

**Michigan**

**Direct Costs**

Chronic Disease	2003			2023											
	PRC (Thousands)	Expenditure per PRC (\$)	Total Expenditure (US\$ Billions)	Projections - Level						Projections - Difference					
				PRC (Thousands)		Expenditure per PRC (\$)		Total Expenditure (US\$ Billions)		PRC (Thousands)		Expenditure per PRC (\$)		Avoidable Costs (US\$ Billions)	
				Baseline	Optimistic	Baseline	Optimistic	Baseline	Optimistic	Absolute	Percent	Absolute	Percent	Absolute	Percent
Cancer	359	4,463	1.60	537	441	7,604	6,989	4.08	3.08	-96	-17.89	-615	-8.09	-1.00	-24.54
Breast cancer	38	4,427	0.17	52	45	7,608	6,992	0.39	0.32	-6	-12.30	-616	-8.10	-0.08	-19.40
Colon cancer	10	11,145	0.11	11	9	20,642	18,975	0.23	0.18	-2	-17.67	-1,666	-8.07	-0.06	-24.31
Lung cancer	11	15,109	0.17	13	11	26,021	23,913	0.34	0.26	-2	-18.44	-2,108	-8.10	-0.09	-25.05
Prostate cancer	42	4,171	0.18	67	53	7,307	6,716	0.49	0.36	-14	-21.48	-592	-8.10	-0.14	-27.84
Other cancers	258	3,774	0.97	394	323	6,664	6,125	2.62	1.98	-71	-18.00	-539	-8.09	-0.65	-24.64
Diabetes	465	2,022	0.94	638	553	3,549	3,262	2.26	1.80	-85	-13.30	-287	-8.09	-0.46	-20.32
Heart disease	742	3,710	2.75	965	631	6,830	6,278	6.59	3.96	-334	-34.63	-552	-8.08	-2.63	-39.90
Pulmonary conditions	2,119	1,055	2.24	2,593	2,229	1,903	1,749	4.94	3.90	-364	-14.05	-154	-8.08	-1.04	-21.00
Hypertension	1,391	799	1.11	1,769	1,439	1,404	1,291	2.48	1.86	-331	-18.70	-114	-8.09	-0.63	-25.28
Stroke	90	4,831	0.43	106	86	9,030	8,301	0.96	0.71	-20	-18.84	-729	-8.07	-0.24	-25.39
Mental disorders	998	1,501	1.49	1,375	1,206	2,616	2,405	3.60	2.90	-170	-12.35	-212	-8.10	-0.70	-19.45
<b>Total</b>	<b>6,164</b>	<b>1,713</b>	<b>10.56</b>	<b>7,984</b>	<b>6,584</b>	<b>3,513</b>	<b>3,229</b>	<b>24.91</b>	<b>18.22</b>	<b>-1,400</b>	<b>-17.54</b>	<b>-284</b>	<b>-8.09</b>	<b>-6.70</b>	<b>-26.89</b>

**Indirect Impacts\* (US\$ Billions)**

Chronic Disease	2003	2023											
	Total	Individual				Caregiver				Total			
	Level	Lost Work Days		Presenteeism		Lost Work Days		Presenteeism		Projections - Level		Projections - Difference	
		Baseline	Optimistic	Baseline	Optimistic	Baseline	Optimistic	Baseline	Optimistic	Baseline	Optimistic	Absolute	Percent
Cancer	9.19	1.53	1.25	25.85	15.35	0.110	0.090	2.50	1.62	29.99	18.31	-11.68	-38.94
Breast cancer	0.97	0.15	0.13	2.49	1.58	0.011	0.009	0.24	0.17	2.89	1.88	-1.01	-34.79
Colon cancer	0.61	0.09	0.07	1.46	0.87	0.006	0.005	0.14	0.09	1.70	1.04	-0.66	-38.76
Lung cancer	0.96	0.13	0.10	2.18	1.28	0.009	0.008	0.21	0.14	2.53	1.53	-0.99	-39.36
Prostate cancer	1.02	0.18	0.14	3.12	1.77	0.013	0.010	0.30	0.19	3.61	2.11	-1.50	-41.61
Other cancers	5.63	0.98	0.80	16.60	9.84	0.071	0.058	1.61	1.04	19.26	11.74	-7.52	-39.02
Diabetes	3.55	1.05	0.91	8.59	6.74	0.084	0.072	0.92	0.71	10.64	8.43	-2.21	-20.76
Heart disease	4.06	2.24	1.46	8.14	4.45	0.220	0.144	0.79	0.43	11.39	6.49	-4.90	-43.01
Asthma	4.03	2.14	1.84	7.62	6.19	0.156	0.134	0.74	0.60	10.66	8.77	-1.89	-17.74
Hypertension	10.58	4.27	3.47	22.18	17.54	0.420	0.341	2.15	1.70	29.02	23.05	-5.96	-20.55
Stroke	0.82	0.36	0.29	1.55	1.17	0.026	0.021	0.15	0.11	2.08	1.60	-0.49	-23.35
Emotional disturbances	5.62	1.85	1.62	13.47	11.32	0.134	0.118	1.29	1.09	16.75	14.15	-2.60	-15.54
<b>Total</b>	<b>37.85</b>	<b>13.44</b>	<b>10.85</b>	<b>87.40</b>	<b>62.76</b>	<b>1.15</b>	<b>0.92</b>	<b>8.54</b>	<b>6.27</b>	<b>110.53</b>	<b>80.80</b>	<b>-29.73</b>	<b>-26.90</b>

\* Based on Nominal GDP

**Intergenerational Impacts**

Variables	1970	2003	2023		2023		2050		2050	
			Projections - Level		Projections - Difference		Projections - Level		Projections - Difference	
			Baseline	Optimistic	Absolute	Percent	Baseline	Optimistic	Absolute	Percent
Bachelor's degrees (percent)	9.40	23.27	26.56	28.30	1.74	6.54	33.13	38.90	5.77	17.40
Capital stock (US\$ Billions)	258.65	691.59	1357.21	1406.96	49.76	3.64	3502.48	3843.95	341.47	9.72
Life expectancy at 65 (years)	14.71	18.23	19.93	21.08	1.15	5.79	22.79	24.99	2.20	9.66
GDP* by state (US\$ Billions)	78.74	356.47	535.50	573.52	38.02	7.10	827.66	973.49	145.83	17.62

\*Based on Real GDP