

**Table S1** Logistic regression models, bivariate analysis. Only estimates for the predictor anemia are shown. (weighted)

Outcomes				
Predictors	Fatigue	Lack of energy	Lack of concentration	Shortness of breath and/or weakness
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Age in years (continuous)	<b>1.23</b> <b>(1.02-1.47)</b>	<b>1.38</b> <b>(1.12-1.72)</b>	1.16 (0.92-1.45)	<b>1.26</b> <b>(1.05-1.52)</b>
Sex				
Male	Reference	Reference		
Female	<b>1.23</b> <b>(1.02-1.47)</b>	<b>1.42</b> <b>(1.15-1.76)</b>	<b>1.31</b> <b>(1.05-1.64)</b>	<b>1.56</b> <b>(1.31-1.87)</b>
Number of medications	1.02 (0.85-1.24)	1.12 (0.89-1.39)	1.02 (0.81-1.28)	1.07 (0.87-1.30)
Medication with side-effects	1.12 (0.93-1.35)	1.23 (0.99-1.53)	1.13 (0.89-1.42)	<b>1.38</b> <b>(1.15-1.66)</b>
Hypothyroidism (claims data)	1.19 (0.99-1.44)	<b>1.38</b> <b>(1.11-1.71)</b>	<b>1.29</b> <b>(1.03-1.61)</b>	<b>1.55</b> <b>(1.29-1.85)</b>
Depression and/or anxiety (claims data)	1.21 (1.00-1.45)	<b>1.41</b> <b>(1.14-1.76)</b>	<b>1.31</b> <b>(1.05-1.65)</b>	<b>1.57</b> <b>(1.31-1.88)</b>
Depression and/or anxiety (SHIP)	<b>1.25</b> <b>(1.03-1.51)</b>	<b>1.53</b> <b>(1.21-1.95)</b>	<b>1.39</b> <b>(1.09-1.77)</b>	<b>1.61</b> <b>(1.34-1.94)</b>
Insomnia (SHIP)	1.15 (0.95-1.39)	<b>1.32</b> <b>(1.06-1.65)</b>	1.24 (0.98-1.55)	<b>1.51</b> <b>(1.23-1.81)</b>
CCI (claims data)	1.10 (0.92-1.33)	<b>1.25</b> <b>(1.01-1.56)</b>	1.12 (0.89-1.41)	1.22 (1.00-1.47)
Cancer (claims data)	1.19 (0.99-1.43)	<b>1.38</b> <b>(1.11-1.71)</b>	<b>1.29</b> <b>(1.03-1.62)</b>	<b>1.52</b> <b>(1.27-1.82)</b>
CKD (claims data)	1.17 (0.98-1.42)	<b>1.34</b> <b>(1.08-1.66)</b>	1.22 (0.97-1.53)	<b>1.41</b> <b>(1.18-1.69)</b>
Heart failure (claims data)	1.17 (0.97-1.41)	<b>1.34</b> <b>(1.08-1.66)</b>	1.24 (0.99-1.55)	<b>1.41</b> <b>(1.18-1.70)</b>
Diabetes (claims data)	1.16 (0.97-1.40)	<b>1.33</b> <b>(1.07-1.65)</b>	1.21 (0.97-1.52)	<b>1.41</b> <b>(1.17-1.69)</b>
Pregnancy	1.20 (1.00-1.44)	<b>1.38</b> <b>(1.12-1.71)</b>	<b>1.31</b> <b>(1.04-1.63)</b>	<b>1.56</b> <b>(1.30-1.87)</b>
COPD (claims data)	-	-	-	<b>1.48</b> <b>(1.24-1.78)</b>
Asthma (claims data)	-	-	-	<b>1.56</b> <b>(1.30-1.88)</b>

OR: Odds Ratio, 95% CI: 95% Confidence Interval, CCI: Charlson comorbidity index, COPD: Chronic obstructive pulmonary disease, CKD: Chronic kidney disease  
bold numbers = statistically significant

**Table S2** Multivariate logistic regression models with symptoms of anemia as outcome variables (weighted) including the variable iron deficiency instead of the variable anemia (as compared to **Table 5**)

	Outcomes							
	Fatigue		Lack of energy		Lack of concentration		Dyspnea and/or weakness	
Predictors	OR (95% CI) n = 5777		OR (95% CI) n=5777		OR (95% CI) n=5777		OR (95% CI) n=5777	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
iron deficiency	1.19 (0.95; 1.49)	1.19 (0.95; 1.48)	0.98 (0.73; 1.33)	0.99 (0.74; 1.34)	<b>1.65</b> <b>(1.24; 2.19)</b>	<b>1.66</b> <b>(1.26; 2.20)</b>	1.16 (0.90; 1.48)	1.14 (0.89; 1.46)
Women	<b>1.41</b> <b>(1.27; 1.56)</b>	<b>1.43</b> <b>(1.29; 1.58)</b>	<b>1.31</b> <b>(1.14; 1.50)</b>	<b>1.31</b> <b>(1.15; 1.51)</b>	1.10 (0.96; 1.27)	1.09 (0.96; 1.26)	1.07 (0.96; 1.19)	1.08 (0.97; 1.20)
Age (years)	0.98 (0.97; 0.99)	0.99 (0.98; 0.99)	0.98 (0.97; 0.99)	0.99 (0.98; 1.00)	1.01 (1.00; 1.01)	1.01 (1.00; 1.02)	<b>1.02</b> <b>(1.01; 1.02)</b>	<b>1.03</b> <b>(1.02; 1.03)</b>
Number of medications	<b>1.10</b> <b>(1.08; 1.13)</b>	-	<b>1.13</b> <b>(1.10; 1.16)</b>	-	<b>1.07</b> <b>(1.05; 1.10)</b>	-	<b>1.20</b> <b>(1.17; 1.22)</b>	-
Medication with side-effects	-	<b>1.20</b> <b>(1.05; 1.37)</b>	-	<b>1.58</b> <b>(1.35; 1.85)</b>	-	<b>1.62</b> <b>(1.39; 1.98)</b>	-	<b>1.73</b> <b>(1.52; 1.96)</b>
Depression and/or anxiety (SHIP)	<b>3.45</b> <b>(3.08; 3.86)</b>	<b>3.52</b> <b>(3.15; 3.95)</b>	<b>8.14</b> <b>(7.14; 9.28)</b>	<b>8.06</b> <b>(7.06; 9.19)</b>	<b>7.03</b> <b>(6.15; 8.04)</b>	<b>6.85</b> <b>(5.99; 7.84)</b>	<b>2.72</b> <b>(2.41; 3.07)</b>	<b>2.74</b> <b>(2.43; 3.09)</b>
Insomnia (SHIP)	<b>2.23</b> <b>(2.00; 2.49)</b>	<b>2.31</b> <b>(2.07; 2.57)</b>	<b>2.02</b> <b>(1.76; 2.32)</b>	<b>2.09</b> <b>(1.83; 2.40)</b>	<b>1.69</b> <b>(1.48; 1.95)</b>	<b>1.72</b> <b>(1.50; 1.97)</b>	<b>1.63</b> <b>(1.45; 1.83)</b>	<b>1.72</b> <b>(1.53; 1.93)</b>
CCI (claims data)	<b>1.11</b> <b>(1.05; 1.18)</b>	<b>1.20</b> <b>(1.14; 1.26)</b>	1.06 (0.98; 1.13)	<b>1.14</b> <b>(1.07; 1.22)</b>	1.08 (1.02; 1.16)	<b>1.12</b> <b>(1.05; 1.19)</b>	<b>1.08</b> <b>(1.02; 1.15)</b>	<b>1.19</b> <b>(1.13; 1.26)</b>
Heart failure (claims data)	-	-	-	-	-	-	<b>2.72</b> <b>(1.78; 4.16)</b>	<b>3.07</b> <b>(2.03; 4.65)</b>
COPD (claims data)	-	-	-	-	-	-	<b>2.13</b> <b>(1.59; 2.85)</b>	<b>2.29</b> <b>(1.72; 3.06)</b>
Asthma (claims data)	-	-	-	-	-	-	<b>3.41</b> <b>(2.69; 4.32)</b>	<b>3.66</b> <b>(2.90; 4.62)</b>

OR: Odds Ratio, 95% CI: 95% Confidence Interval, CCI: Charlson-Comorbidity-Index, COPD: Chronic obstructive pulmonary disease, SHIP: Study of Health in Pomerania, bold numbers = statistically significant