Using research to inform and change primary care

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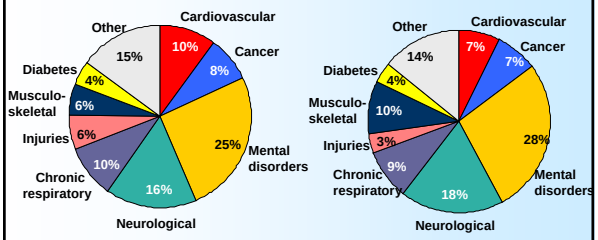
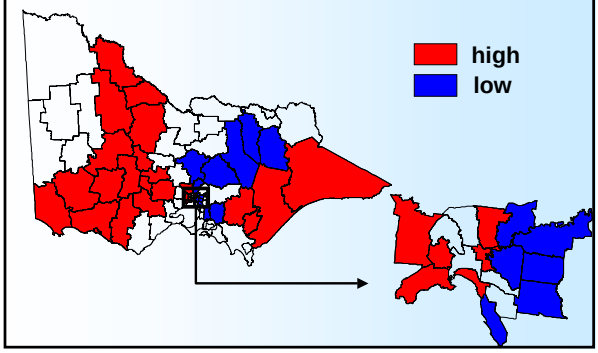
Years Lost Due to Disability (YLD) by sex and disease group, Victoria 1996



Males: 143,821 YLD
44% of total DALYs

Females: 147,229 YLD
50% of total DALYs

Areas with high and low DALY rates: Heart disease and diabetes



New Challenges for Better Health by 2010

- ***Lifestyle and behaviours are key contributors to health and disease patterns***

What is the research question?

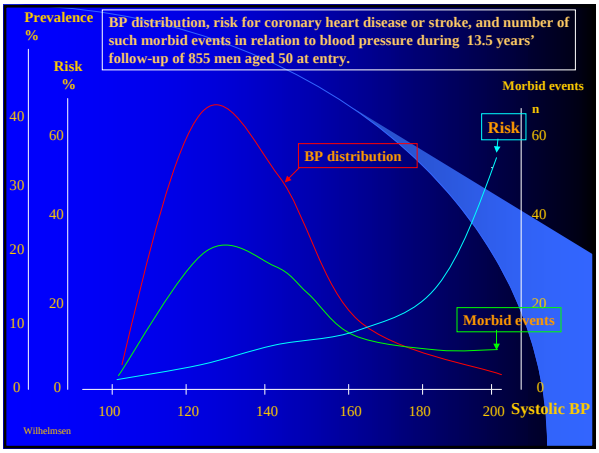
What is the research method?

Levels of evidence

- A meta-analysis, systematic review or RCTs
- B case control or cohort studies
- C extrapolated from case control cohort studies
- D case reports or expert opinion

EBM – the fallacy

- General practice is holistic
- Absence of evidence is not evidence of absence
- Who pays?
- Common sense and experts
- Selective publication and publication bias
- Lifestyle risk factors and population approaches



MORTALITY CHANGES IN NORTH KARELIA IN 25 YEARS.

(35 - 64. AGE ADJUSTED, MEN)

MORTALITY	RATE IN 1970 (PER 100 000)	CHANGE IN 25 YEARS (%)
TOTAL	1556	- 45
ALL CVD	912	- 68
CORONARY	695	- 73
CANCER	293	- 45
LUNG Ca.	167	- 71

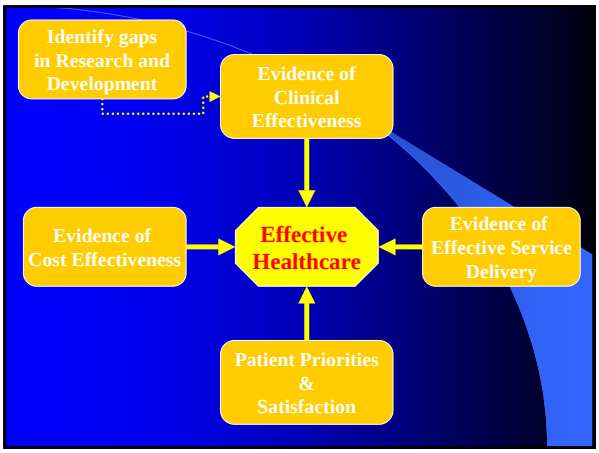
RISK FACTOR CHANGES IN NORTH KARELIA 1972 AND 1992

AGE 25-59

Male			Female		
Smoking %	S-cholesterol mmol/l	Blood Pressure mmHg	Smoking %	S-cholesterol mmol/l	Blood Pressure mmHg
52	6.9	149/92	10	6.8	153/92
32	5.8	142/85	17	5.6	135/80

EBM – the fallacy

- General practice is holistic
- Absence of evidence is not evidence of absence
- Common sense and experts
- Selective publication and publication bias
- Lifestyle risk factors and population level
- **Economic evidence, patients' views and implementation**



'Evidence' in CVD

- Prava- or simvastatin
- Other choice of drug
- Dietary advice

Publishing quality improvement

bmj.com

- Context
- Outline of problem
- Key measures of improvement
- Process for gathering information
- Analysis and interpretation
- Strategy for change
- Effects of change
- Next steps

Change

- Not all change is improvement, but all improvement is change
- Real improvement comes from changing systems not changing within systems
- To make improvements we must be clear about what we are trying to accomplish, how we will know that change has led to improvement and what change we can make that will result in improvement
- The more specific the aim the more likely the improvement

- Concentrate on meeting the needs of patients rather than the needs of organisations
- Measurement is the best for learning rather than for selection, reward or punishment
- Effective leaders challenge the status quo by insisting that the current system cannot remain and by offering clear ideas about superior alternatives

Fundamental Questions for Improvement

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?

Fundamental Questions for Improvement

- What are we trying to accomplish?

AIM

Fundamental Questions for Improvement

- How will we know that a change is an improvement?

MEASUREMENT

All change does not lead to improvement, but all improvement requires change

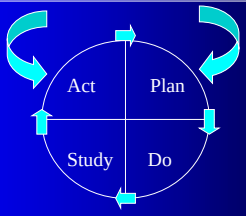
Fundamental Questions for Improvement

- What changes can we make that will result in an improvement?

CHANGE IDEAS

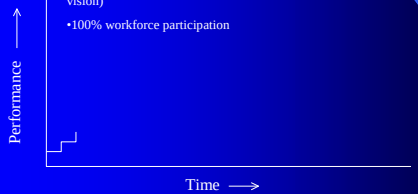
Model for improvement

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in an improvement?



Incremental improvement

- low investment per project (small projects, but in large numbers)
- grass roots based; empowering (builds morale, customer satisfaction)
- needs reward and recognition system (reinforces improvement vision)
- 100% workforce participation



Secondary Prevention of Coronary Vascular Disease

An Example of Improvement

CVD Project

- Involved 105 GPs in 37 practices
- All data shared unanonymously
- Chosen as a model later applied to diabetes and hypertension
- Became multidisciplinary

AIM: the original project

Improve Secondary Prevention of CHD by developing and introducing a local guideline and auditing clinical management before and after introduction.

Lifestyle

- Smoking Habits
  - 19% (n=191) current smokers
  - Only 3 on Nicotine Replacement Therapy
  - On re-audit, rate down 1% (0-31%)

Lifestyle

- 66% (n=702) received dietary advice at least once
- On reaudit increased to 73%

Secondary prevention project: current components

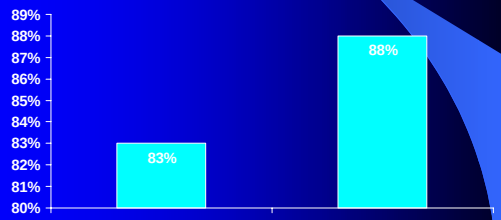
- Re-audit of practice activity December
- Patient-held record card
- Resources pack
- Introduction and evaluation of Heartscore patient-interactive software
- NURSE TRAINING

Cholesterol & Statins

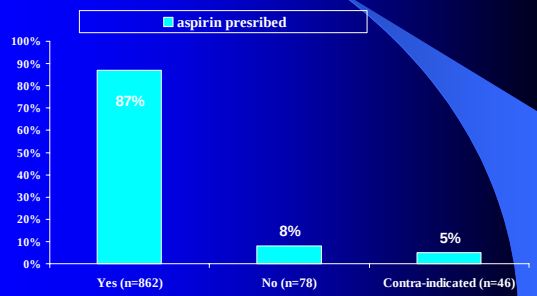
%	Description
41% ->62%	Had Cholesterol level below 5.2 mmol/l
46% -> 63%	Have Cholesterol level above 5.2 mmol/l and are on Statins

Blood Pressure

31 % (n=302) diagnosed with Hypertension



Aspirin



Professions involved in training

- dietician
- diabetic physician, cardiologist, rehab. medicine specialist
- general practitioners
- health promotion staff
- physiotherapist
- pharmacist

Nurse training

- Behaviour change skills (2 Days)
- Smoking cessation
- Diet and statin drugs to lower cholesterol
- physical activity and angina management
- diabetes/ hypertension
- clinic management

Main outcomes

- 10% reduction in admissions in first year

Peer Review

- Facilitated inter-practice groups
- collegiate approach
- provided with good information
- protected time