

# Advancing Health Equity in Health Care

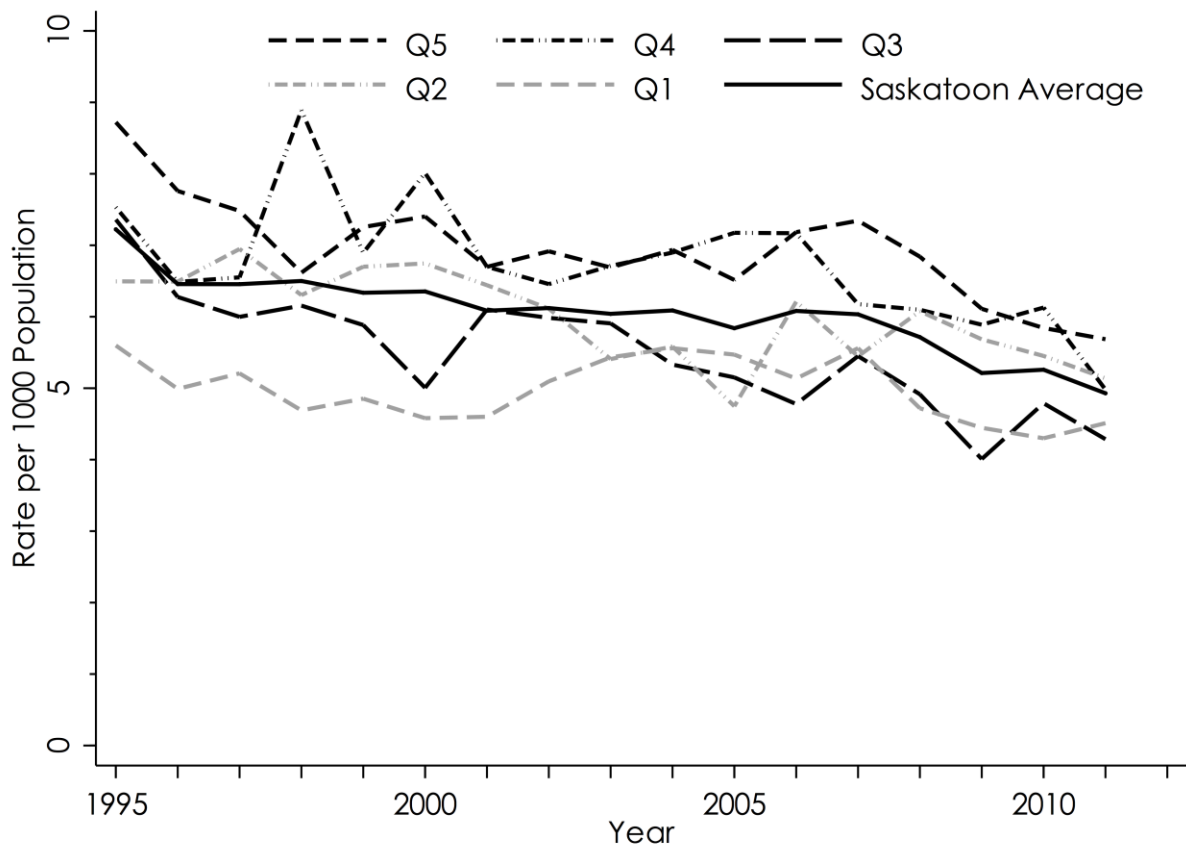
## Hospital Discharges for Cancer

### Highlights

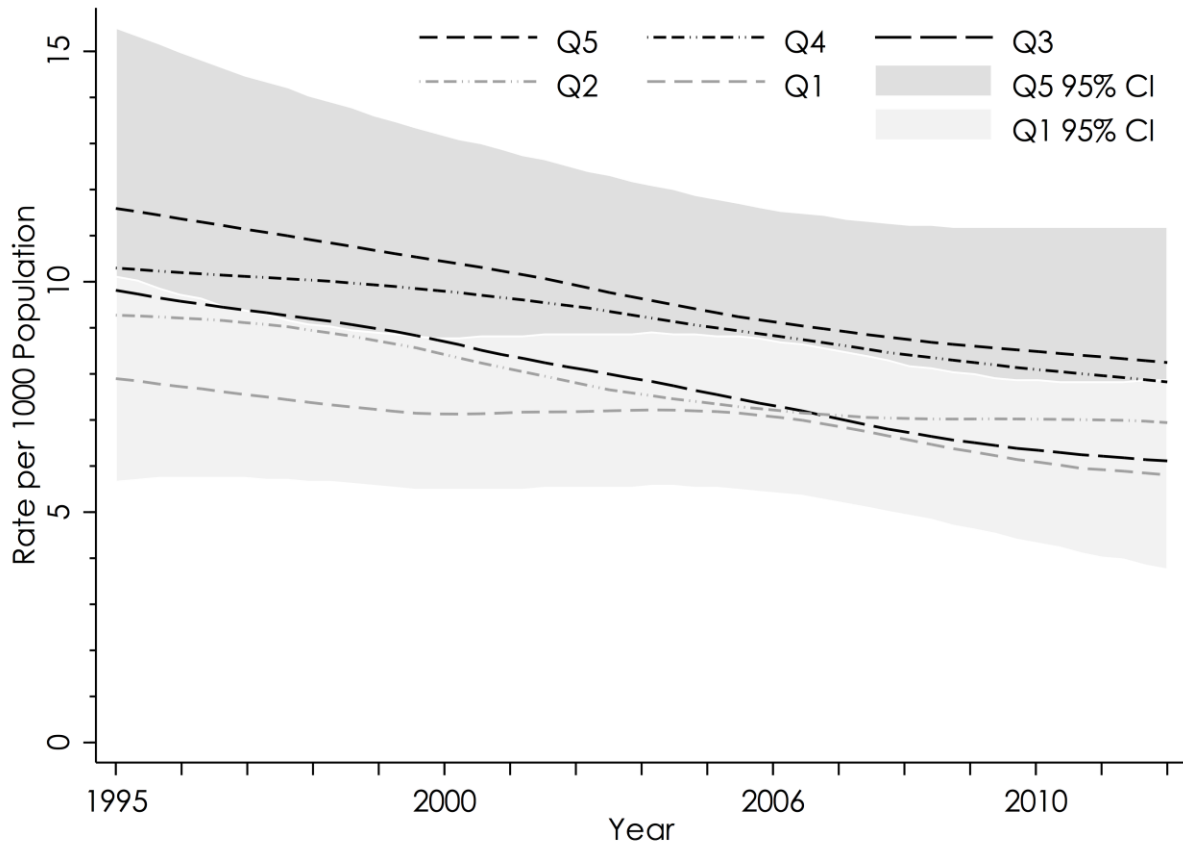
- Hospital discharges for cancer are decreasing over time for the general population.
- Cancer hospital discharges is currently the only indicator showing overall low inequality across the population.
- The gap in inequality is beginning to show signs of narrowing over time.
- From 1995 to 2011, 28% of cancer hospital discharges occurred for people living in the highest areas of deprivation, compared to 19% in the areas of lowest deprivation.
- Click [here](#) to learn more about data sources and methods.

Between January 1, 1995 and December 31, 2011 there were 20,630 cancer hospital discharges for Saskatoon residents. There were 8,503 cases among men and 12,127 cases among women. In the city as a whole cancer hospital discharges decreased by 35% from 7.2 to 4.7 cases per 1000 people between 1995 and 2011 (*Figure 1 and Figure 2*). *Figure 3* shows the disparity rate ratio and disparity rate difference for age and sex standardized cancer rates. The disparity rate ratio increased by 4% from 1.13 in 1995 to 1.18 in 2011. The disparity rate difference decreased by 8% from 0.92 in 1995 to 0.84 in 2011.

**Figure 1: Crude Cancer Hospital Discharge Rate per 1000 Population by Quintile of Deprivation, Saskatoon, 1995 to 2011.**

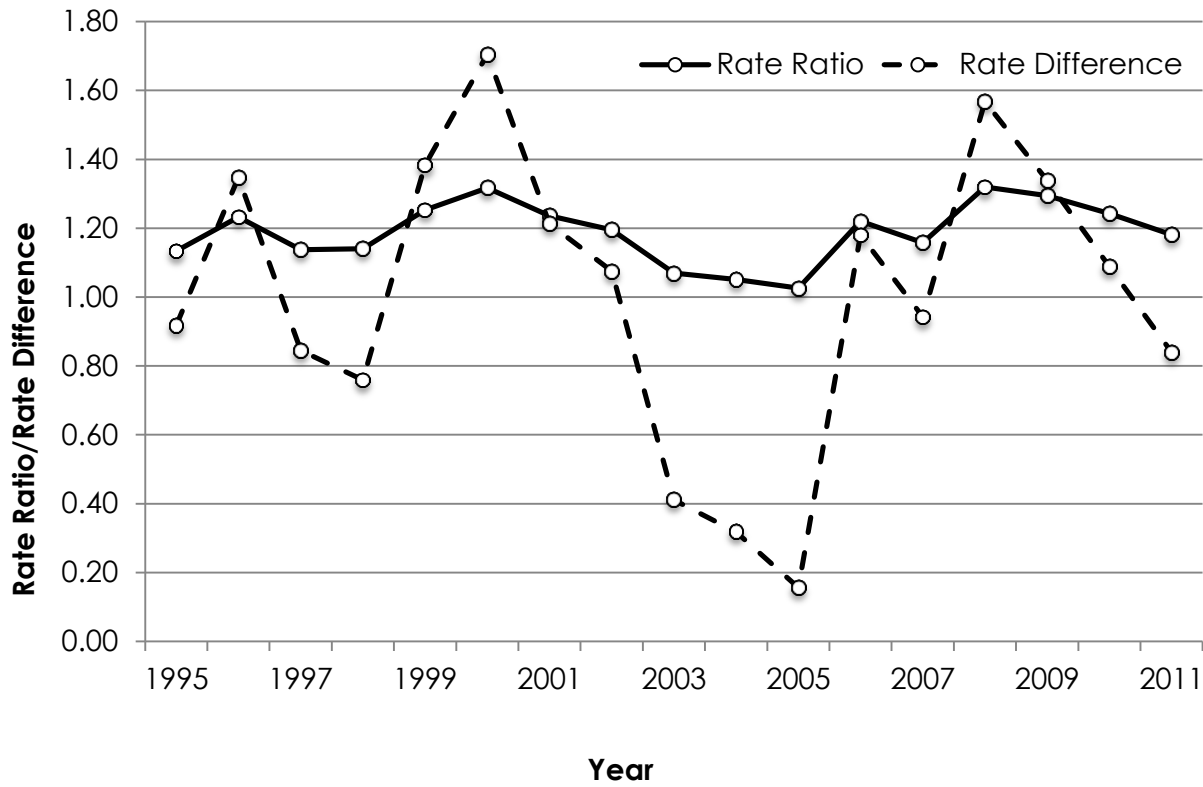


**Figure 2: Adjusted Cancer Hospital Discharge Rate per 1000 Population by Deprivation Area, Saskatoon, 1995 to 2011.**



Note: Model is a negative binomial regression and includes age, sex, year, quintile of deprivation and a year\*quintile of deprivation interaction term as dependent variables. The model is offset by the log of population size and robust standard errors were estimated.

**Figure 3: Age and Sex Standardized Cancer Hospital Discharge Rate Ratio and Rate Differences between the Highest and Lowest Quintiles of Deprivation, Saskatoon, 1995 to 2011.**



The Lorenz curve for all years combined shows that 28% of the cancer hospital discharges occurs among residents in areas of highest deprivation, representing 24% of the total population of Saskatoon. In contrast, 19% of cancer hospital discharges occurs for those residing in areas of least deprivation, representing 23% of the population.

**Figure 4: Age and Sex Adjusted Lorenz Curve for Cancer Hospital Discharges, Saskatoon, 1995 to 2011.**

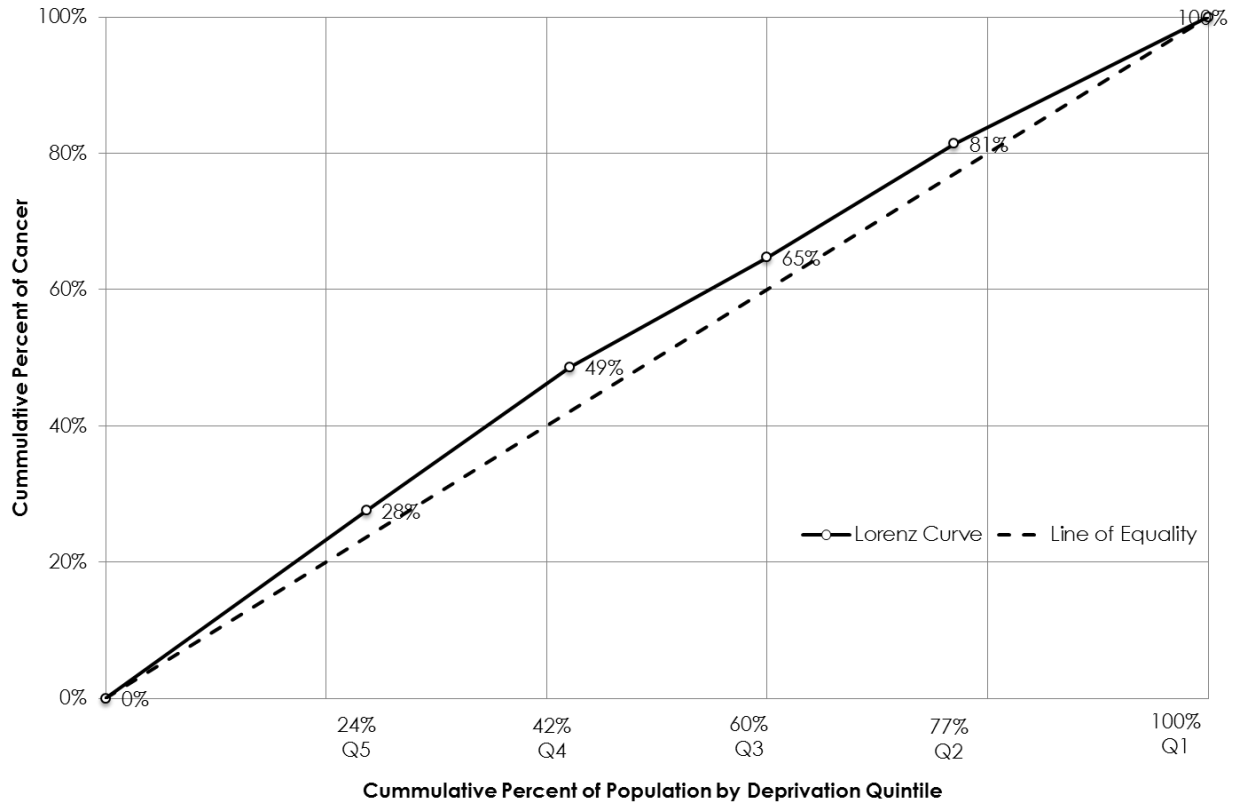
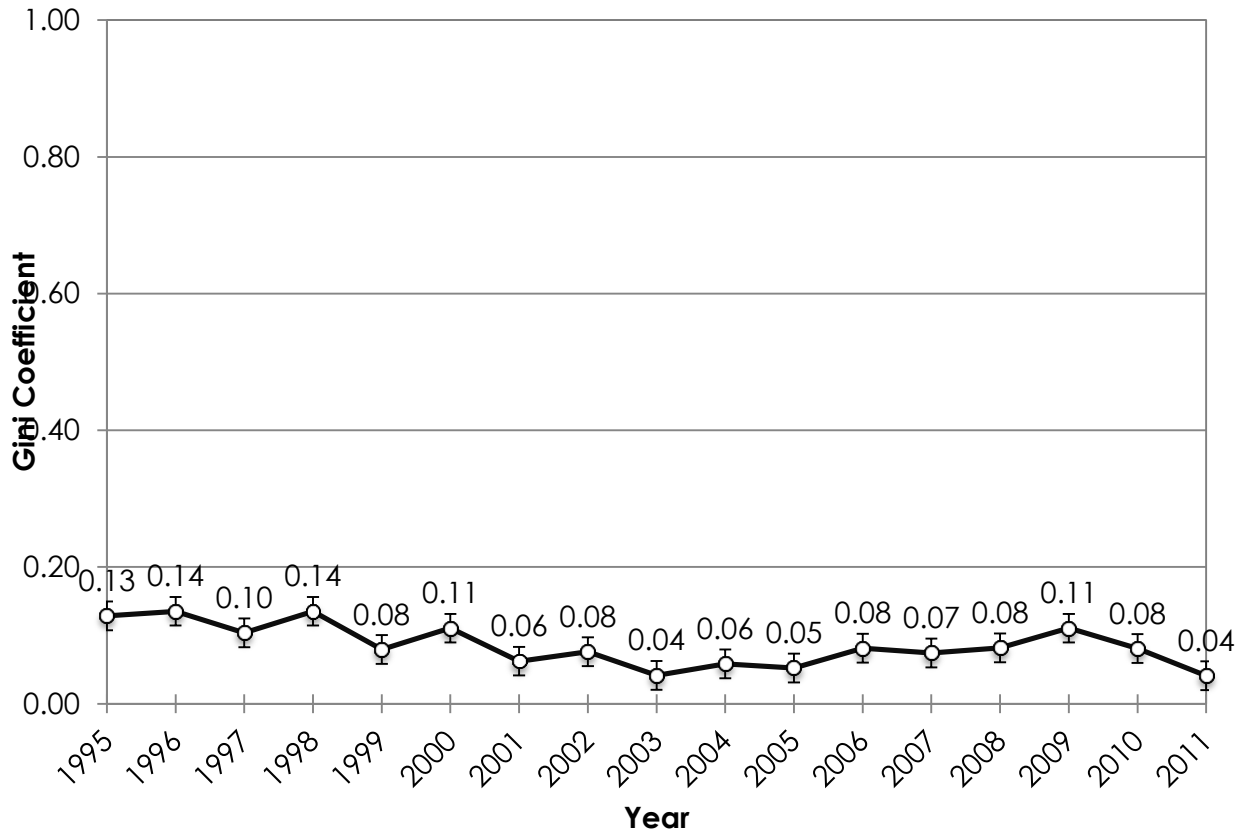


Figure 5 shows that the Gini coefficient for cancer hospital discharges was 0.13 (95% CI: 0.11 to 0.15) in 1995. The Gini coefficient decreased significantly to 0.04 (95% CI: 0.05 to 0.03) between 1995 and 2011. The Gini coefficient ranging from 0.14 and 0.04 represents a low degree of inequality for cancer hospital discharges in Saskatoon.

**Figure 5: Age and Sex Adjusted Gini Coefficients for Cancer Hospital Discharges, Saskatoon, 1995 to 2011.**



**Table 1: Cancer Hospital Discharge Rate Ratios for Sex, Age, Quintile of Deprivation, Saskatoon, 1995 and 2011.**

Cancer	RR	Robust Std. Err.	z	P>z	[95% Conf. Interval]	
<b>Sex</b>						
Male	1.00	-	-	-	-	
Female	1.02	0.04	0.43	0.67	0.94 1.11	
<b>Age Category</b>						
0 to 14	1.00	-	-	-	-	
15 to 29	1.76	0.18	5.56	0.00	1.44 2.15	
30 to 44	6.28	0.61	18.78	0.00	5.18 7.61	
45 to 64	21.55	1.91	34.72	0.00	18.12 25.63	
65 +	113.08	10.19	52.45	0.00	94.76 134.93	
<b>Deprivation Quintiles</b>						
Q5	1.00	-	-	-	-	
Q4	1.10	0.30	0.36	0.72	0.65 1.89	
Q3	1.56	0.41	1.69	0.09	0.93 2.62	
Q2	1.30	0.35	0.99	0.32	0.77 2.20	
Q1	1.31	0.33	1.07	0.29	0.80 2.13	
<b>Year</b>						
1995	1.00	-	-	-	-	
1996	0.87	0.26	-0.48	0.63	0.49 1.55	
1997	0.84	0.27	-0.54	0.59	0.45 1.56	
1998	0.72	0.20	-1.18	0.24	0.42 1.24	
1999	0.74	0.20	-1.13	0.26	0.43 1.25	
2000	0.80	0.23	-0.77	0.44	0.45 1.41	
2001	0.68	0.19	-1.43	0.15	0.39 1.16	
2002	0.67	0.18	-1.52	0.13	0.40 1.12	
2003	0.65	0.18	-1.56	0.12	0.38 1.12	
2004	0.65	0.18	-1.54	0.12	0.38 1.13	
2005	0.61	0.17	-1.71	0.09	0.35 1.07	
2006	0.62	0.16	-1.87	0.06	0.38 1.02	
2007	0.67	0.19	-1.40	0.16	0.39 1.17	
2008	0.59	0.15	-2.02	0.04	0.36 0.98	
2009	0.54	0.15	-2.20	0.03	0.31 0.94	
2010	0.49	0.12	-2.84	0.01	0.30 0.80	
2011	0.46	0.12	-3.06	0.00	0.28 0.76	

Note: Model is a negative binomial regression and includes age, sex, year, quintile of deprivation and a year\*quintile of deprivation interaction term as dependent variables. The model is offset by the log of population size and robust standard errors were estimated.