär död

SCORE2
Uppskattar 10 års risk för kardiovaskulär HÄNDELSE

14

SCORE2015

Män ickerökare 55 år

	Totalkolesterol				
Blodtryck	4	5	6	7	8
180	2	3	4	4	5
160	2	2	2	3	3
140	1	1	2	2	2
120	1	1	1	1	2

	Totalkolesterol				
Blodtryck	4	5	6	7	8
180-190	2	3	4	4	5
170-180	2	3	4	4	5
160-170	2	2	2	3	3
150-160	2	2	2	3	3
140-150	1	1	2	2	2
130-140	1	1	2	2	2
120-130	1	1	1	1	2
−120	1	1	1	1	2

SCORE2

Män ickerökare 55-59 år

	Non HDL			
Blodtryck	3-3,9	4-4,9	5-5,9	>6
160-179	9	10	11	12
140-159	7	8	9	10
120-139	5	6	7	8
100-119	4	5	6	6

	Non HDL			
Blodtryck	3-3,9	4-4,9	5-5,9	>6
170-179	9	10	11	12
160-170	9	10	11	12
150-159	7	8	9	10
140-150	7	8	9	10
130-139	5	6	7	8
120-130	5	6	7	8
100-119	4	5	6	6

SCORE 2015
Uppskattar 10 års risk för kardiovaskulär död

SCORE2
Uppskattar 10 års risk för kardiovaskulär HÄNDELSE

15

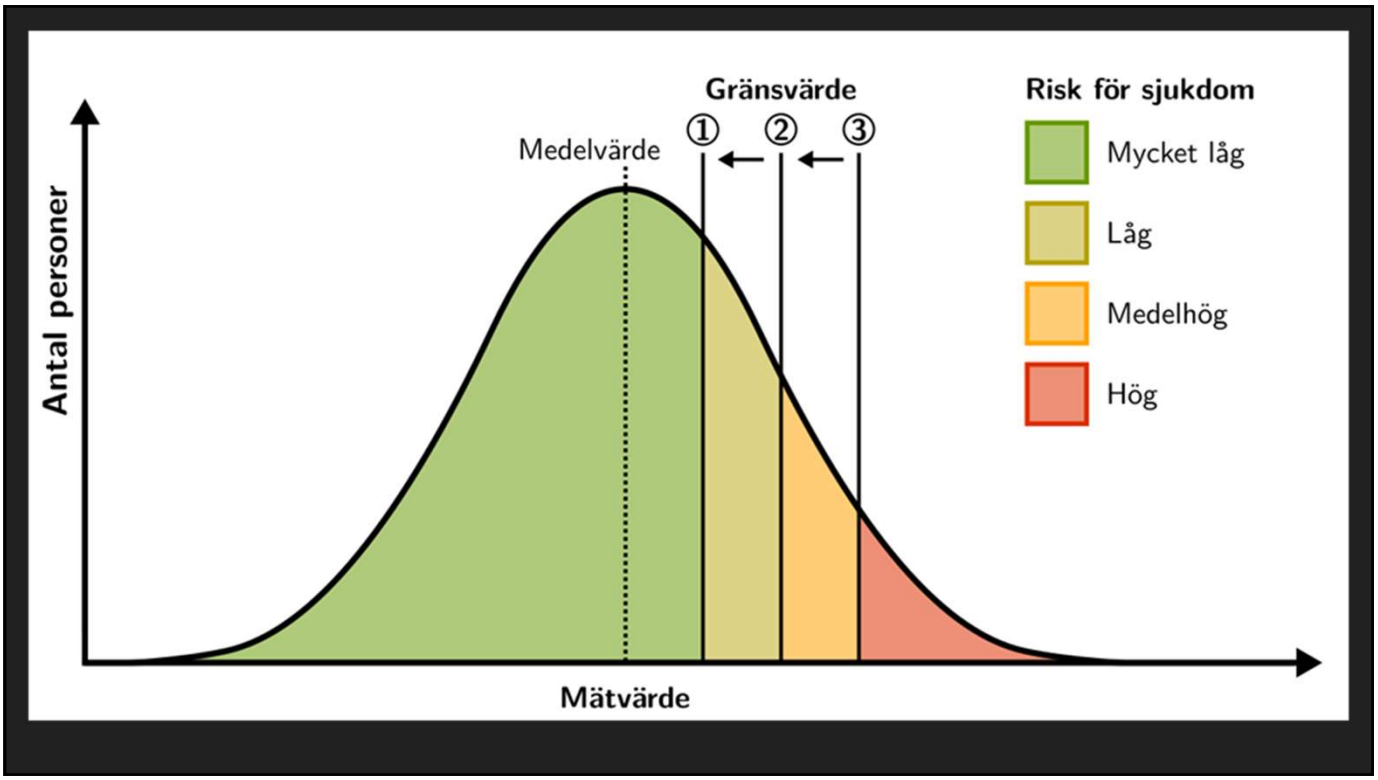
Region Uppsala

Godkänt den: 2023-01-18
Ansvarig: Torbjörn Linde
Gäller för: Region Uppsala

Hög risk – behandling av riskfaktorer bör övervägas:

- Uttalad stegring av en enskild riskfaktor, särskilt triglycerider > 8 mmol/L, LDL-kolesterol > 4,9 mmol/L eller blodtryck ≥ 180/110 mm Hg.
- Familjär hyperkolesterolemi utan andra riskfaktorer.
- Diabetes mellitus utan organpåverkan, med duration ≥ 10 år eller med annan riskfaktor.
- Moderat kronisk njursjukdom (GFR 30–59 mL/min/1,73 m^2).
- Till synes frisk person med SCORE2-risk 2,5– < 7,5 % om < 50 år, 5– < 10 % om mellan 50–69 år samt 7,5– <15 % om ≥ 70 år[1] (orange färg i SCORE2-tabellen)

16



17

An evaluation of the performance of SCORE Sweden 2015 in estimating cardiovascular risk: The Northern Sweden MONICA Study 1999–2014

FREE

Tina Karjalainen, Martin Adiels, Lena Björck, Marie-Therèse Cooney, Ian Graham, Joep Perk, Annika Rosengren, Stefan Söderberg, Mats Eliasson

40-65 år

European Journal of Preventive Cardiology, Volume 24, Issue 1, 1 January 2017, Pages

Table 1. Proportion of risk groups according to 2015 SCORE Sweden, stratified by gender, in the 2014 M

Risk	Men	Women	Total
	n (% (95% CI))	*n* (% (95% CI))	*n* (% (95% CI))
Total	381	432	813
Low (<1%)	98 (25.7 (21.3–30.1))	274 (63.4 (58.9–68.0))	372 (45.8 (42.3–49.2))
Moderate (1–4%)	263 (69.0 (64.4–73.7))	157 (36.3 (31.8–40.9))	420 (51.7 (48.2–55.1))
High (5–9%)	18 (4.7 (2.6–6.9))	1 (0.2 (–0.2–0.7))	19 (2.3 (1.3–3.4))
Very high (≥10%)	2 (0.5 (–0.2–1.3))	0 (0.0 (0.0–0.0))	2 (0.2 (–0.1–0.6))

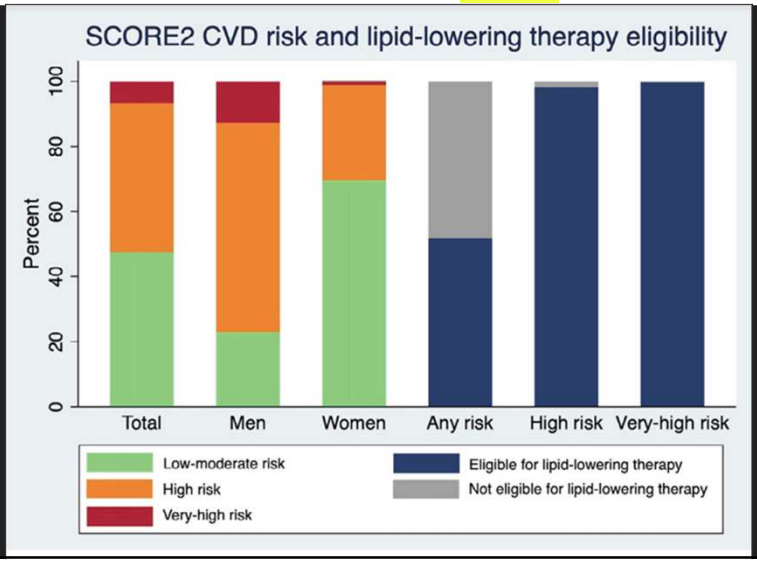
18

Distribution of cardiovascular disease risk according to SCORE2 and potential need for cholesterol and blood pressure lowering therapy in apparently healthy middle-aged individuals

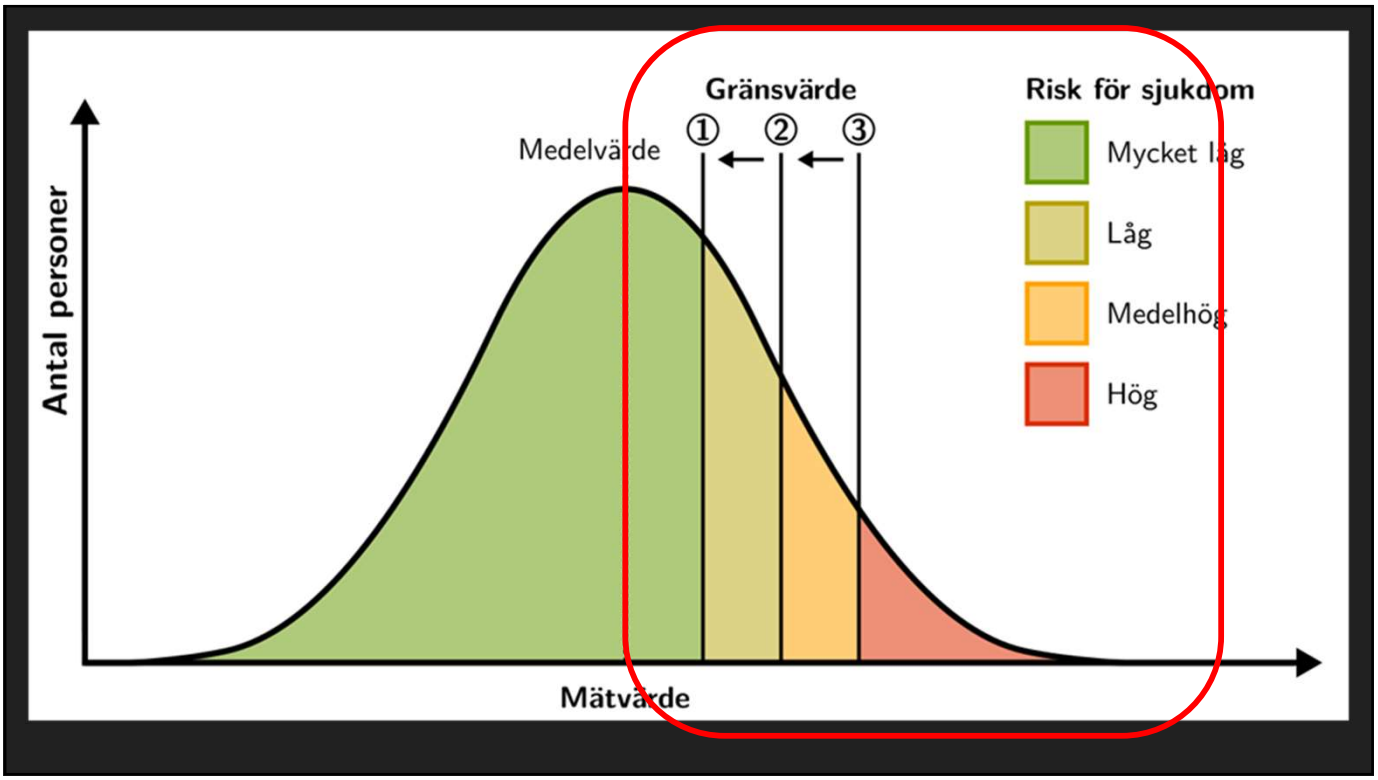
A Yari, P Ueda, E Hagstrom, P Lundman, A Ravn-Fischer, S Soderberg, T Yndigegn, T Jernberg

European Heart Journal, Volume 43, Issue Supplement_2, October 2022, ehac544.2279,
https://doi.org/10.1093/eurheartj/ehac544.2279
Published: 03 October 2022

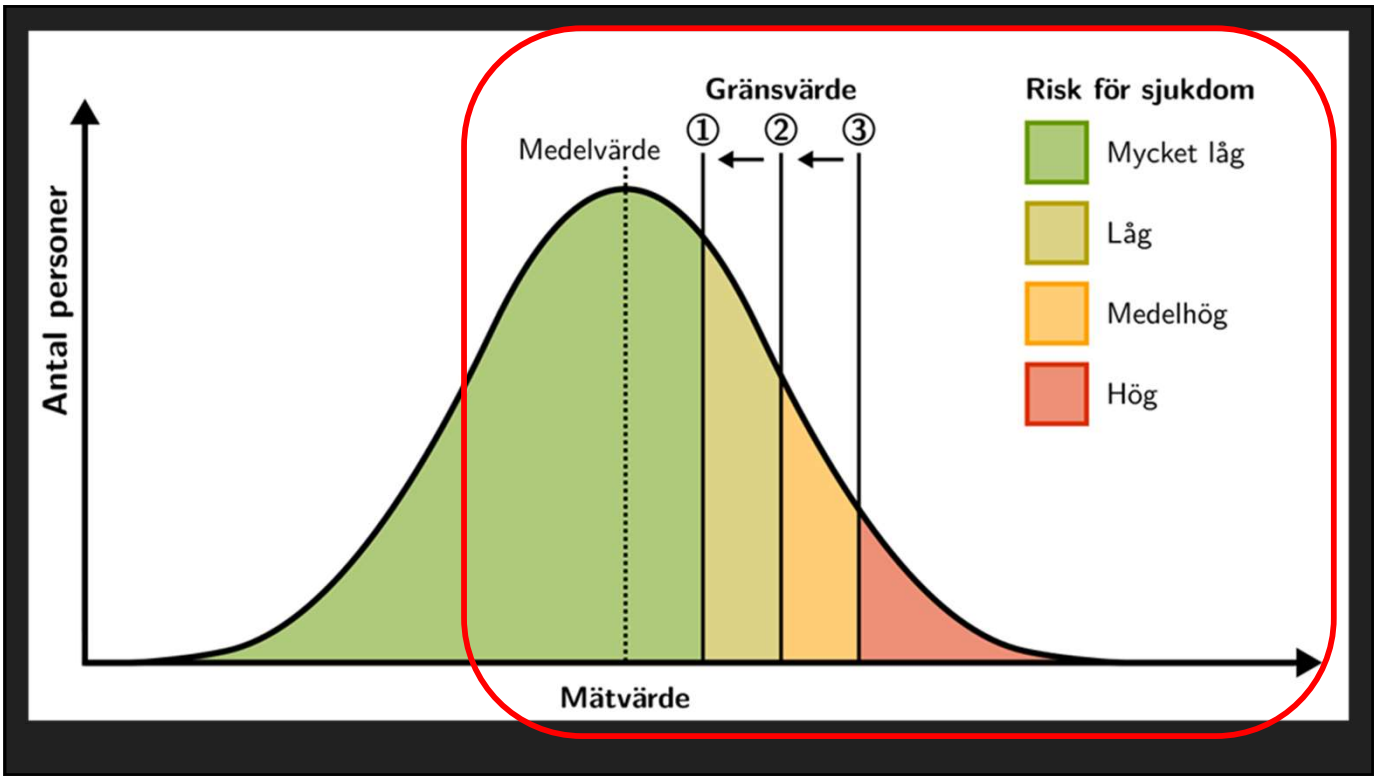
50-64 år



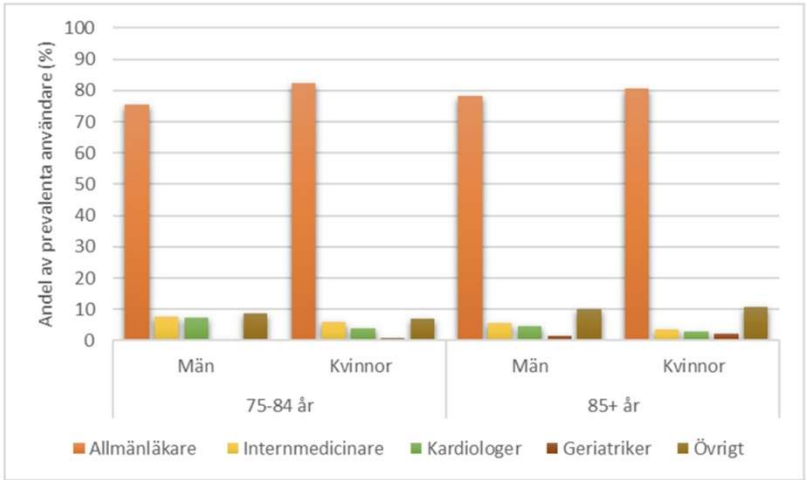
19



20



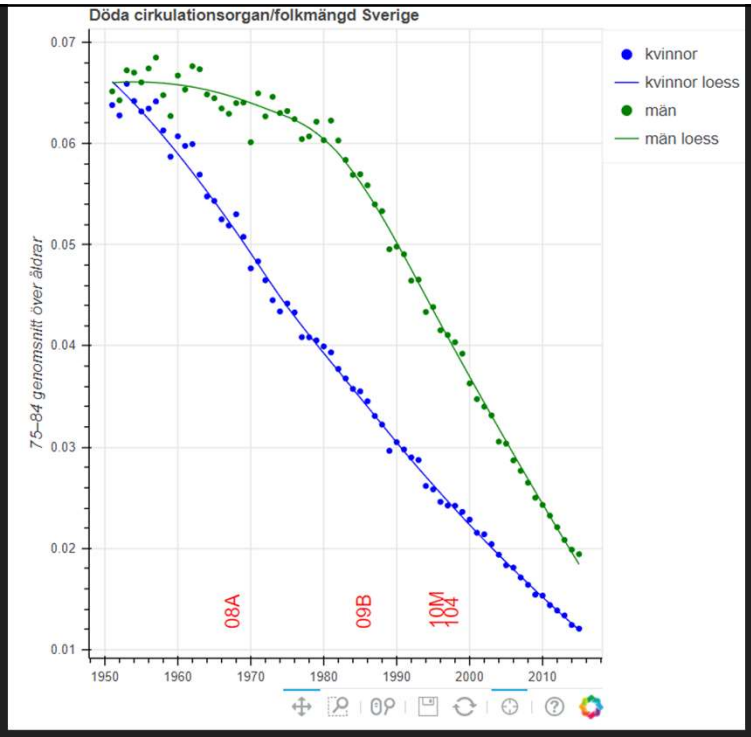
21



Figur 12: Andel (%) av prevalenta statinanvändare uppdelat på olika förskrivarens specialitet per kön och åldersgrupp i region Stockholm under år 2019. (Första recept under år 2019)

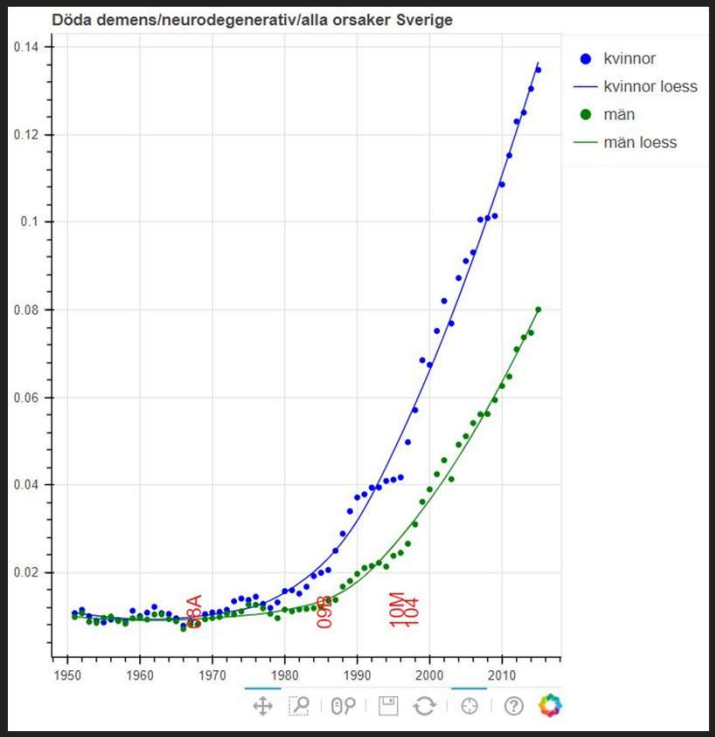
Statinbehandling av äldre för primär- och sekundärprevention i Region Stockholm
Camelia Kalantaripour, masteruppsats, 2020

22



https://mortchart.klpn.se/

23



24

Exempel på populationsstrategi

Transfett ska begränsas i livsmedel enligt ny EU-förordning

Från 2019 Publicerad 11.05.2019 10:30.

Den maximala mängden industriellt producerat transfett ska vara två gram per 100 gram fett och begränsningen träder i kraft i april 2021.

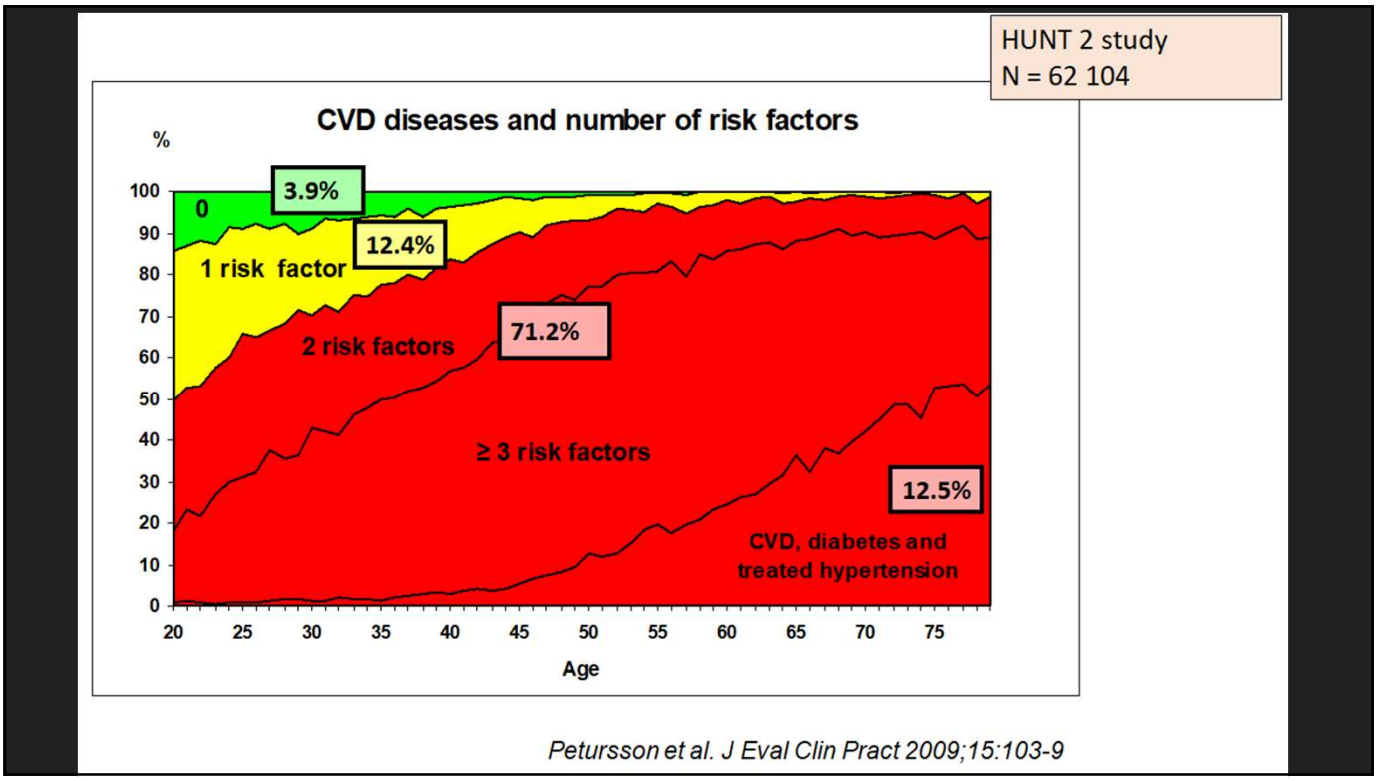
25

Am Fam Physician. 2018;97(2):72

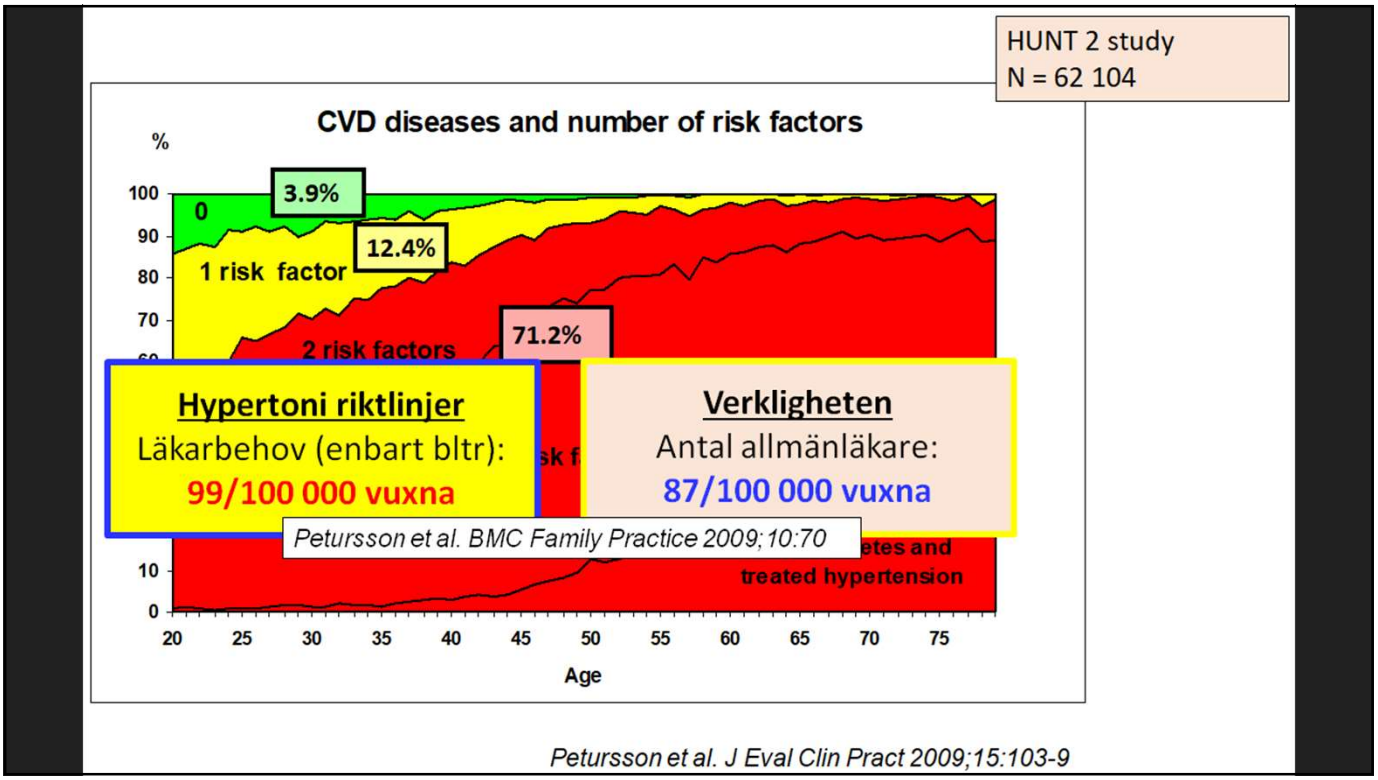
Update: AAFP Opts to Not Endorse New AHA/ACC Hypertension Guideline

The American Academy of Family Physicians (AAFP) has decided to not endorse the new hypertension guideline from the American Heart Association (AHA), the American College of Cardiology (ACC), and nine other health professional organizations. The AAFP was not involved in the development of the new guideline and continues to endorse the 2014 recommendations from the Eighth Joint National Committee (JNC8). David O'Gurek, MD, chair of the AAFP's Commission on Health of the Public and Science, said the commission used the same process and criteria to review both guidelines, and that "based on the methodology, applicability, and consistency within the JNC8 guideline, the AAFP felt strongly that the JNC8 upheld the scientific rigor that provided strong recommendations ... on appropriate treatment of hypertension." O'Gurek noted that the bulk of the AHA/ACC guideline was not based on a systematic evidence review. For more information, go to https://www.aafp.org/news/health-of-the-public/20171212notendorseaha-accgdlne.html.

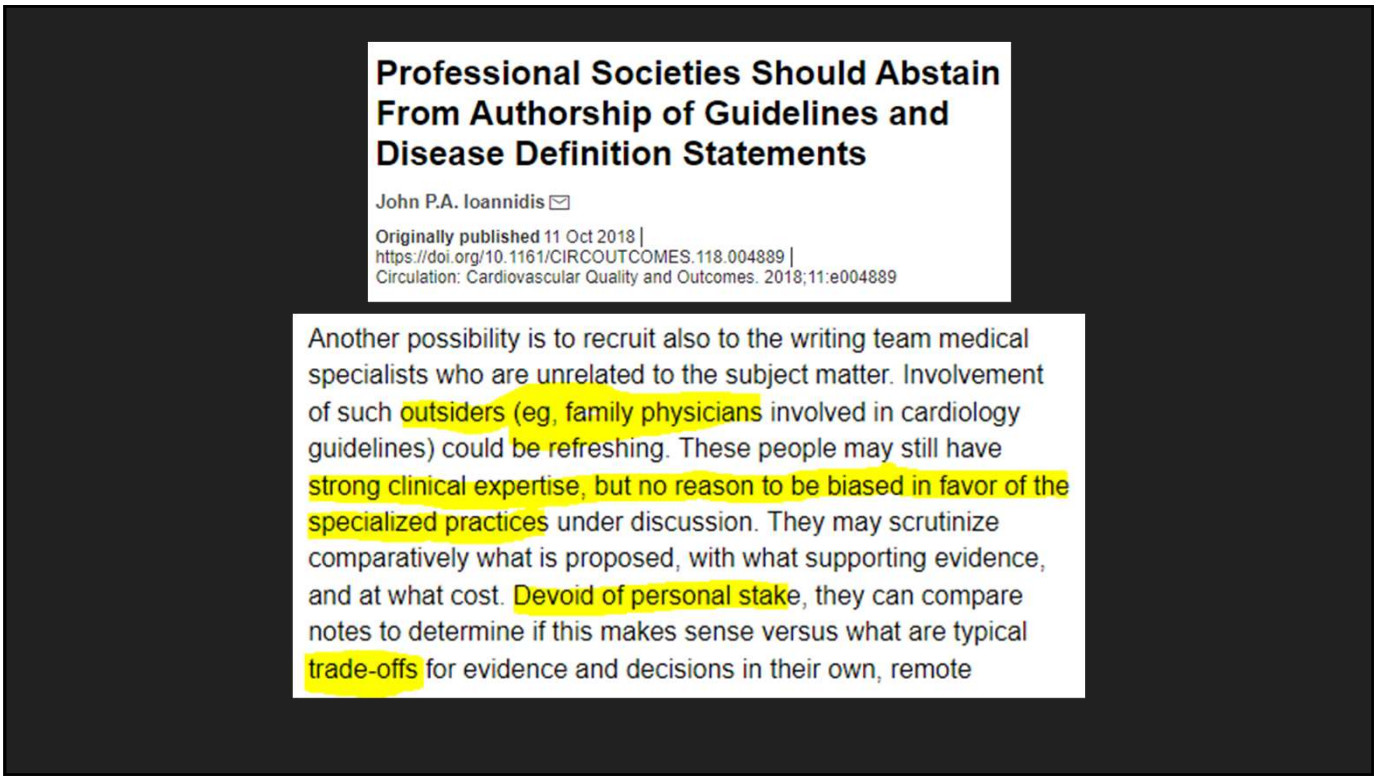
26


HUNT 2 study
N = 62 104
CVD diseases and number of risk factors
%
3.9%
0
12.4%
1 risk factor
2 risk factors
71.2%
≥ 3 risk factors
12.5%
CVD, diabetes and
treated hypertension
Age
Petursson et al. J Eval Clin Pract 2009;15:103-9

27


HUNT 2 study
N = 62 104
CVD diseases and number of risk factors
%
3.9%
0
12.4%
1 risk factor
2 risk factors
71.2%
Hypertoni riktlinjer
Läkarbehov (enbart bltr):
99/100 000 vuxna
Verkligheten
Antal allmänläkare:
87/100 000 vuxna
Petursson et al. BMC Family Practice 2009;10:70
treated hypertension
Age
Petursson et al. J Eval Clin Pract 2009;15:103-9

28


Professional Societies Should Abstain From Authorship of Guidelines and Disease Definition Statements
John P.A. Ioannidis
Originally published 11 Oct 2018 |
https://doi.org/10.1161/CIRCOUTCOMES.118.004889 |
Circulation: Cardiovascular Quality and Outcomes. 2018;11:e004889
Another possibility is to recruit also to the writing team medical specialists who are unrelated to the subject matter. Involvement of such outsiders (eg, family physicians involved in cardiology guidelines) could be refreshing. These people may still have strong clinical expertise, but no reason to be biased in favor of the specialized practices under discussion. They may scrutinize comparatively what is proposed, with what supporting evidence, and at what cost. Devoid of personal stake, they can compare notes to determine if this makes sense versus what are typical trade-offs for evidence and decisions in their own, remote

29