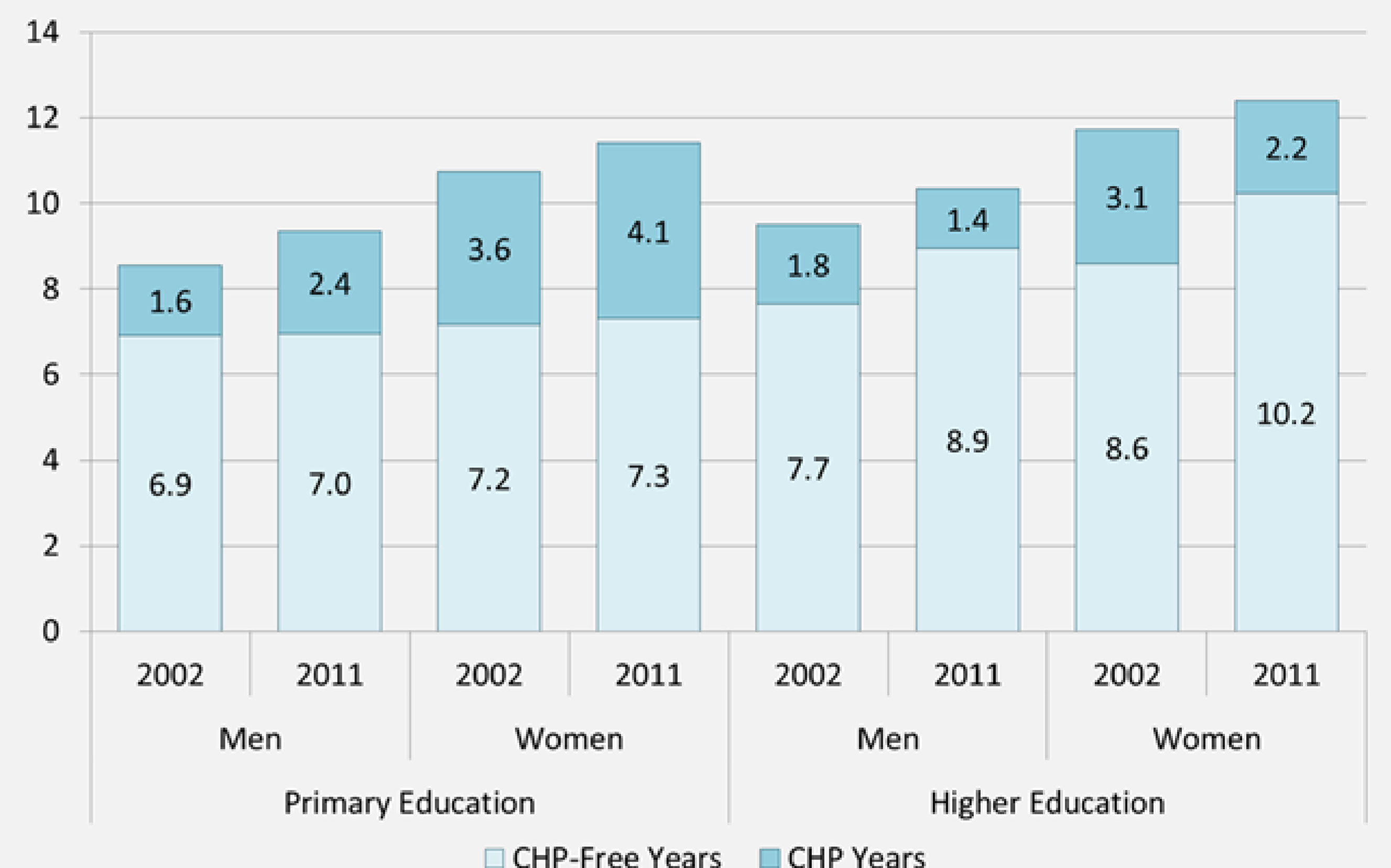


# Educational inequalities in life expectancy with and without complex health problems in Sweden 2002-2011

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## Key Points

- Compared to higher educated people, those with primary education had a shorter total LE at age 77. They also spent more years with complex health problems (i.e., multiple medical *and* functional problems).
- The educational gap in LE with complex health problems increased between 2002 and 2011.
- LE with complex health problems seems to have expanded for people with primary education while there was a compression of LE with complex health problems among those with higher education.
- With the demographic challenges facing welfare states, monitoring changes in LE with complex health problems provides crucial information for predicting the need for integrated health and social care services.



Life expectancy with and without complex health problems at age 77 in Sweden, 2002-2011, by Sex and Education

## Introduction

While educational disparities in life expectancy (LE) are well-documented, less is known about educational inequalities in health expectancies. Moreover, few studies have addressed the simultaneous presence of multiple medical conditions *and* functional impairments, usually implying complex care needs from several providers of medical care and social services.

## Aims

- To analyze educational differences in LE with and without complex health problems (CHP) at age 77.
- To analyze changes between 2002 and 2011 in LE with and without complex health problems at age 77, by sex and education.

## Method

Life expectancy with and without complex health problems was calculated using the Sullivan method. Age, sex, education and period specific mortality rates were provided by Statistics Sweden. Prevalence rates of complex health problems were based on two waves of the **Swedish Panel Study of Living Conditions of the Oldest Old (SWEOLD)**, comprising representative samples of the Swedish population aged 77+ (2002: n=561; 2011: n=831 response rate >85 %).

### Measurement of complex health problems (CHP)

Serious problems in three health domains were identified:

1. **Symptoms/diseases:** at least 3 severe
2. **Mobility:** difficulty with at least 3 of 4 items: walk 100m, go up/down stairs, rise from a chair, stand without support
3. **Cognition/communication:** Low MMSE or proxy interview

**Complex health problems = Serious problems in 2-3 health domains**

## Results

- As expected, women and people with higher education could expect to live longer than men and people with shorter education.
- Total LE increased for all groups during the period.
- People with primary education were expected to spend more time with complex health problems than those with higher education.
- The educational gap in CHP-free LE increased over time; from 0.8 to 1.9 years among men and from 1.4 to 2.9 years among women.
- For men and women with primary education the gain in LE between 2002 and 2011 consisted entirely of years with CHP. In contrast, for men and women with higher education LE with CHP decreased.

### Study population, The Swedish Panel Study of Living Conditions of the Oldest Old (SWEOLD)

	2002		2011	
	Men n= 253	Women n= 368	Men n= 368	Women n=463
<b>Primary education</b>	62%	73%	49%	62%
<b>Higher education</b>	38%	27%	51%	38%
<b>CHP</b>	19%	31%	19%	29%

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