Health expectancy to monitor health: Achievements and challenges ahead in the Netherlands

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History of HE in the Netherlands

- **Mortality measures to monitor population health have important limitations**

- **Development of health expectancy (HE) measures**

- **Netherlands among the first countries to use health expectancy measures**
  - **Van Ginneken, 1988/89**

- **More than 15 years experience with HE in the Netherlands**

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Use of HE in the Netherlands

HE is multi-purpose measure:

1. **Description of health of the Dutch population**

2. **Description of disparities within the Dutch population**

3. **Monitoring differences in population health over time**

4. **Explaining differences between subgroups, or over time**
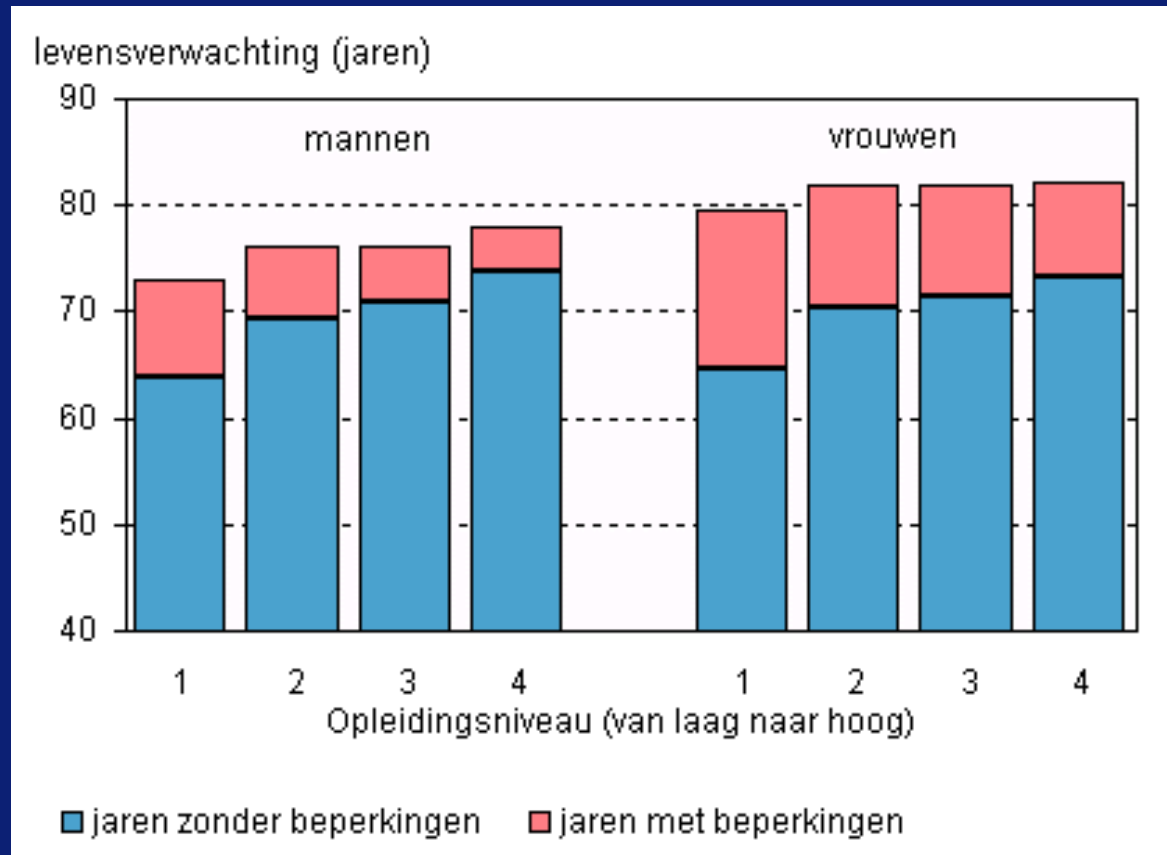
5. **Assessing health targets**

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1. Description of health of the Dutch population, 2003

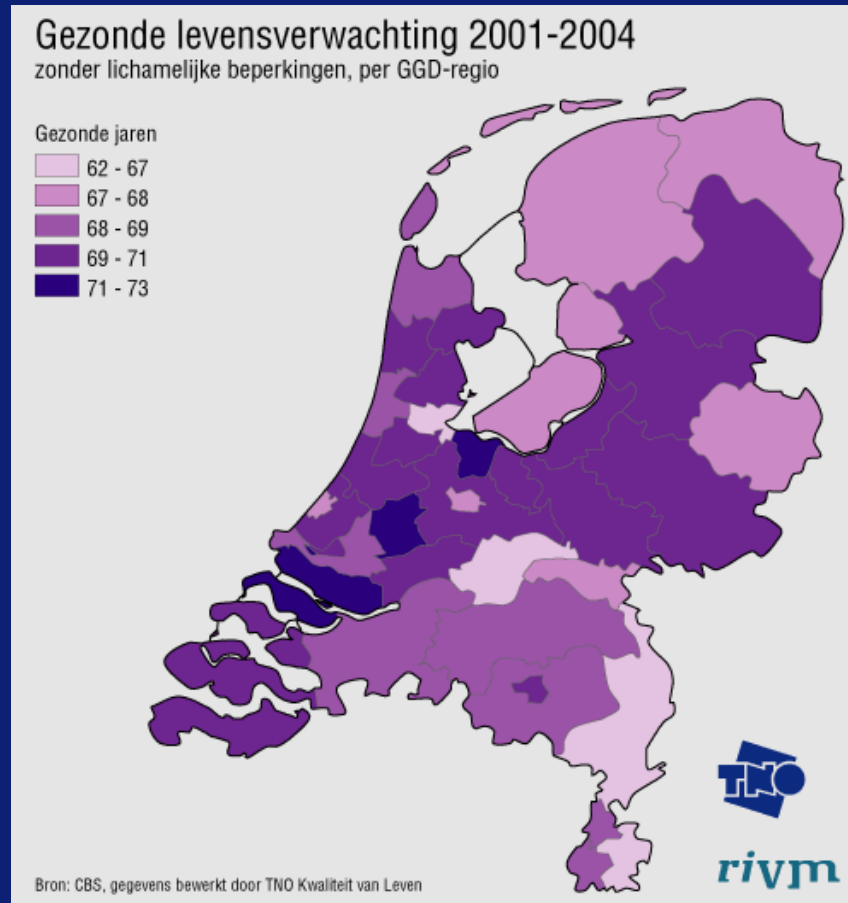|	Men, yrs	Women, yrs
Total life expectancy (LE)	76.3	80.9
LE in good health	62.2	61.1
LE free of disability	69.9	68.8
LE in good mental health	69.1	69.3

Source : National Institute for Public Health and the Environment

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2. Description of disparities within the population (a)

DFLE by SES

2. Description of disparities within the population (b)

DFLE by region

Gezonde levensverwachting 2001-2004
zonder lichamelijke beperkingen, per GGD-regio

Gezonde jaren
- 62 - 67
- 67 - 68
- 68 - 69
- 69 - 71
- 71 - 73

Bron: CBS, gegevens bewerkt door TNO Kwaliteit van Leven

Source : National Institute for Public Health and the Environment

3. Monitoring differences in population health over time

LE in good health
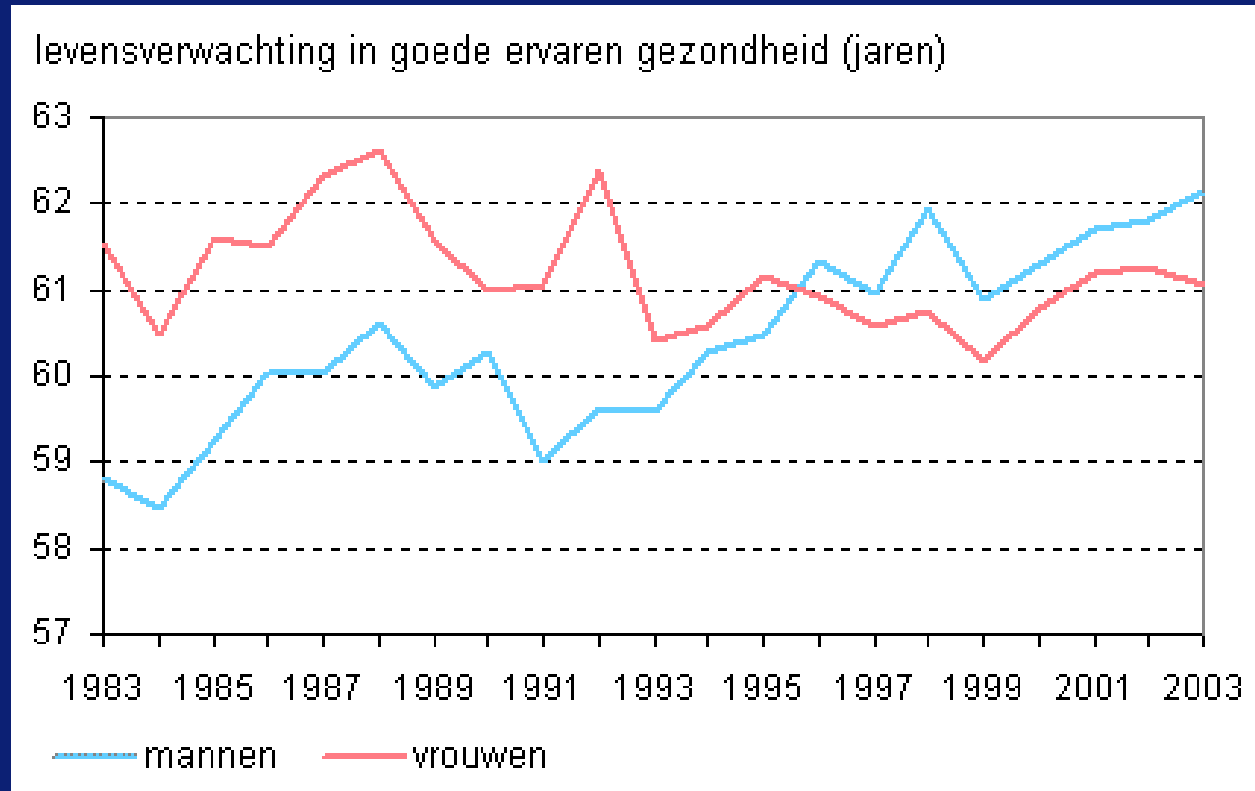
levensverwachting in goede ervaren gezondheid (jaren)

(legend: mannen, vrouwen)

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4. Explaining differences between subgroups (a)

Gender gap in LE with disability (1990-1994):

Men:	**8.4 yrs**
Women	**14.8 yrs**
Difference:	**6.4 yrs**

Why is number of years with disability higher among women?

4. Explaining differences between subgroups (b)

Gender gap in LE with disability (1990-1994):

Men:	**8.4 yrs**
Women	**14.8 yrs**
Difference:	**6.4 yrs**

Why is number of years with disability higher among women?

Due to:

Lower mortality	**2.82**
Higher disability	**3.55**

Source : Nusselder & Looman, 2004.

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4. Explaining differences between subgroups (c)

- **Difference in yrs with disability:** men 8.4 vs. women 14.8 yrs
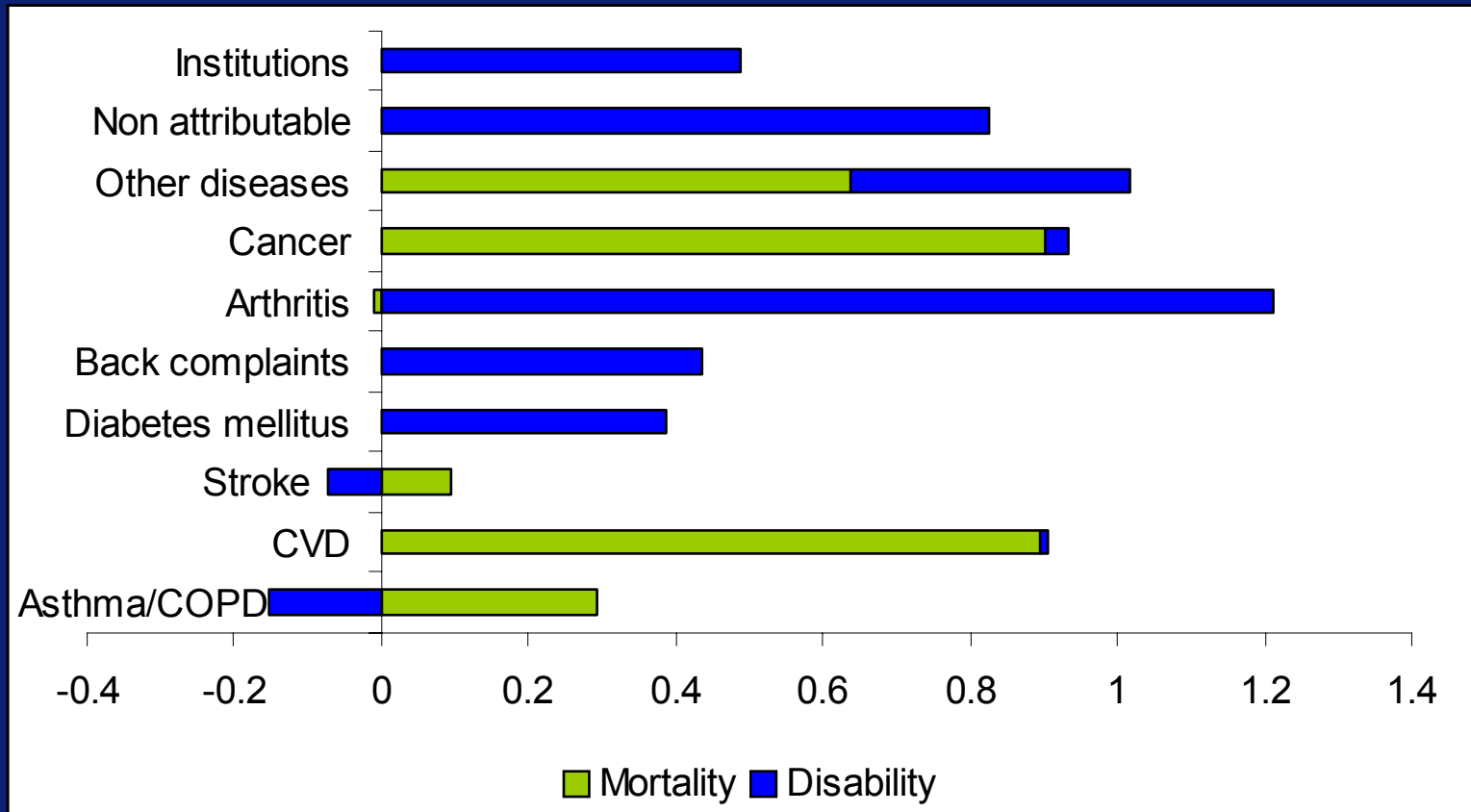
Source : Nusselder & Looman, 2004.

5. Assessing health targets

Policy targets formulated in terms of HE:

- **Objective:**
  - **To decrease the 12-year difference in HE between SES-groups, by increasing the HE of persons with a low SES from 53 years to 56 years in the period 2000 to 2020**

   **Source: Preventieve Gezondheidszorg. Tweede Kamer, vergaderjaar 2003-2004 29300, nrs.1-2**

HE: also limitations in studying trends

Shift from mortality to health has made it all a matter of definition and measurement

1. **Health expectancy sensitive to change or chance?**

2. **Health expectancy trend dependent on exact definition**

3. **Data are relatively weak**

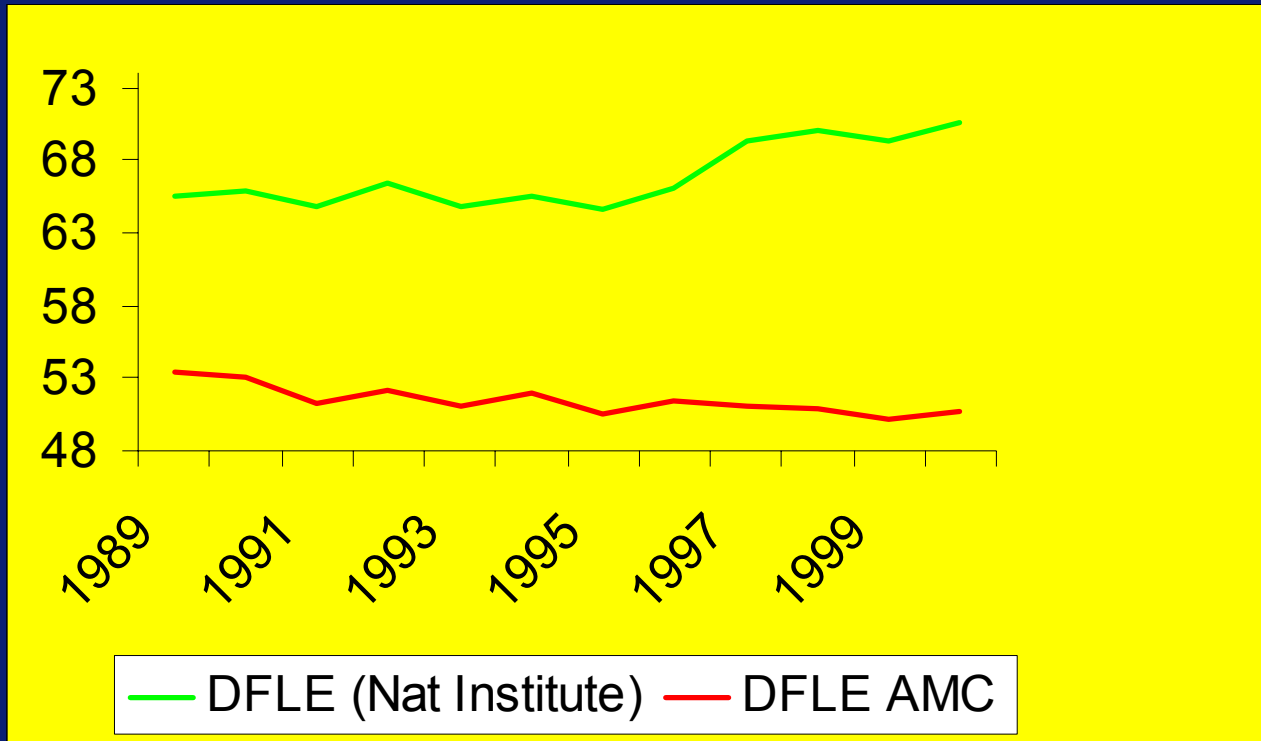4. **Unclear which measure should be used in what situation**

1. HE sensitive to change or chance?

DFLE

levensverwachting zonder beperkingen (jaren)

Source

mannen   vrouwen

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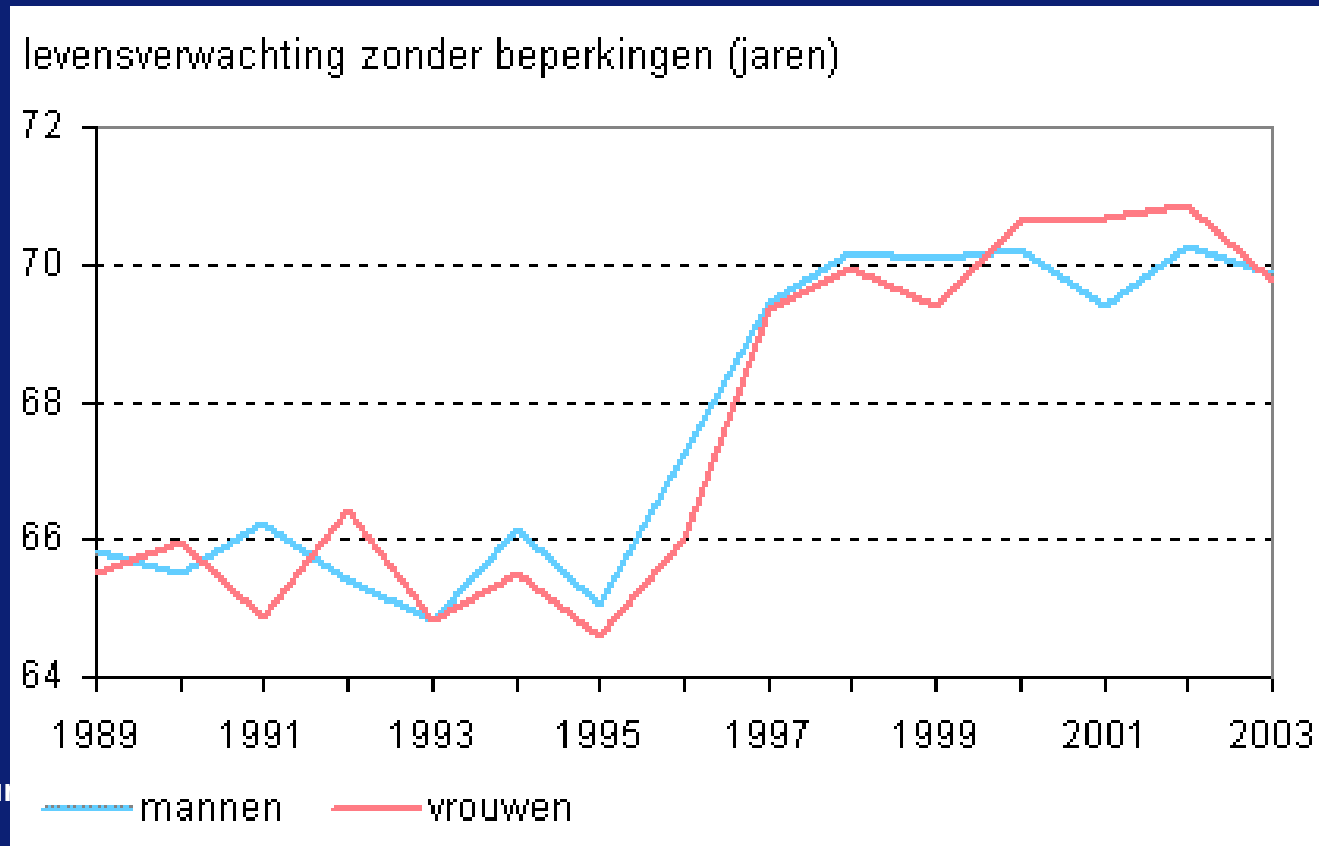
2. HE trend dependent on exact definition (a)

DFLE women

Legend: DFLE (Nat Institute) — DFLE AMC

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2. HE trend dependent on exact definition (b)

Website National Institute for Public Health and the Environment:

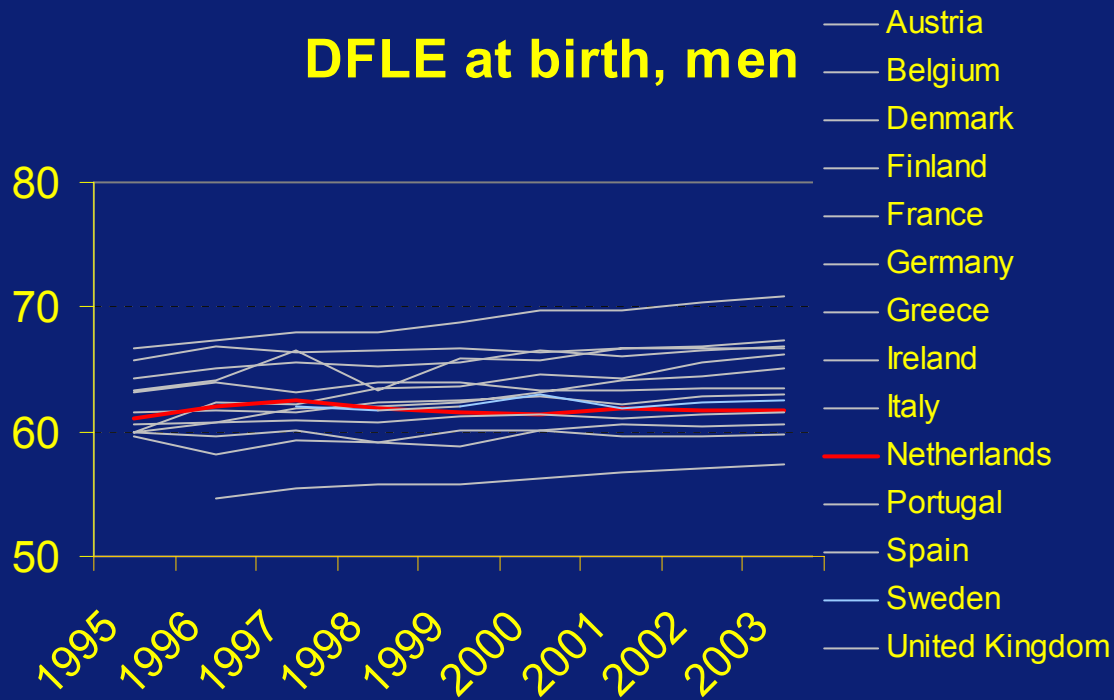"Korte tijd stijging van levens-verwachting zonder beperkingen"

Press release AMC:

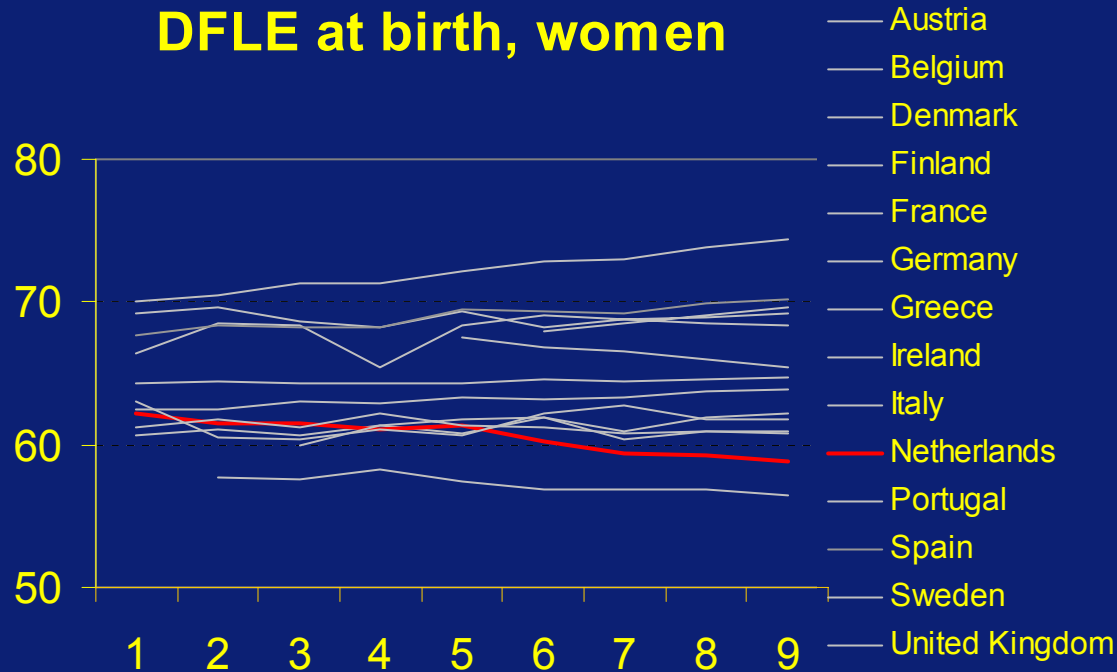"Gezonde levensverwachting daalt. Het aantal te verwachten levensjaren zonder beperking is in ons land afgenomen"

1990-2000: DFLE increases

1990-2000: DFLE decreases

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2. HE trend dependent on exact definition (c)

DFLE at birth, men

Legend:
- Austria
- Belgium
- Denmark
- Finland
- France
- Germany
- Greece
- Ireland
- Italy
- Netherlands
- Portugal
- Spain
- Sweden
- United Kingdom

Bron: EHEMU, 2005

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2. HE trend dependent on exact definition (d)

DFLE at birth, women

Legend: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, United Kingdom

Bron: EHEMU, 2005

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3. Data are relatively weak

Official calculations of HE in Netherlands:

- **Response rate < 60%**

- **Self-reported health measures**

- **Sample among non-institutionalized population**

- **Small number of elderly included (85+)**
    - **1994: n= 8823**
        - **58 persons in age group 85+**
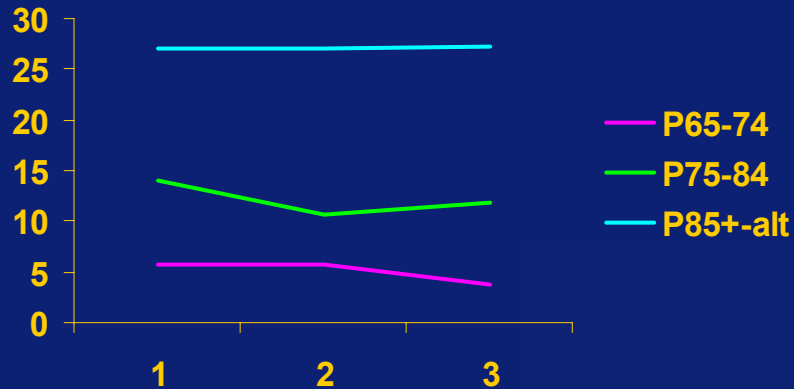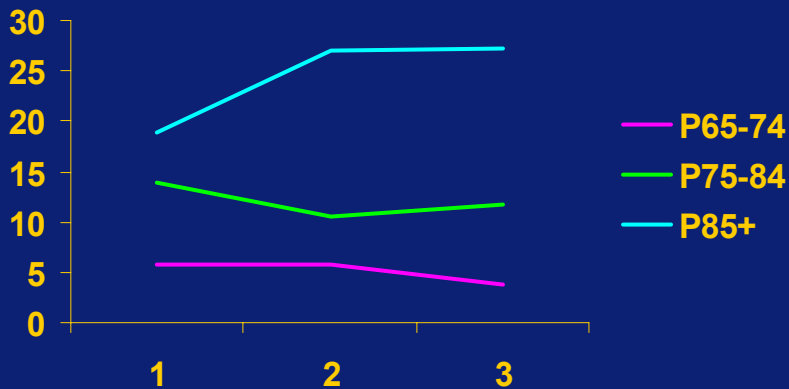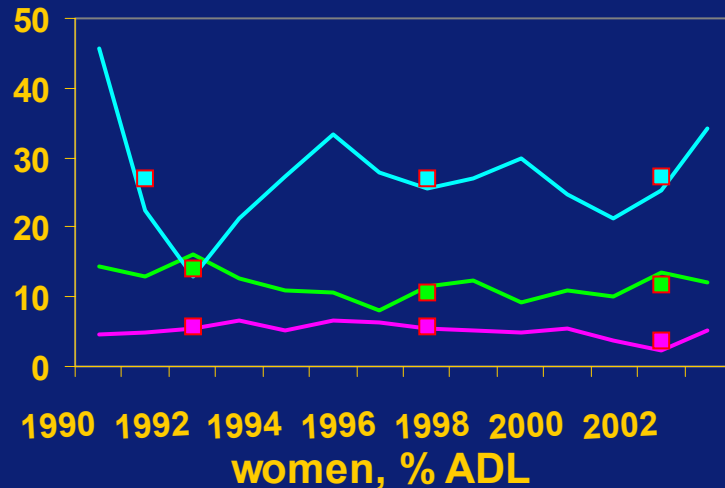   - **208 persons in age group 80+**

Small sample size among the elderly

1991-1993; 1996-1998; 2000-2003

85+: 1990-1992 in stead of 1991-1993

Women — 65-74, 75-84, 85+, P65-74, P75-84, P85+ — women, % ADL

Women — 65-74, 75-84, 85+, P65-74, P75-84, P85+ — women, % ADL

P65-74, P75-84, P85+

P65-74, P75-84, P85+-alt
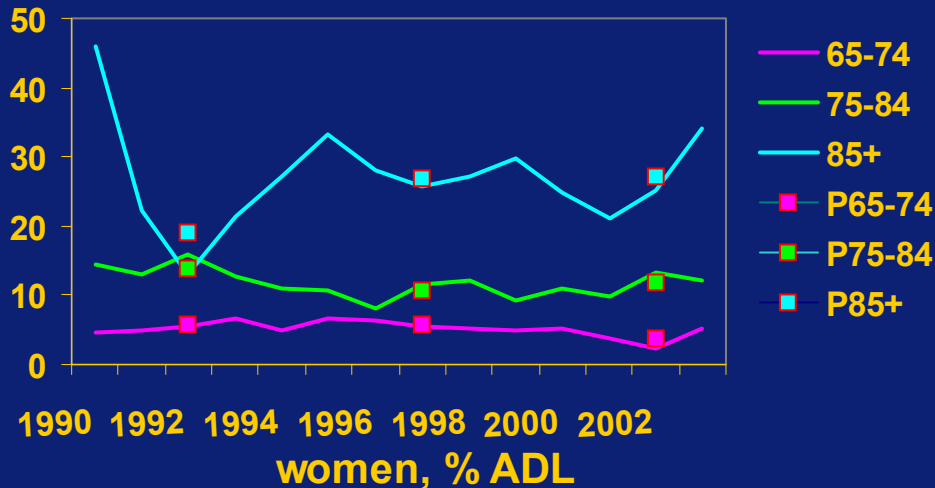
4. Unclear which measure to be used in what situation

Monitoring:

- **Confusion about trends in DFLE**

Target setting:

- **Government uses for target setting HE in good health**
  - **Based on self-perceived health**

Conclusion

HE has important added values as compared to health measures based on mortality

This added value has become clear in the Netherlands, where HE has become multi-purpose measure

But Dutch experience has also pointed at limitations

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Challenges for the future

- **Better data**

- **Better measures?**

- **Better techniques to assess changes over time?**

- **Better guidance to policy makers which indicator to use**

Thank you for your attention

Data sources from Statistics Netherlands

Gezondheisenquête: 1990-1996

- **Non-institutionalized population**
- **stratified sample (municipality, address, household, person)**
- **N: 6942-9352**
- **Response: 55-60%**
- **Weights for age, sex, marital status, degree of urbanization**

POLS Module Health and Labor ("Gezondheid en Arbeid"): 1997-2000

- **Non-institutionalized population**
- **stratified sample (municipality, person)**
- **N: 15664-18339**
- **Response: 55-62%**
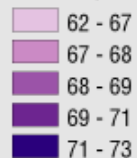- **Weights for age, sex, marital status, degree of urbanization, COROP regions, household size**

Institutionalized population: age, sex, and type of institution

Description of disparities within the population (2)
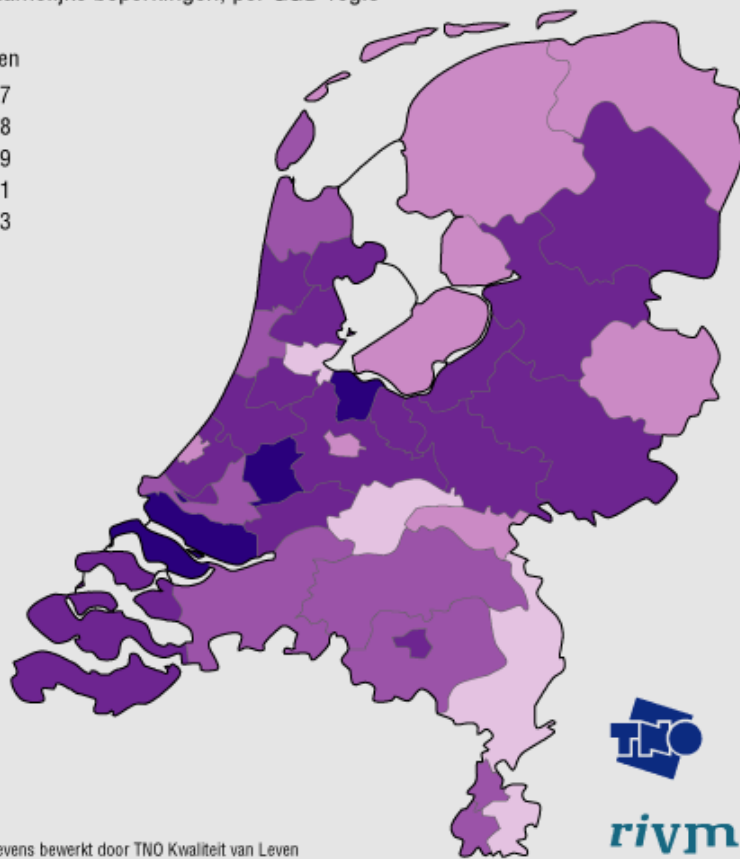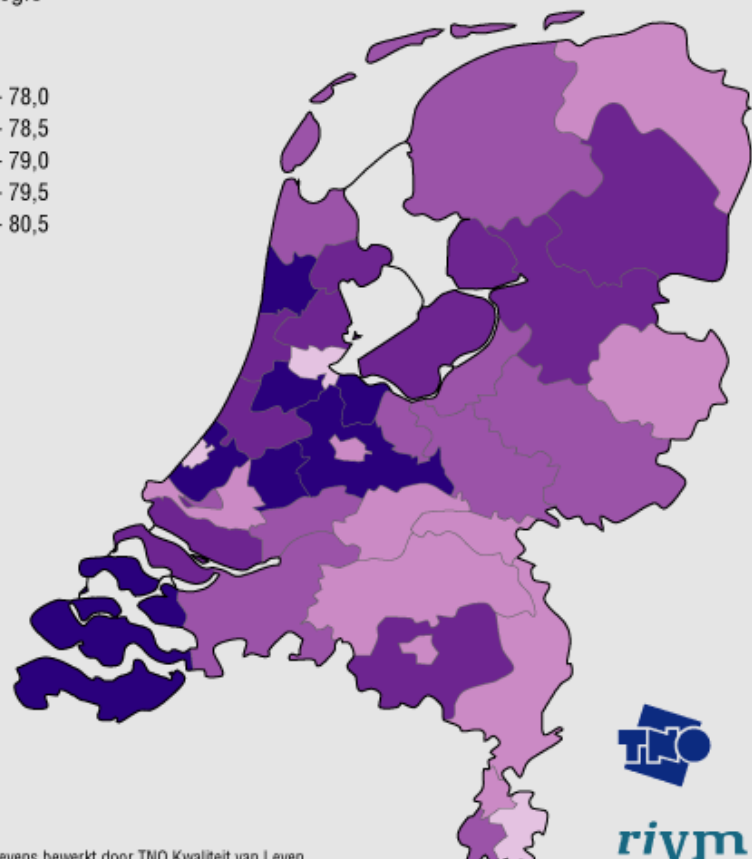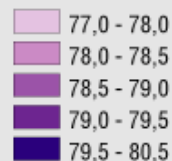
Also: methodological progress

- Better understanding of pros and cons of Sullivan method

- Development of new tools/applications:
    - Cause-elimination technique based on the Sullivan method to assess potential effect of interventions
    - Decomposition method based on the Sullivan method to assess contribution of diseases to differences in HE
    - Method to assess health expectancy differences associated with presence of (risk)factors, adjusted for confounders

HE trend largely dependent on definition