Table 1. Estimated and adjusted age-specific mortality rates; women 65 years and older; Germany, 1997-2012

|  | Empirical mortality rates from GSOEP |  | Estimated with Gompertz, GSOEP |  | $\begin{gathered} \text { Mortality } \\ \text { rates from } \\ \text { AOK, } \\ 2010-2013 \end{gathered}$ | Percent of people staying in institutions | Mortality rates adjusted on the AOK data |  | Mortality rates estimates from the HMD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline 1997- \\ & 2004 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2005- \\ & 2012 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1997- \\ & 2004 \end{aligned}$ | $\begin{aligned} & \hline 2005- \\ & 2012 \\ & \hline \end{aligned}$ |  |  | $\begin{aligned} & \hline 1997- \\ & 2004 \end{aligned}$ | $\begin{aligned} & 2005- \\ & 2012 \end{aligned}$ | $\begin{aligned} & \hline 1997- \\ & 2004 \end{aligned}$ | $\begin{aligned} & \hline 2005- \\ & 2012 \\ & \hline \end{aligned}$ |
| 65-69 | 0.013 | 0.006 | 0.012 | 0.007 | 0.135 | 0.91 | 0.013 | 0.008 | 0.011 | 0.009 |
| 70-74 | 0.024 | 0.015 | 0.022 | 0.014 | 0.167 | 1.50 | 0.024 | 0.016 | 0.020 | 0.016 |
| 75-79 | 0.043 | 0.026 | 0.041 | 0.027 | 0.208 | 3.35 | 0.046 | 0.033 | 0.036 | 0.030 |
| 80-84 | 0.063 | 0.051 | 0.075 | 0.054 | 0.242 | 7.50 | 0.088 | 0.068 | 0.068 | 0.059 |
| 85-89 | 0.092 | 0.076 | 0.139 | 0.105 | 0.279 | 15.00 | 0.160 | 0.131 | 0.127 | 0.113 |
| 90+ | 0.242 | 0.166 | 0.207 | 0.160 | 0.379 | 30.97 | 0.260 | 0.228 | 0.239 | 0.239 |

Source: Own estimates

Table 2. Estimated and adjusted age-specific mortality rates by educational groups; women, 65 years and older; Germany, 1997-2012

|  | Empirical mortality rates from GSOEP |  | Estimated with Gompertz, GSOEP |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1997-2004 | 2005-2012 | 1997-2004 | 2005-2012 |
| Low 65-69 | 0.010 | 0.006 | 0.014 | 0.007 |
| 70-74 | 0.022 | 0.016 | 0.026 | 0.013 |
| 75-79 | 0.049 | 0.030 | 0.048 | 0.026 |
| 80-84 | 0.095 | 0.038 | 0.088 | 0.052 |
| 85-89 | 0.094 | 0.091 | 0.159 | 0.102 |
| 90+ | 0.338 | 0.141 | 0.237 | 0.156 |
| Middle 65-69 | 0.014 | 0.005 | 0.010 | 0.007 |
| 70-74 | 0.025 | 0.015 | 0.019 | 0.014 |
| 75-79 | 0.041 | 0.024 | 0.036 | 0.029 |
| 80-84 | 0.033 | 0.065 | 0.065 | 0.057 |
| 85-89 | 0.098 | 0.069 | 0.119 | 0.112 |
| 90+ | 0.153 | 0.192 | 0.174 | 0.171 |
| High 65-69 | 0.015 | 0.006 | 0.009 | 0.006 |
| 70-74 | 0.023 | 0.017 | 0.016 | 0.012 |
| 75-79 | 0.023 | 0.026 | 0.029 | 0.025 |
| 80-84 | 0.055 | 0.041 | 0.054 | 0.049 |
| 85-89 | 0.027 | 0.043 | 0.098 | 0.096 |
| 90+ | 0.107 | 0.221 | 0.143 | 0.146 |

Source: Own estimates
Hazard ratio: middle education - reference category
1997-2004 Iow education: 1.358 (0.029); high education: 0.822 ( 0.466 )
2005-2012 Iow education: 0.910 (0.508); high education: 0.853 (0.488)

Table 3. Age-specific prevalence rates in using LTC based on different data sources; women, 65 years and older; Germany, 2004 and 2012 (percent)

| Age <br> groups | MC data |  | Data from the Federal Health <br> Monitoring System |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Based on recipients of <br> cash benefits | Based on recipients of <br> cash and non-cash <br> benefits | Based on recipients of cash and non- <br> cash benefits |  |
|  | 2004 | 2012 | 2003 | 2013 |
| $65-69$ | 1.4 | 1.4 | 1.6 | 1.8 |
| $70-74$ | 2.3 | 2.5 | 3.0 | 2.9 |
| $75-79$ | 4.1 | 4.6 | 5.6 | 6.0 |
| $80-84$ | 9.2 | 10.3 | 11.1 | 12.0 |
| $85-89$ | 17.0 | 20.6 | 17.5 | 19.4 |
| $90+$ | 34.0 | 38.4 | 26.0 | 25.6 |
| Sauyy |  |  |  |  |

Source: Own estimates; In the estimation of the prevalence rates from the official statistics, the population exposure was used from the Human Mortality Database (HMD); Official data on the benefits of LTC by types are available only every second year beginning from 1999 and thus the numbers here are given for the 2003 and 2013.

Table 4. LE, CFLE, and CLE (in years) and health ratio by educational groups; women 65 years and above, 1997-2004 and 2005-2012

| $1997-2004$ | LE |  | CFLE |  | CLE |  | Health ratio |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | value | $\Delta$ | value | $\Delta$ | value | $\Delta$ |  |
| Low | 17.00 | - | 16.19 | - | 0.82 | - | 0.95 |
| Middle | 18.76 | 1.76 | 17.88 | 1.69 | 0.88 | 0.06 | 0.95 |
| High | 19.85 | 1.09 | 18.83 | 0.95 | 1.02 | 0.14 | 0.95 |
| High vs low |  | 2.85 |  | 2.64 |  | 0.20 |  |
|  |  |  |  |  |  |  |  |
| 2005-2012 |  |  |  |  |  |  |  |
| Low | 20.28 | - | 18.55 | - | 1.73 | - | 0.91 |
| Middle | 19.79 | -0.49 | 18.54 | -0.01 | 1.25 | -0.48 | 0.94 |
| High | 20.60 | 0.81 | 19.35 | 0.81 | 1.26 | 0.01 | 0.94 |
| High vs low |  | 0.32 |  | 0.80 |  | -0.47 |  |

Source: Own estimates; $\Delta$ represents the absolute difference between two neighboring educational categories; high vs low $\Delta$ is the difference between values for high and low education


Fig 1. Age-specific prevalence (with $95 \% \mathrm{Cl}$ 's) of using LTC by educational groups; women, 65 years and older, Germany, 2004 and 2012 (percent)

Source: Own estimates from the German Microcensus data, 2004 and 2012


Fig 2. Long-term care-free life expectancy (CFLE) and life expectancy with care (CLE) and 95\% confidence intervals; Germany, women, aged 65 or older, 2004 and 2012

