



Osnovna zdravstvena dejavnost in njena znanstvena utemeljenost



Vsebina predavanja

- Ideološke osnove osnovne zdravstvene dejavnosti
- Dokazi o učinkovitosti
- Kaj raziskovati (izbor tem s primeri)
- Kako raziskovati (nekaj nasvetov in pasti)



IDEOLOGIJA OSNOVNE ZDRAVSTVENE DEJAVNOSTI



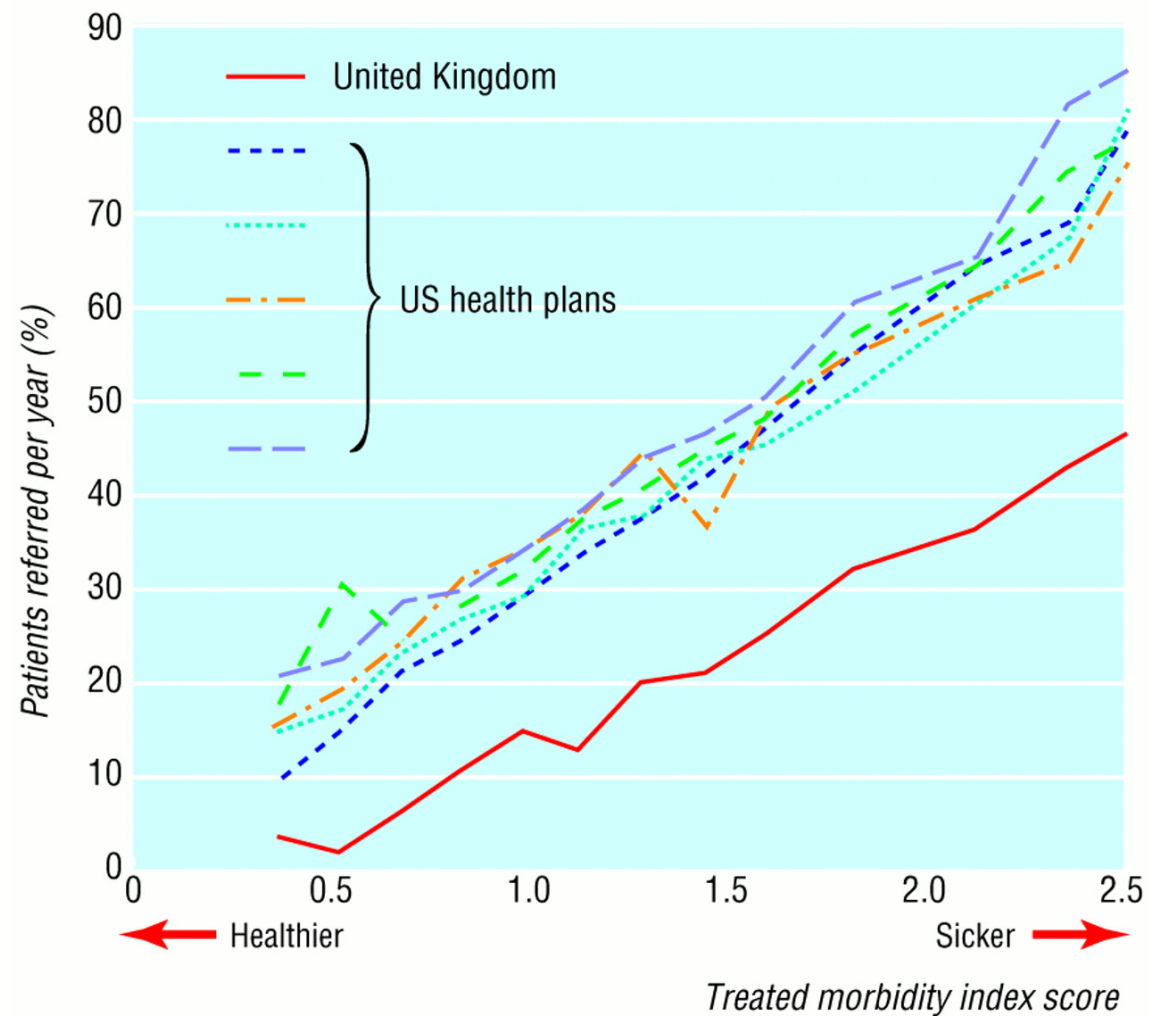
KAJ JE TO

- Raven oskrbe: prvi kontakt
- Atributi:
 - dostopnost,
 - celovitost,
 - koordiniranost,
 - stalnost,
 - Odgovornost (do družbe in okolja)
- Službe:
 - Medicina: družinska medicina, pediatrija, ginekologija....
 - Ostalo zdravstvo: patronaža, laboratorij, fizioterapija...
 - Sociala



Značilčnosti

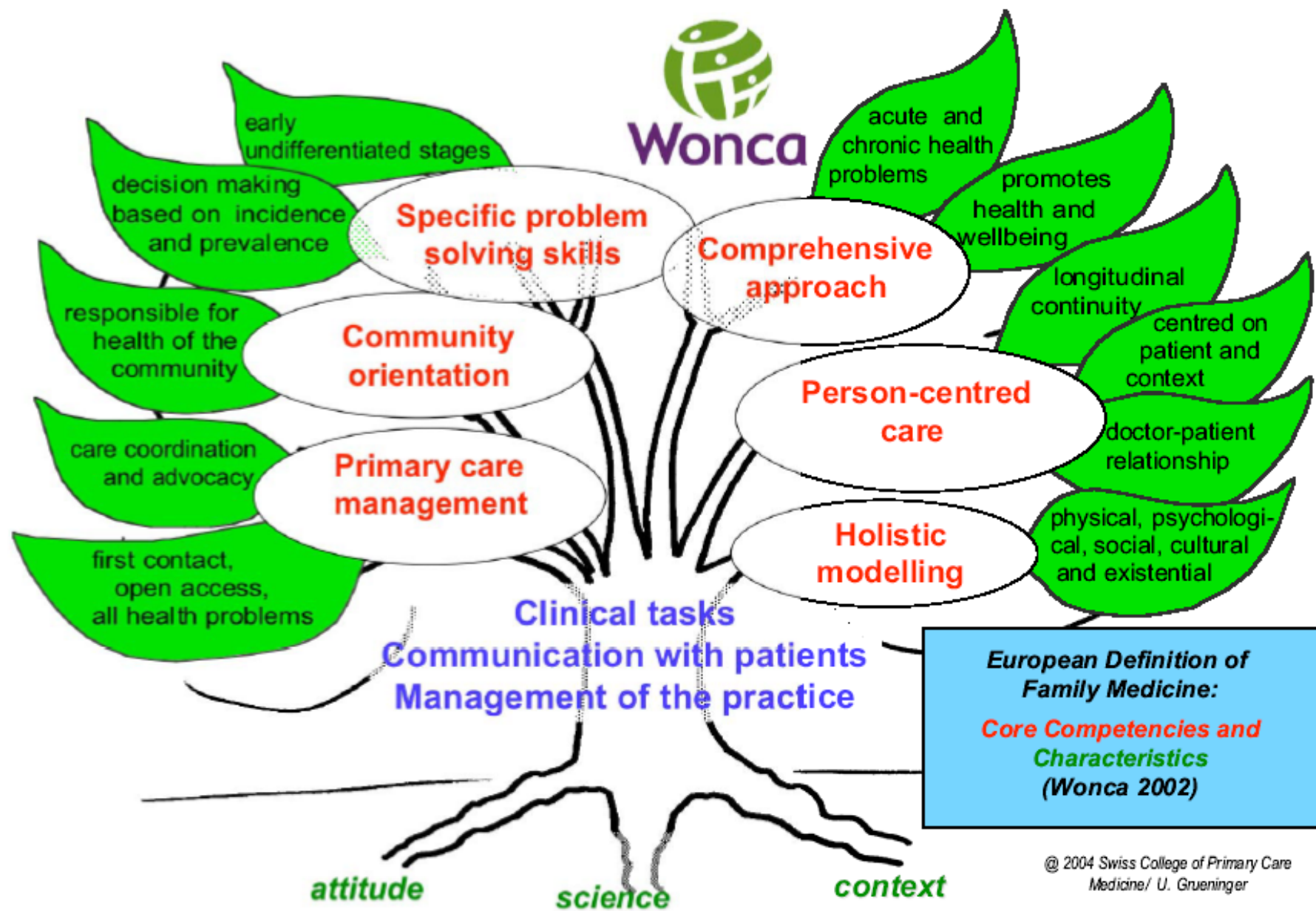
	<i>Specialistika</i>	<i>Osnovno</i>
<i>Okolje</i>	Nadzorovano	Nenadzorovano
<i>Pacient</i>	Pasiven	Aktiven
<i>Bolezen</i>	Ena	Več
<i>Pristop</i>	Analitični	Analitični in holistični
<i>Stroški</i>	Visoki	Nizki





Kaj je družinska medicina?

- Splošna/družinska medicina je znanost s svojo posebno vsebino poučevanja, raziskovanja, dokazi in klinično dejavnostjo in klinična disciplina, ki je usmerjena v primarno zdravstveno varstvo





Torej...

- Gre za raven oskrbe, ki je heterogena
- Njena pomembna značilnost je velika širina problemov, s katerimi se ukvarja, saj se dotika področij, ki so medicini sorodna (npr. sociologija, psihologija, antropologija itd.)
- Delo na takem področju terja široko izobražene in razmišljujoče strokovnjake



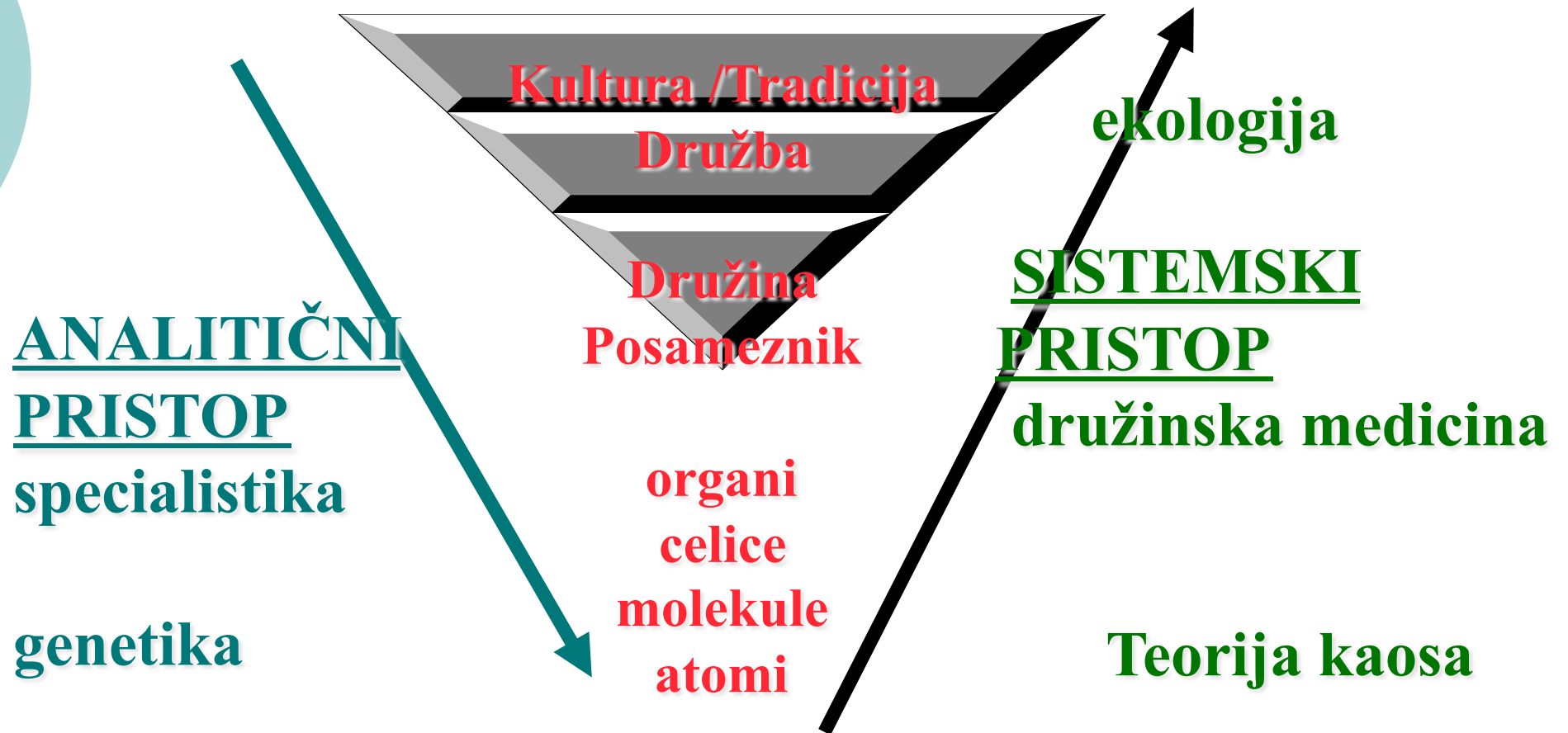
Znanstvena utemeljenost



DVE PARADIGMI V ZNANOSTI

- Teorija sistemov in biopsihosocialni model
- Analitičnost in biomedicinski model

Dva pristopa v znanosti



DEKLARATIVNI POMEN





International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978

- Primary health care is the key to attaining health for all.
- All governments should formulate national policies, strategies and plans of action to launch and sustain primary health care as part of a comprehensive national health system and in coordination with other sectors.
- the whole world community should support national and international commitment to primary health care and channel increased technical and financial support to it, **particularly in developing countries.**



Kaj se je zgodilo po tem?



Spremembe v družbi

- Izguba zaupanja v avtoritete
 - Eksplozija znanja (knjige, internet, mediji)
Potošništvo
 - Tožbe
 - Vzpon managerjev
-
- Izguba ugleda medicine kot stroke in zdravnikov kot strokovnjakov



Novi koncepti v medicini

- Usmerjenost v populacijo
- Soodločanje bolnikov
- Akademsko družinska medicina, akademski vidiki osnovne zdravstvene dejavnosti
- Kakovost oskrbe, nadzor kvalitete, standardi
-



Trideset let pozneje

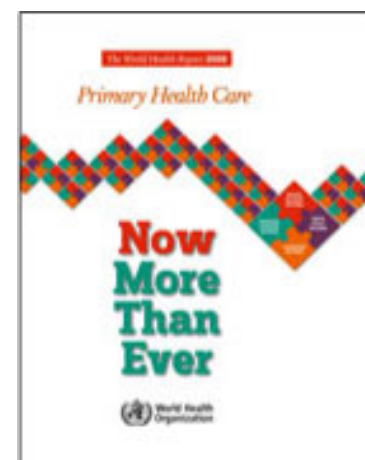


Kriza medicine

- Kriza = nesposobnost odločitve, katero smer ubrati.
- Skrbi:
 - Finančna vzdržnost
 - Nadzor
 - Potrošništvo
 - Globalizacije

Almaty, 2008

- Stanje je enako ali slabše
- Razlike med državami so se povečale
- Nekatere države so zavozile svoje zdravstvene sisteme
- Ponovno poudarjen pomen osnovne zdravstvene dejavnosti





DOKAZI?

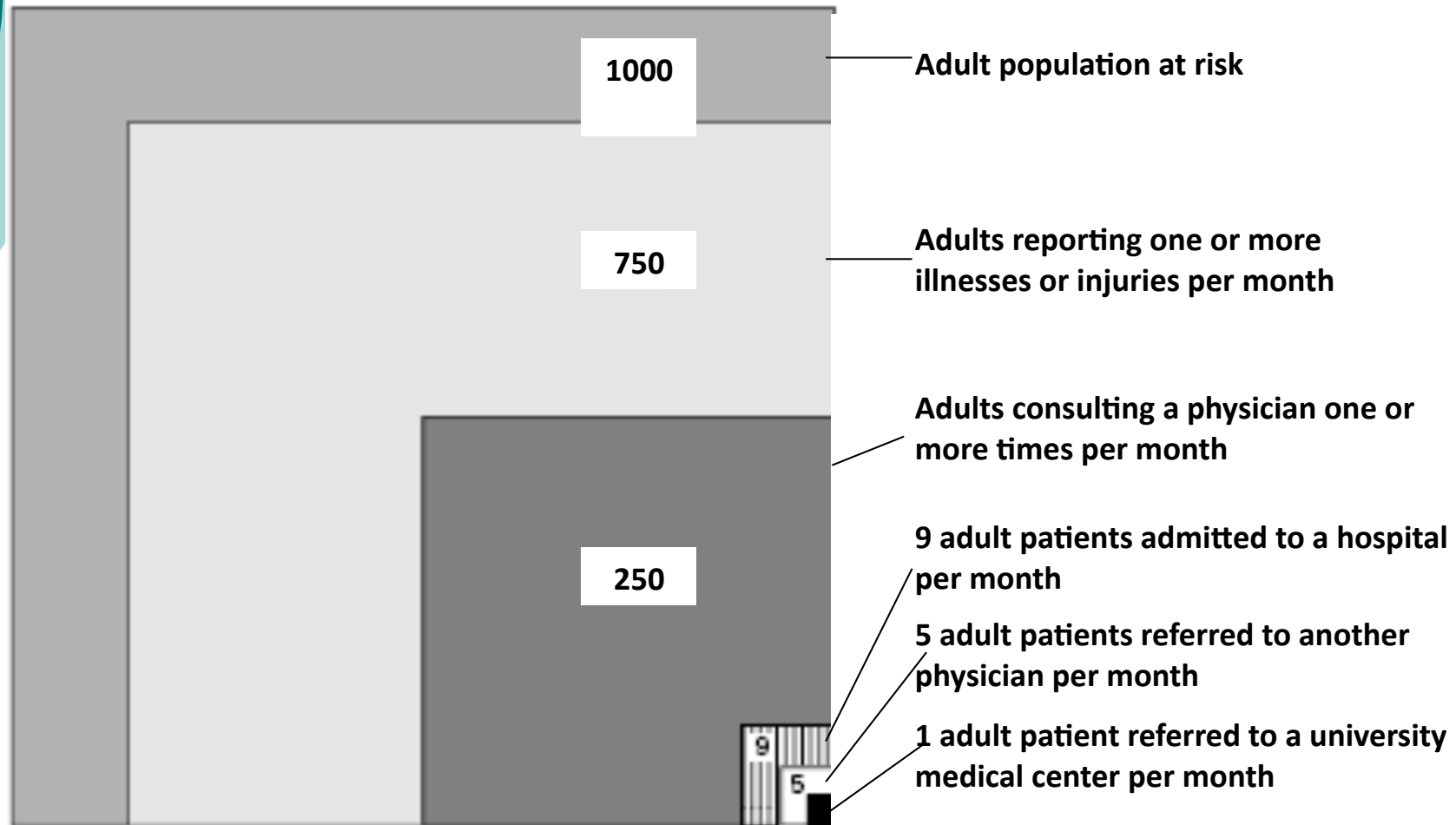
If primary care has anything at all to do with improving health, then its contribution will be measurable. If not, it will be accepted as the homeopathy of modern medicine.

Horton R. Is primary-care research a lost cause? *Lancet* 2003, 361: 977



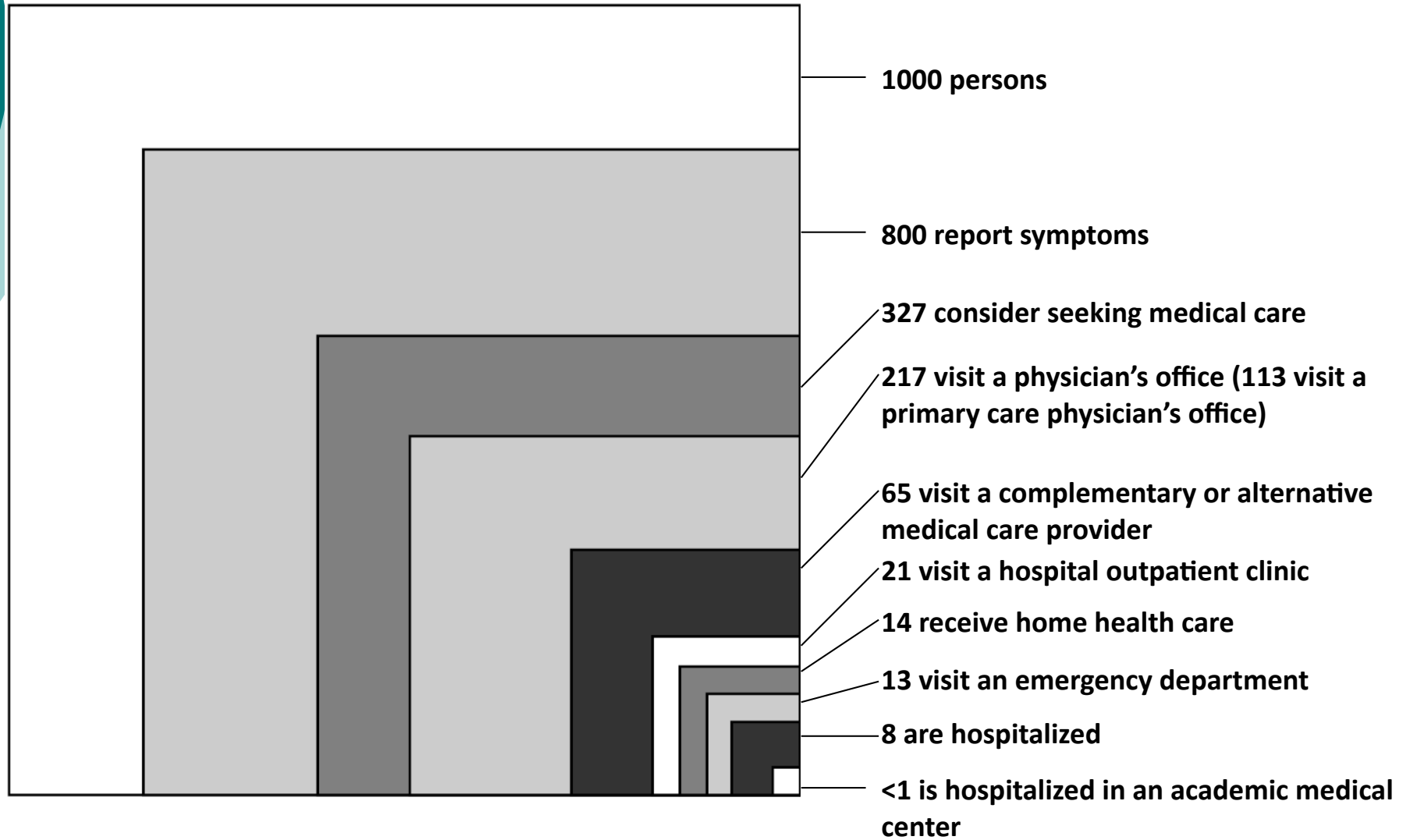
KOLIČINA OPRAVLJENEGA DELA

Monthly Prevalence Estimates of Illness in the Community

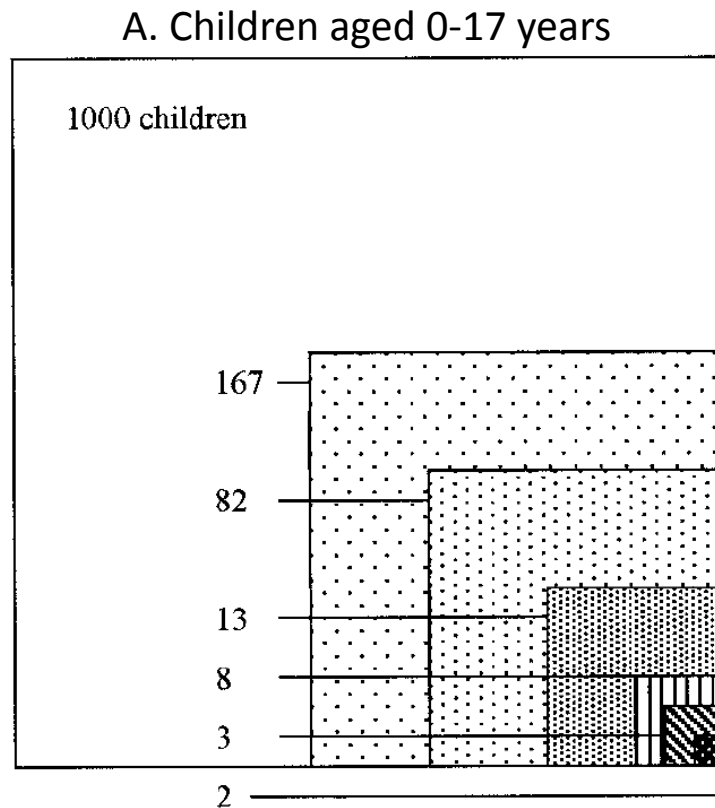


Source: White et al, N Engl J Med 1961; 265: 885-92.

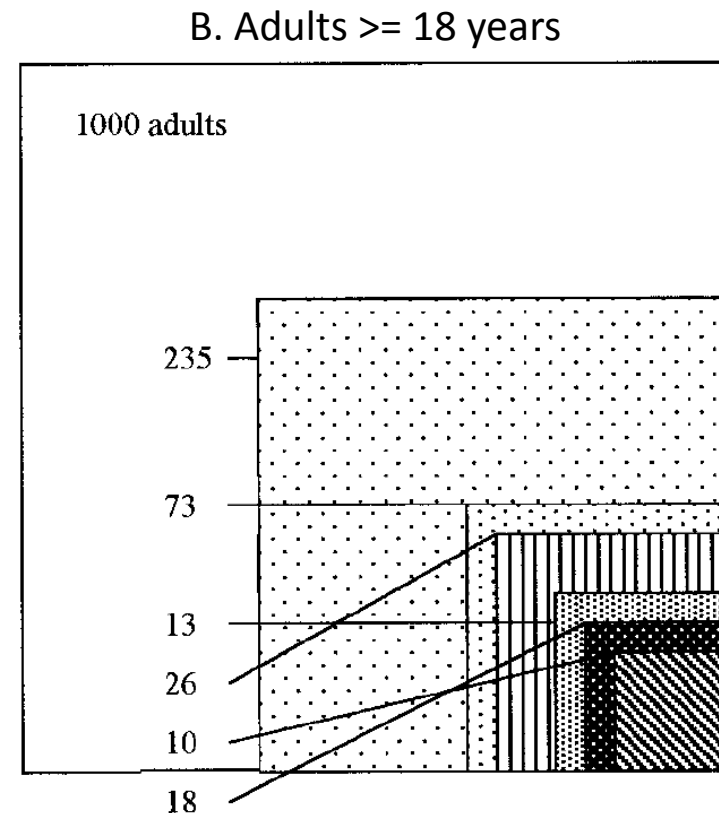
Reanalysis 2001



Participation in Medical and Dental Care in a Typical Month for 1000 Children and Adolescents Aged 0 to 17 years (A), and 1000 adults ≥ 18 years (B)



167 visit a physician's office
 82 visit a dentist's office
 13 visit an emergency department
 8 visit a hospital outpatient clinic
 3 are hospitalized
 2 receive home health care



235 visit a physician's office
 73 visit a dentist's office
 13 visit an emergency department
 26 visit a hospital outpatient clinic
 10 are hospitalized
 18 receive home health care

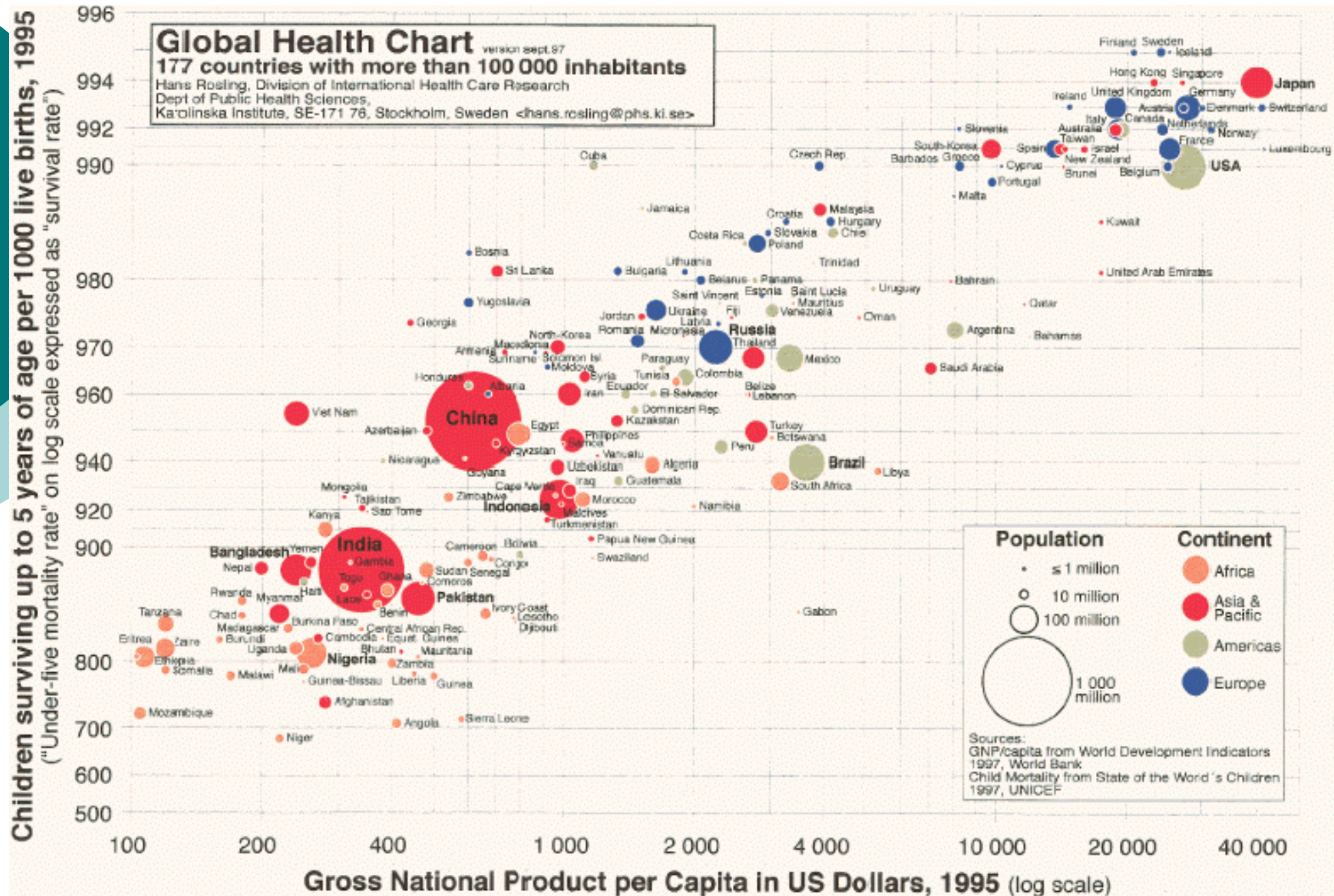


PORABA STREDSTEV

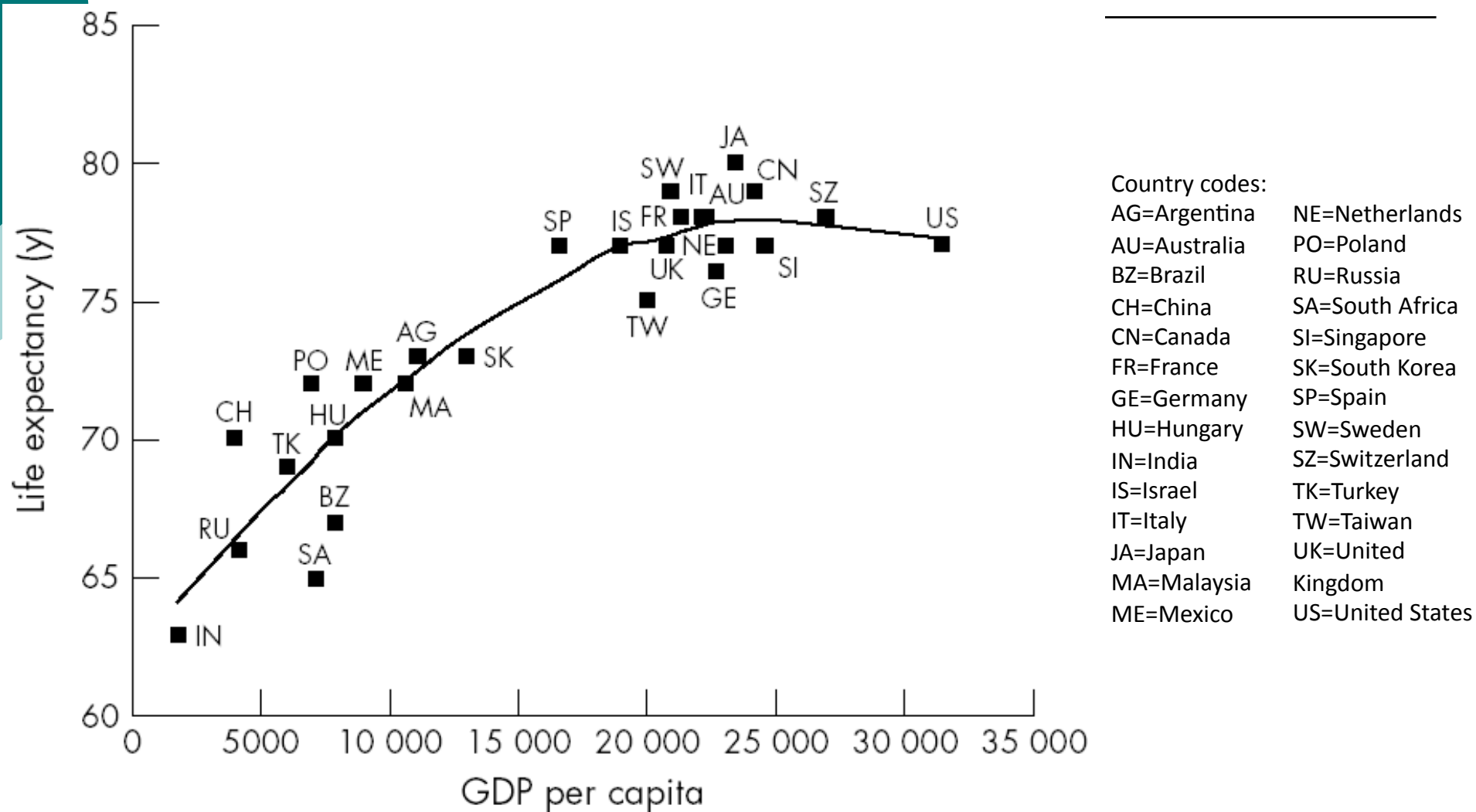


Poraba sredstev in vpliv na zdravje

Na splošno, več denarja pomeni
več zdravja...



Life Expectancy Compared with GDP per Capita for Selected Countries

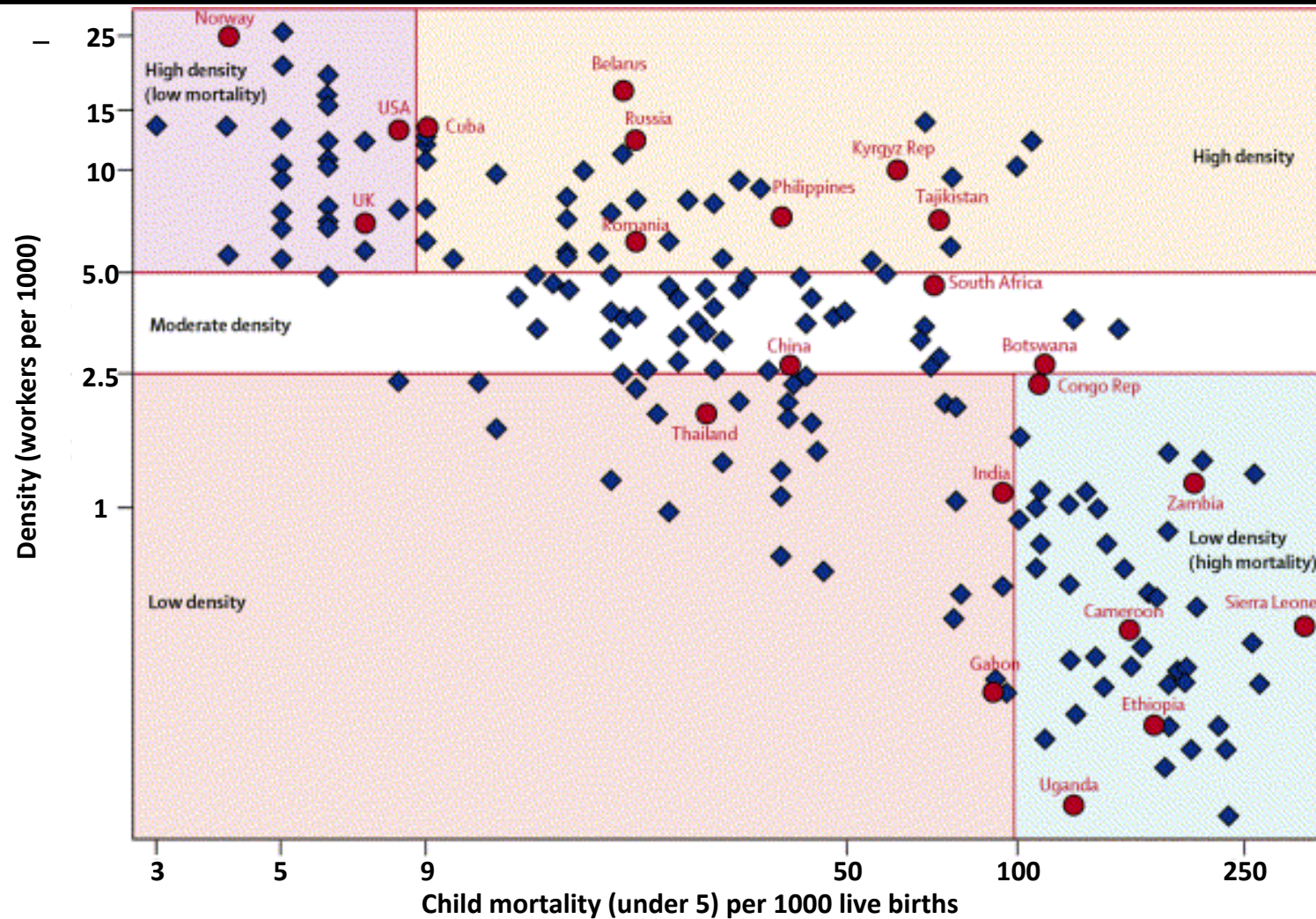


Source: Economist Intelligence Unit. Healthcare International. 4th quarter 1999.
London, UK: Economist Intelligence Unit, 1999.



Na splošno, več zdravnikov
pomeni več zdravja...

Country* Clusters: Health Professional Supply and Child Survival



*186 countries

Source: Chen et al, Lancet 2004; 364:1984-90.



AMPAK, VSI NE PRISPEVAJO
K ZDRAVJU ENAKO

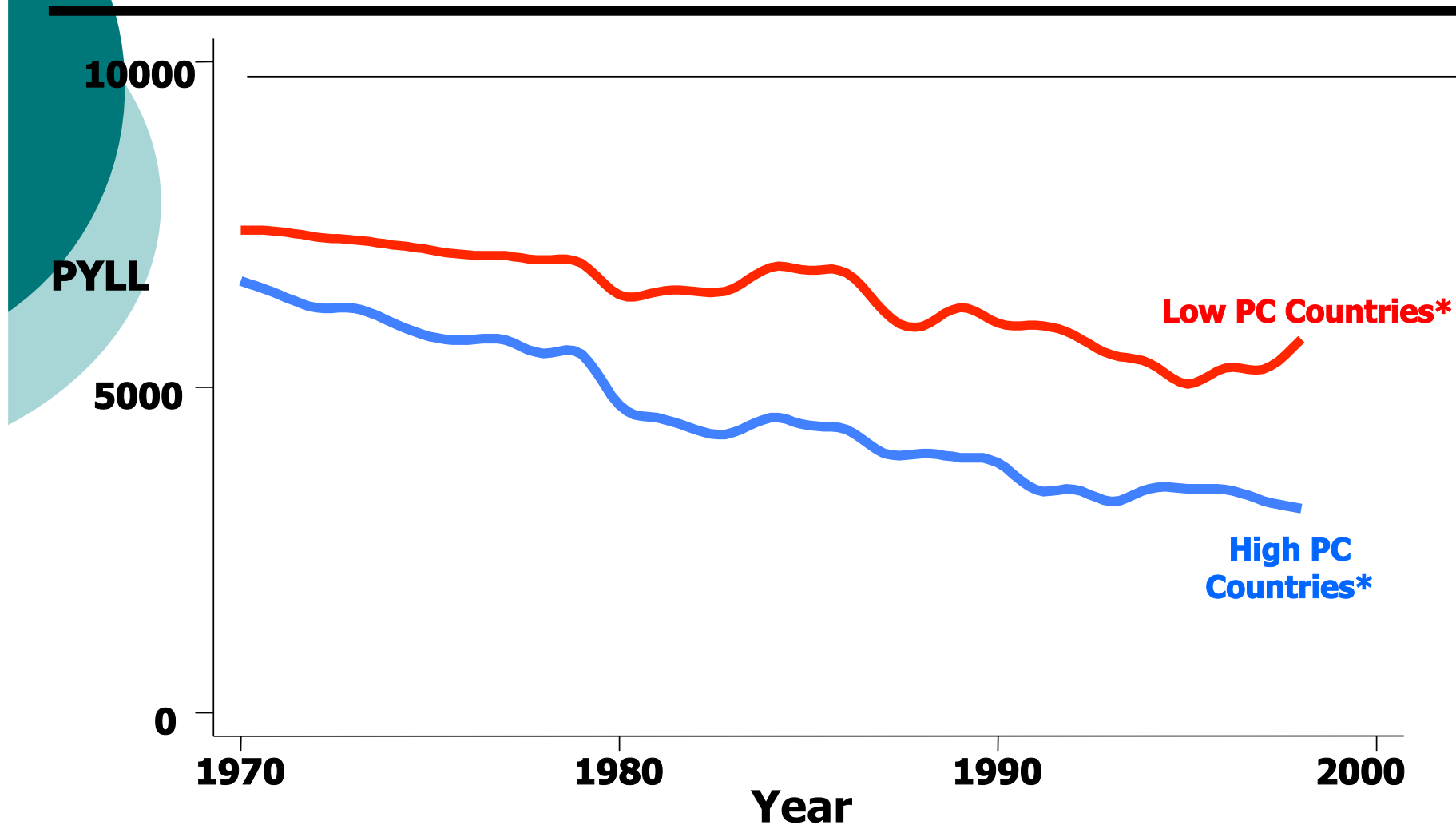


Primary Care Scores, 1980s and 1990s

	1980s	1990s
Belgium	0.8	0.4
France*	-	0.3
Germany	0.5	0.4
United States	0.2	0.4
Australia	1.1	1.1
Canada	1.2	1.2
Japan*	-	0.8
Sweden	1.2	0.9
Denmark	1.5	1.7
Finland	1.5	1.5
Netherlands	1.5	1.5
Spain*	-	1.4
United Kingdom	1.7	1.9

*Scores available only for the 1990s

Povezava med usmerjenostjo v PZV in zgodnjo umerljivostjo (18 OECD držav)





Vpliv na umrljivost

- Vsak dodatni zdravnik v osnovni zdravstveni dejavnosti na 10000 populacije zniža umrljivost za 3-10%, odvisno od vzroka smrti. Ta efekt ostane tudi, če upoštevate sociodemografske razlike.



Specifična umrljivost

- Več zdravnikov v osnovni zdravstveni dejavnosti izboljša zdravje (rak, kardiovaskularne bolezni, CVI, umrljivost otrok, nizka porodna teža, pričakovano trajanje življenja, samoocena zdravja)

Porast teh zdravnikov za 12% (1 /10,000) izboljša te učinke za 4% (1.3-10.8%, odvisno od dejavnika, ki ga proučujemo).



Stranski učinki specialistične oskrbe

- **Nad določeno ravniyo specialistična oskrba ogroža zdravje ljudi**
- V 35 analizah, ki so se ukvarjale z razlikami v specialistični oskrbi in PZV, je bilo v 28 ugotovljeno, da povečevanje zdravnikov v PZV znižuje umrljivost (splošno, kardiovaskularne bolezni, rak, CVI). V 25 analizah so ugotovili, da poviševanje specialistične oskrbe povišuje umrljivost.



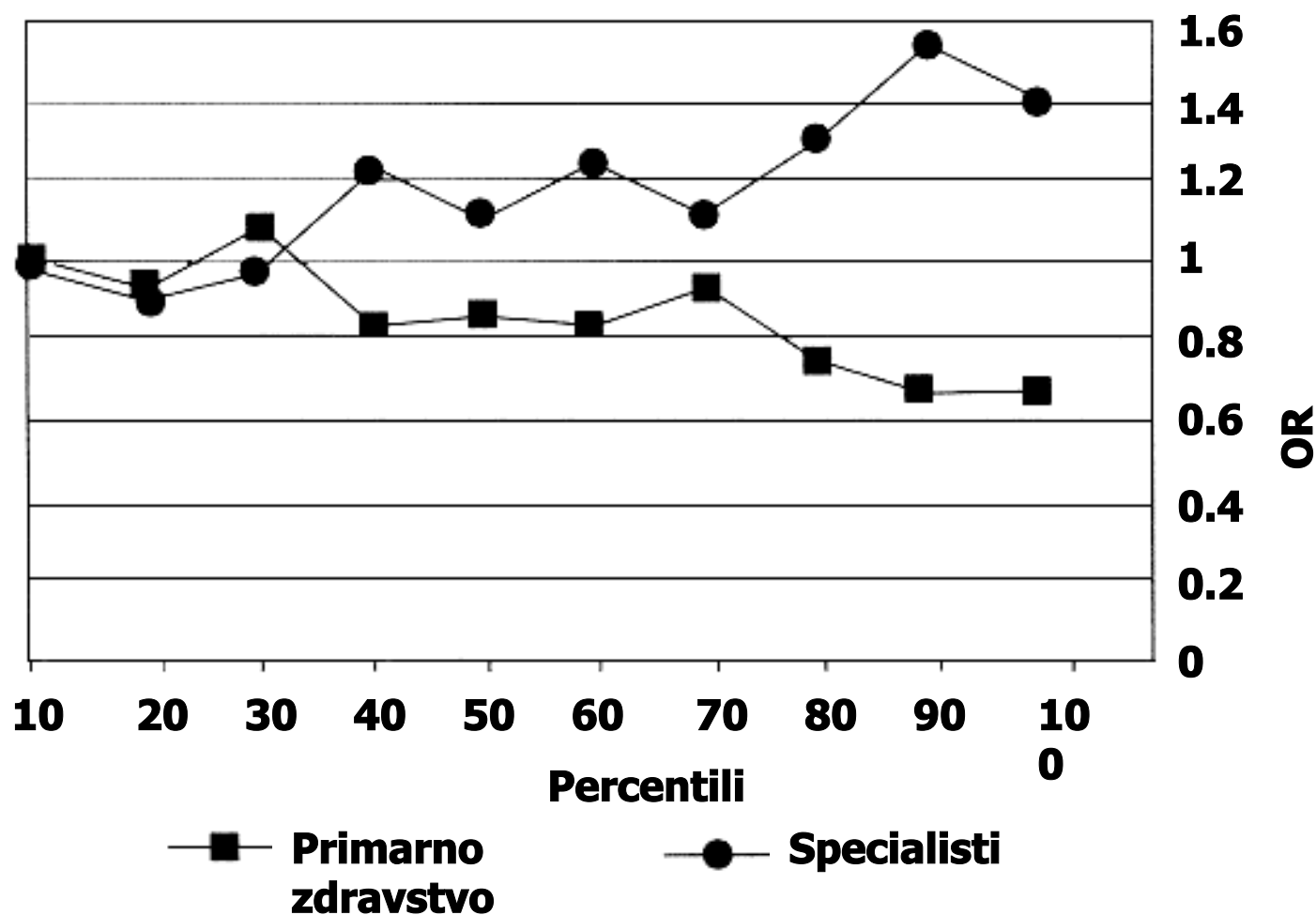
Karcinom cerviksa in dojke

- Incidenca napredovalega karcinoma cerviksa je nižja tam, kjer je preskrbljenost z družinskimi zdravniki večja. Ni pa nobene prednosti v povečevanju števila vseh drugih specialistov, vključno z ginekologi.
- Podobno velja za karcinom dojke: z vsakim odstotkom povečanja zdravnikov v osnovni zdravstveni dejavnosti povečamo verjetnost za zgodnje odkritje karcinoma dojke za 4%.

1) **Campbell et al, Fam Med 2003; 35:60-4.**

2) Ferrante et al, J Am Board Fam Pract 2000; 13:408-14.

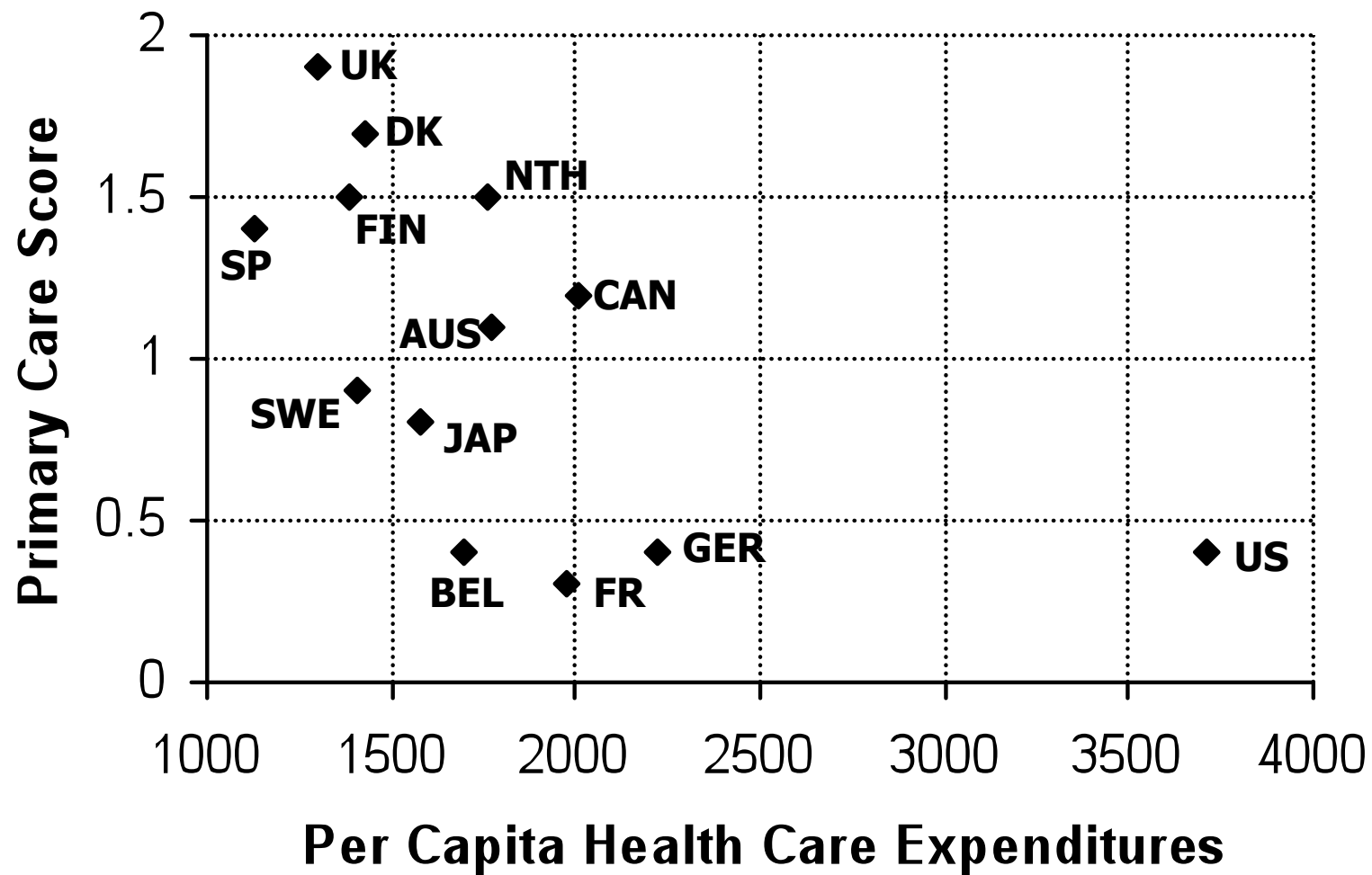
Uspešnost pri zgodnji diagnostiki raka





CENOVNA UČINKOVITOST

Cenovna učinkovitost





Stroški (ZDA)

- Odrasli, ki imajo izbranega zdravnika, imajo
 - 33% nižje stroške zdravstvene oskrbe
 - 19% manj smrti



Health Care Expenditures and Mortality 5 Year Follow-up: United States, 1987-92

- Adults (age 25 and older) with a primary care physician rather than a specialist as their personal physician
 - had 33% lower cost of care
 - were 19% less likely to die (after controlling for age, gender, income, insurance, smoking, perceived health (SF-36) and 11 major health conditions)



POVZETEK

- Države z dobrim primarnim zdravstvom imajo:
 - Večjo enakost v zdravstvu
 - Večje zadovoljstvo bolnikov
 - Nižje stroške
 - Boljše učinke na zdravje

Starfield and Shi, Health Policy 2002; 60:201-18.

van Doorslaer et al, Health Econ 2004; 13:629-47.

Schoen et al, Health Aff 2005; W5: 509-25.



KAJ RAZISKOVATI



KAJ RAZISKOVATI?

(izbor tem)

- Obolevnost v osnovni zdravstveni dejavnosti (pogoste bolezni in njihovo zdravljenje)
- Uporaba zdravstvene službe (pogosti obiskovalci, marginalne skupine)
- Organizacija dela (racionalnost porabe sredstev, elektronska kartoteka, naročanje)
- Timsko delo
- Komunikacija z bolnikom (težavni bolniki, soodločanje pri zdravljenju, zadovoljstvo bolnikov)
- Kontinuiteta dela

- 
-
- Odločanje:
 - Predpisovanje zdravil
 - Poraba laboratorijskih storitev
 - Napotitve k specialistu in v bolnišnico
 - Preventiva
 - Preventivni programi in njihovo izvajanje
 - Življenjski slog
 - Multimorbidnost in komorbidnost
 - Analize dela
 - Specifične tehnike (hišni obiski)
 - Kvaliteta dela po metodologiji kakovosti
 - Urgentna stanja
 - Paliativna medicina
 - Usmerjenost v družbo (javno zdravje, družina, stalež)



NEKAJ PRIMEROV



1. BOLEZNI IN NJIHOVO ZDRAVLJENJE

Pragmatic randomised controlled trial of local corticosteroid injection and naproxen for treatment of lateral epicondylitis of elbow in primary care.

Hay EM, Paterson SM, Lewis M, Hosie G, Croft P.

BMJ 1999;319:964-968

OBJECTIVE: To compare the clinical effectiveness of local corticosteroid injection, standard non-steroidal anti-inflammatory drugs, and simple analgesics for the early treatment of lateral epicondylitis in primary care.

DESIGN: Multicentre pragmatic randomised controlled trial.

SETTING: 23 general practices in North Staffordshire and South Cheshire.

PARTICIPANTS: 164 patients aged 18-70 years presenting with a new episode of lateral epicondylitis.

Interventions: Local injection of 20 mg methylprednisolone plus lignocaine, naproxen 500 mg twice daily for two weeks, or placebo tablets. All participants received a standard advice sheet and co-codamol as required.

MAIN OUTCOME MEASURES: Participants' global assessment of improvement (five point scale) at four weeks.

RESULTS: At 4 weeks, 48 patients (92%) in the injection group were completely better or improved compared with 30 (57%) in the naproxen group ($P<0.001$) and 28 (50%) in the placebo group ($P<0.001$). At 12 months, 43 patients (84%) in the injection group had pain scores ≤ 3 compared with 45 (85%) in the naproxen group and 44 (82%) in the placebo group ($P>0.05$).

CONCLUSIONS: **Early local corticosteroid injection is effective for lateral epicondylitis.**

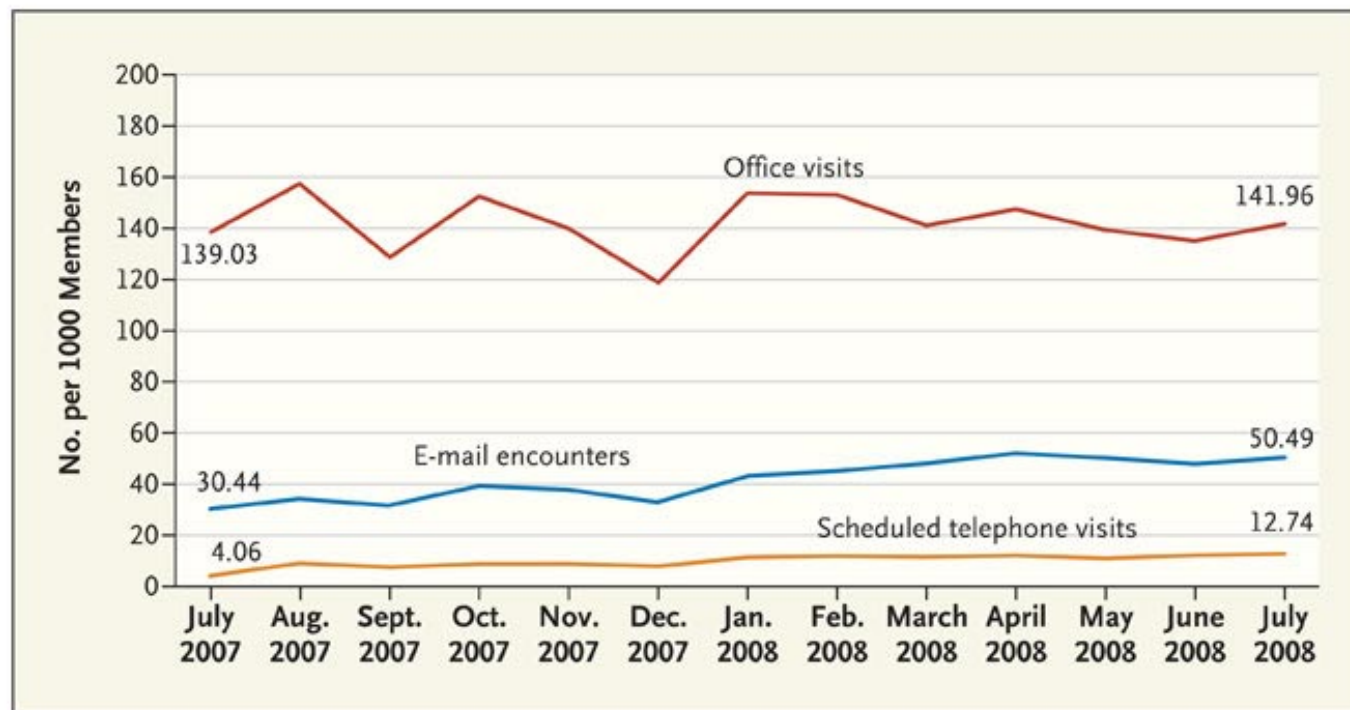
Numbers (percentages) of patients recorded to have reconsulted with general practitioner and received cointerventions during follow up^{*}

	Injection (n=53)	Naproxen (n=53)	Placebo (n=58)
Reconsultation			
4 weeks	9 (18)	16 (32)	12 (23)
6 months	20 (41)	24 (48)	21 (40)
12 months	25 (51)	24 (48)	22 (42)
Cointerventions			
4 weeks	6 (12)	9 (18)	10 (19)
6 months	13 (27)	18 (36)	18 (35)
12 months	17 (35)	19 (38)	19 (37)



2. UPORABA ZDRAVSTVENE SLUŽBE

Susan Okie, M.D. Innovation in Primary Care — Staying One Step Ahead of Burnout. N Engl. J Med. 2008; 359:2305-2309



Numbers of Office Visits, E-Mail Encounters, and Scheduled Telephone Visits to Primary Care Providers per 1000 Members at Kaiser Permanente Colorado from July 2007 through July 2008. The numbers include outpatient contacts with providers in family medicine, internal medicine, and pediatrics.



3. ORGANIZACIJSKI PRISTOPI

The electronic patient record in primary care—regression or progression? A cross sectional study

Julia Hippisley-Cox, Mike Pringle, Ruth Cater, Alison Wynn, Vicky Hammersley, Carol Coupland,
—Rhydian Hapgood, Peter Horsfield, Sheila Teasdale, Christine Johnson

Table 2 Indicators of quality in the medical record for 249 consultations from 25 general practitioners using paperless records and for 280 consultations from 28 general practitioners using paper based records. Values are numbers (percentages) unless stated otherwise

	Paperless records (n=249)	Paper based records (n=280)	P value of difference*
Is there an entry?			
No	1 (0.4)	4 (1.4)	0.25
Yes	248 (99.6)	276 (98.6)	
Is entry legible?			
No	0	16 (5.7)	<0.0001
Partially	0	84 (30.0)	
Yes	249 (100)	180 (64.3)	
Is entry understandable?			
No	2 (0.8)	19 (6.8)	0.0001
Partially	24 (9.6)	62 (22.1)	
Yes	222 (89.2)	193 (68.9)	
Not applicable	1 (0.4)	6 (2.1)	



4. TIMSKO DELO



Safety and effectiveness of nurse telephone consultation in out of hours primary care: randomised controlled trial. The South Wiltshire Out of Hours Project (SWOOP) Group.

Lattimer V, George S, Thompson F, Thomas E, Mullee M, Turnbull J, Smith H, Moore M, Bond H, Glasper A.

OBJECTIVE: To determine the safety and effectiveness of nurse telephone consultation in out of hours primary care.

DESIGN: Block randomised controlled trial over a year of 156 matched pairs of days and weekends in 26 blocks.

SETTING: One 55 member general practice cooperative serving 97 000 registered patients in Wiltshire.

INTERVENTION: A nurse telephone consultation service integrated within a general practice cooperative. The out of hours period was 615 pm to 1115 pm from Monday to Friday, 1100 am to 1115 pm on Saturday, and 800 am to 1115 pm on Sunday.

MAIN OUTCOME MEASURES: Deaths within seven days of a contact with the out of hours service; emergency hospital admissions within 24 hours and within three days of contact; attendance at accident and emergency within three days of a contact; number and management of calls in each arm of the trial.

RESULTS: 14 492 calls were received during the specified times. There were no substantial differences in the age and sex of patients in the intervention and control groups. **Nurses managed 49.8% of calls during intervention periods without referral to a general practitioner. A 69% reduction in telephone advice from a general practitioner, together with a 38% reduction in patient attendance at primary care centres and a 23% reduction in home visits was observed during intervention periods.**

CONCLUSIONS Nurse telephone consultation produced substantial changes in call management, reducing overall workload of general practitioners by 50%. This model of out of hours primary care is safe and effective.

Table 5 Management outcome of calls in paired comparison within randomisation blocks of two weeks of weekly contacts

Management outcome	Median (interquartile range)		Median difference (95% CI)
	Control group	Intervention group	
Calls managed with nurse telephone advice	NA	138 (121 to 143)	NA
Calls managed with telephone advice from GP	132 (119 to 148)	36 (31 to 57)	-91 (-100 to -82)
Patient attended primary care centre	68 (58 to 79)	40 (35 to 50)	-23 (-36 to -18)
Patient visited at home by duty GP	66 (57 to 76)	49 (44 to 60)	-17.5 (-23 to -10)

NA=not applicable. GP=general practitioner.



5. KOMUNIKACIJA Z BOLNIKOM

Patient-based outcome results from a cluster randomized trial of shared decision making skill development and use of risk communication aids in general practice.

Edwards A, Elwyn G, Hood K, Atwell C, Robling M, Houston H, Kinnersley P, Russell I; Study Steering Group.

BACKGROUND: Shared decision-making (SDM) between professionals and patients is increasingly advocated from ethical principles. Some data are accruing about the effects of such approaches on health or other patient-based outcomes. These effects often vary substantially between studies.

OBJECTIVE: Our aim was to evaluate the effects of training GPs in SDM, and the use of simple risk communication aids in general practice, on patient-based outcomes.

METHODS: A cluster randomized trial with crossover was carried. A total of 747 patients were invited to a consultation to review their condition or treatments. After baseline, participating doctors were randomized to receive training in (i) SDM skills; or (ii) the use of simple risk communication aids, using simulated patients. The alternative training was then provided for the final study phase. Patients were randomly allocated to a consultation during baseline or intervention 1 (SDM or risk communication aids) or intervention 2 phases. Patient-based outcomes were assessed at exit from consultation and 1 month follow-up. **RESULTS: No statistically significant changes in patient-based outcomes due to the training interventions were found:**

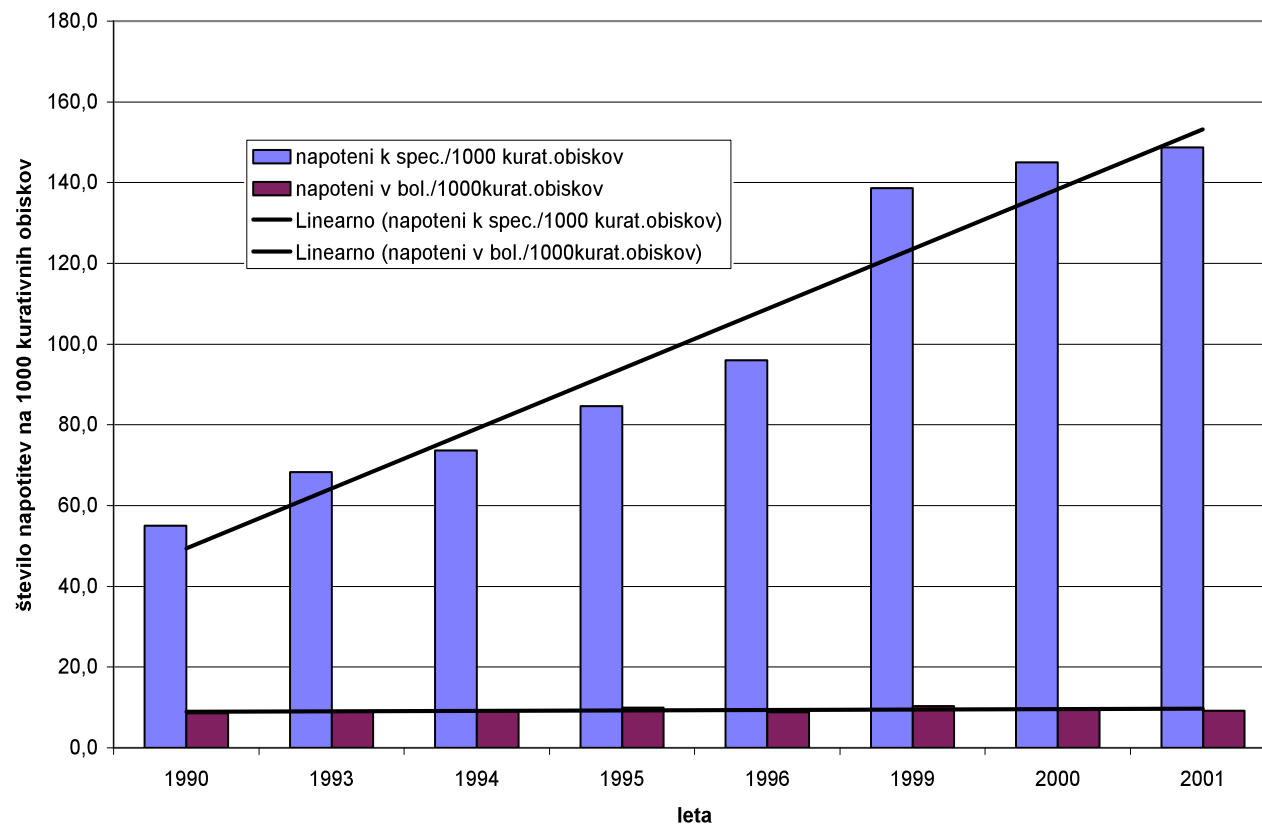
CONCLUSION: Patients can be more involved in treatment decisions, but the resources required to enhance these professional skills must also be taken into consideration.



6. ODLOČITVE: NAPOTITEV

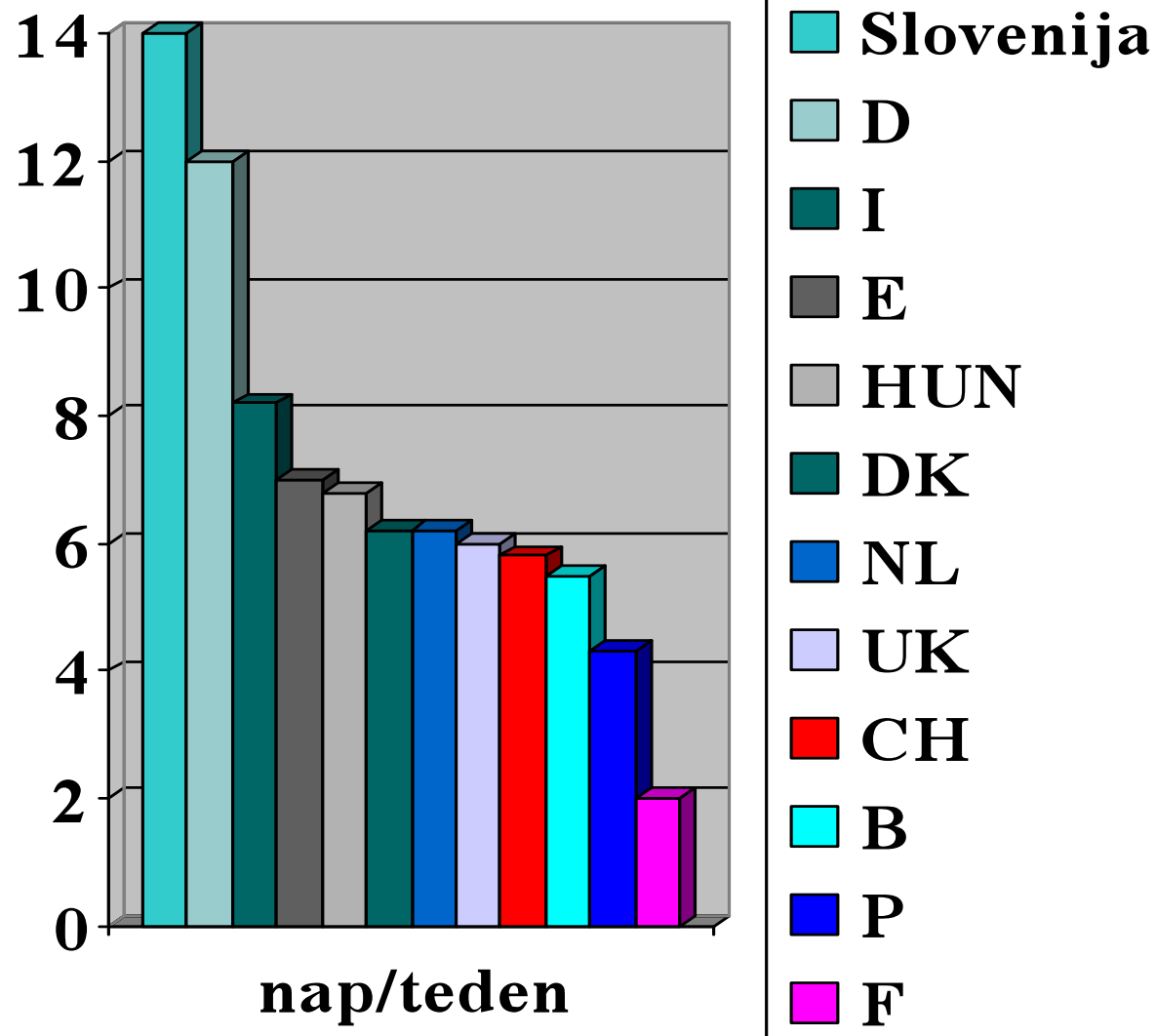
NAPOTITVE V SLOVENIJI

Gibanje stopnje napotitev k specialistu na sekundarno raven in na bolnišnično zdravljenje odraslih prebivalcev, Slovenija, 1990-2001



Raziskava iz leta 1991

- Visoko število napotitev na teden
- Veliko napotitev je rutinskih
- Hitrost izmenjave podatkov je dobra
- Napotitve so v obratnem sorazmerju s hišnimi obiski





7. PREVENTIVA

Improving uptake of breast screening in multiethnic populations: a randomised controlled trial using practice reception staff to contact non-attenders.

[Atri J](#), [Falshaw M](#), [Gregg R](#), [Robson J](#), [Omar RZ](#), [Dixon S](#).

BMJ Nov 1997; 315: 1356 - 1359

OBJECTIVES: To determine whether a two hour training programme for general practice reception staff could improve uptake in patients who had failed to attend for breast screening, and whether women from different ethnic groups benefited equally. DESIGN: Controlled trial, randomised by general practice.

SETTING: Inner London borough of Newham. SUBJECTS: 2064 women aged 50-64 years who had failed to attend for breast screening. Women came from 26 of 37 eligible practices, 31% were white, 17% were Indian, 10% Pakistani, 14% black, 6% Bangladeshi, 1% Chinese, 4% were from other ethnic groups, and in 16% the ethnic group was not reported. MAIN OUTCOME MEASURES: Attendance for breast screening in relation to ethnic group in women who had not taken up their original invitation.

RESULTS: Attendance in the intervention group was significantly better than in the control group (9% v 4%). The response was best in Indian women--it was 19% in the intervention group and 5% in the control group. CONCLUSIONS: This simple, low cost intervention improved breast screening rates modestly.

Improvement was greatest in Indian women--probably because many practice staff shared their cultural and linguistic background. This intervention could be effective as part of a multifaceted strategy to improve uptake in areas with low rates.



Table 3 Weighted estimate of percentage (95% confidence interval) of women attending for breast screening in relation to ethnic group		
Ethnic group	Control practices	Intervention practices
White	4.8 (2.2 to 7.5)	5.3 (2.4 to 8.3)
Indian	7.6 (2.0 to 13.2)	13.7 (9.0 to 18.5)
Other (excluding not reported)	4.3 (2.0 to 6.6)	6.6 (3.7 to 9.6)



HIŠNI OBISKI



Factors influencing home visits in Slovenian general practice.

Svab I, Kravos A, Vidmar G.

BACKGROUND: There is great variability in home visiting rates in Europe. The European General Practice Research Workshop (EGPRW) has conducted a pilot quantitative international study on home visits and developed a questionnaire, which has not yet been tested on a national level. In Slovenia, home visiting is decreasing, but the factors influencing home visiting by GPs in the country have not yet been examined. **OBJECTIVES:** The purpose of this study was to test the feasibility of the questionnaire on home visiting developed by EGPRW and to study home visiting in Slovenia. **METHODS:** A random representative sample of 165 Slovenian GPs were given a questionnaire, developed on the basis of former EGPRW projects. Each of the respondents provided data on 10 consecutive home visits made during office hours, data on his/her practice and number of consultations during the registration period. Multivariate modelling of home visits per working week as the dependent variable was performed. **RESULTS:** A 71% response rate was achieved, and the data from 1151 requests for home visits and 1015 completed home visits were analysed. The average number of home visits per working week was 2.5, with wide variation among the respondents (0-10, SD 1.89). Older GPs, trainees, GPs from rural areas and those with a higher proportion of elderly patients carried out more home visits. The selected logistic regression model fits the data well according to established criteria. **CONCLUSION:** It is possible to use the questionnaire developed by EGPRW on a national scale and to obtain representative valid national data. The home visiting rate in Slovenia is low compared with rates in other countries. Rural location of practice, GP's age, trainee status and the number of older patients on the list are the most important predictors of the home visiting rate.



KAKO RAZISKOVATI

NEKAJ NASVETOV



Izberi pomembno temo

- Kaj vas zanima?
- Poglejte okoli sebe!
- Preštudiraj literaturo, najbolje na sistematičen način
- Izogibajte se velikih tem
- Misli dolgoročno: običajno izbereš nekaj, s čemer se boš ukvarjal celo življenje
- Drži se ključnih značilnosti stroke
- Originalna ideja!



Izvedljivost

- Ali lahko dobiš sodelavce?
- Denar?
- Čas?
- Ali se lahko zanesem na to, da bodo drugi kaj naredili zame (npr. ZD)?
- Etičnost raziskave in problema?
- Kulturna izvedljivost.
- Velikost vzorca (redke bolezni se redko pojavljajo!)



Načrt

○ Kratek načrt (ena stran!)

- Cilj
- Vprašanje
- Kaj se bo merilo
- S kom bom delal?
- Potrebna znanja in veščine
- Čas (realistično!)
- Stroški
- Implementacija



Pogoste napake (1)

- Napačna merila učinka
- Napačni vprašalniki (zlasti nestandardizirani)
- Ni izračuna velikosti vzorca
- Pri intervencijskih študijah: ni primerjav skupin ob začetku študije (po spolu in starosti)
- Zanemarjanje pristranosti pri vzorčenju in zbiranju podatkov
- Napačne analize
- Prevelik poudarek na pomembnosti podatkov (neskromnost)



Najpogostejše napake

- Nejasno vprašanje (rabiš mentorja)
- Napačna metodologija
- Napačno vzorčenje
- Površnost v razmišljanju
- Ni abstraktnosti
- Vztrajanje pri splošni prenosljivosti rezultatov



Nekaj nasvetov

- Eden ključnih problemov je pridobiti zadosten odstotek odgovorov. Odstotki odgovorov pacientov v ambulantni so zelo visoki. Zdravniki pa zelo neradi odgovarjajo na vprašalnike
- V osnovnem zdravstvu zlahka pridete do visokih števil, če zbirate podatke o bolnikih. Pomembno je, da se osredotočite na pogoste probleme, ne pa na redke.
- Raziskuje se v skupini, vendar dobri raziskovalci vedo, kaj je kdo sposoben narediti
- Nasvet statistika rabite na začetku (ko načrtujete raziskavo) in v fazi, ko se delajo analize. Statistiki vam ne bodo povedali vsebinskih rešitev!
- Standard doktorata na uglednih fakultetah je kombinacija več metod (npr. kvalitativne in kvantitativne), ki se dopolnjujeta pri doseganju cilja.



PREDLOG ZA SEMINAR

- Naredite predlog raziskave, ki bo narejena v osnovni zdravstveni dejavnosti.