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A summary of the report, *Health Inequities in Manitoba: Is the Socioeconomic Gap Widening or Narrowing over Time?* by Patricia Martens, Marni Brownell, Wendy Au, Leonard MacWilliam, Heather Prior, Jennifer Schultz, Wendy Guenette, Lawrence Elliot, Shelley Buchan, Marcia Anderson, Patricia Caetano, Colleen Metge, Rob Santos, Karen Serwonka.

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## Achieving Health Equity: A Challenge for Manitoba

The gaps in health between the richest and the poorest Manitobans have grown more often than they have shrunk over the past 20 years. In fact, gaps grew in either urban or rural communities or both for 12 of 18 health measures, stayed the same for 10, and narrowed for just one. That's according to the Manitoba Centre for Health Policy's (MCHP) report on health inequities in Manitoba.

The link between people's income and health is consistent around the world. This means that health differences are not due solely to people's lifestyles but result from their living and working conditions. And so, an unequal distribution of disease and early death is considered unfair or "inequitable." Since we want to live in a just society, we have to get these trends going in the other direction.

This is the reason for doing this study. MCHP researchers looked at the distribution of disease, death, and the use of preventive healthcare to see if the spread was even or "fair" across income groups in Manitoba. They focused on gaps between the well off and the not-so-well-off, how the gaps changed over 20 years and what this could mean for health policy. Knowing where gaps are large or becoming large helps to pinpoint areas that should get more attention.

### What was done

This report uses anonymous data for the entire population of Manitoba, but it differs from most MCHP reports because it focuses on income rather than geography. Using Canada's census data on average incomes for neighbourhoods, the researchers divided Manitobans into five income groups, separately for urban residents (Winnipeg and Brandon) and rural residents (the rest of Manitoba). Most groups included around 20% of the population, but varied somewhat, especially when the focus was on children or seniors. These variations have been accounted for in the analyses.

The report gives rates over time for all Manitobans and for each income group in rural and urban Manitoba. This is important information, but the focus is really on the size of the health gaps among the five income groups and how they changed over a 20-year period – generally starting in 1984/85 and ending in 2007/08.

# The rich are getting richer

You likely know that the poor have fallen behind economically, but you might be surprised to learn how far their income has fallen. The gap in average household income has more than doubled in just 20 years for both rural and urban communities.



#### Table 1. Trends in Inequality Over Time for Health and Social Indicators

Location	Widening gaps	Stable gaps	Narrowing gap	
Rural and Urban	Premature death (before age 75) Potential Years of Life Lost Teen pregnancy Diabetes, age 19 and older Ischemic Heart Disease Pap tests	Death before age 5 Dental extractions (possible increase) Amputation due to diabetes <b>Dementia, age 55 and older</b> Multiple Sclerosis Beta-blocker prescription after a heart attack		
Rural only	Breastfed newborns Continuity of Care Hospitalizations for TB Mental illness, age 10 and older Suicide deaths and attempts	High school completion (mainly rural)		
Urban only	High school completion (mainly urban)	Continuity of Care Hospitalizations for TB (possible decrease) Cumulative mental illness	Breastfed newborns	
Blue type indicates higher inequality in urban compared to rural areas. Green type indicates higher inequality in rural areas.				

#### Large gaps

The levels of inequality were shockingly high for some indicators. The greatest difference occurred for tuberculosis. In rural Manitoba, 58% of recent hospitalizations for tuberculosis occurred in the 20% of people in the lowest income group. Similarly, the lowest income group in urban Manitoba had 53% of the tuberculosis hospitalizations. If there was no inequity, only 20% of those hospitalizations would be in the lowest income group.

The news is not all grim. Overall, fewer people were hospitalized for this serious disease. Since the

In 1986, the wealthiest rural households in Manitoba earned an average of \$21,790 more than the poorest households. Twenty years later, the difference was \$47,005. The gap was even bigger in Winnipeg and Brandon, with a difference of almost \$80,000 in 2006. On average, the wealthiest urban households earned \$114,300, while the poorest households made do on \$34,400. This growing gap in income was accompanied in many cases by profound and growing health gaps.

# Is the socioeconomic gap in health widening or narrowing over time?

As Table 1 shows, the gaps have mostly widened or stayed the same since the mid-1980s. So, poorer Manitobans continue to experience worse health than richer Manitobans, and in some cases they are falling farther behind.

Urban breastfeeding rates stand out as the lone indicator with a shrinking gap. Over time, the number of newborns who were breastfed as they left the hospital went up for all urban income groups but they went up the most for the lowest income urban group. Although there's still room for improvement, this indicator is moving in the right direction.

## Levels of inequality were shockingly high for some indicators.

Health planners need to know more than whether the gap is growing or shrinking. In order to make appropriate

decisions on health programs and policies, they also need information about whether rates are improving or not for the whole population and the current size of the gap. Large gaps in serious health issues demand attention whether they are growing or not. mid-1980s, rates dropped from 16.7 to 12.8 hospitalizations per 100,000 people. The rates fell for some of the income groups in both rural and urban areas. Unfortunately, they actually increased for the lowest income rural Manitobans, where they were already the highest to being with. Rates rose from 41.4 to 57.8 hospitalizations for tuberculosis per 100,000 people. By contrast, rates in the lowest income group in Winnipeg and Brandon dropped by more than half. Although still high, at 21.5 hospitalizations per 100,000 people, some results indicated this gap might be narrowing.

The outcomes with the largest degree of inequality in the most recent time period are listed in the first column of Table 2. For all of these indicators, people in the lowest income group made up at least a third, and in most instances more than 40% of those with the problem. Given that they represent only about one-fifth of the population, this is much more than their fair share. Furthermore, the gap widened for all but two of these indicators over the study period.

## Large gaps in death

Premature death (before age 75) is often used as an overall indicator of people's health. While overall more people were living longer, there was little improvement for people in the lowest income group. Their rates of premature death stayed the same, widening a pre-existing gap for both rural and urban Manitobans. Urban residents did the worst: based on the most current data, one-third (33.4%) of premature death in Winnipeg and Brandon occurred in the poorest fifth (19.5%) of the population. The rate was a little lower for rural residents (29% of deaths in 20% of the population).

Large inequities were also reported for suicide attempts and deaths due to suicide for Manitobans aged 10 and older. This gap was initially large for both rural and urban Manitobans, and it widened for rural Manitobans. In the most recent data, around 42% of the suicide attempts and deaths due to suicide occurred in the 19% of people from the lowest income group. The huge inequity and increasing rates, particularly since the early 2000s, are concerning and should be addressed and monitored.

Deaths in children under five years of age went down considerably and more equally across income groups since the mid-1980s. However, the initial gap between richer and poorer groups was large, and it remained large. For example, in Winnipeg and Brandon, 38% of these deaths occurred in the 24% of children from the lowest income group. There is clearly a need for interventions to prevent deaths of children in the lowest income groups.

# Mixed results for child health

First, some good news: there were fewer teen pregnancies in 15 to 19 year-olds in nearly all income groups. The drop was small in the lowest income rural neighbourhoods. However the rates in urban lowest income group actually increased. Unfortunately, the teen pregnancy gap was large to begin with, and it widened for both rural and urban communities. Almost half (45%) of pregnant teens came from the poorest fifth of Manitobans, where in the most recent time period, more than

one in 10 teens got pregnant.

Another indicator of child health, the number Almost half of pregnant teens came from the poorest fifth of Manitobans.

of pre-school children hospitalized to have teeth pulled, also increased dramatically. Although this sounds like worsening health, it likely reflects improved access to service. In this case, unequal rates actually demonstrate "fairness." The fact that more low-income children were hospitalized to have teeth pulled, tells us that the children who need this procedure the most are the ones who are getting it. This much higher need, however, indicates underlying inequity. Pre-schoolers from low-income families, especially in rural areas, have extremely poor dental health. So we need to work on preventing tooth decay.

One risk for early childhood dental decay is bottle feeding, so improving breastfeeding may help to improve pre-schoolers' dental health. The lowest income group in rural Manitoba was the only group showing no improvement in breastfeeding. Their rate was just 62.5%, well behind the 88% rate for newborns from higher income rural families. This mediumsized gap widened for rural Manitoba in striking contrast to the narrowing gap for Winnipeg and Brandon.

# Adult health: Diabetes gap widens

The number of adult Manitobans living with diabetes doubled from 4.2% to 8.2% in 20 years. The increase affected all income groups, but it affected the lowest income groups the most, and so the gap widened. The increase may be real, or it may be due to more people who didn't know they had diabetes being diagnosed, or to more people with diabetes living longer, or to some combination of all these factors.

The gap for diabetes, perhaps surprisingly, was not large; however, most lower limb amputations resulting from diabetes were in people from the lowest income group in both rural and urban communities. This is the case even though their rates of amputation dropped along with the overall decrease from 1.5% to 1.2%. In the most recent time period, 44% of the amputations occurred in the poorest quarter (26%) of the people with diabetes. Given the large amount of inequity in this measure, targeted care is needed to prevent these tragic losses.

# **Approaching equity**

The last column in Table 2 lists the outcomes that were most fairly distributed among the income groups. Take for example, dementia in people over age 55 in rural areas: 17% of the dementia diagnoses occurred in the 17% of the seniors in the lowest income group. This is about as fair as you can get. The diagnoses of dementia in urban seniors was a different story, with 26% of the dementia occurring in the lowest income group. Approaching equity does not mean health improved. In fact dementia diagnoses in Manitoba seniors went up in the 20 years studied from 6.4% to 10.3%.

MCHP researchers also looked at some measures to assess healthcare service. These included continuity of care (a measure of how often patients got to see the same healthcare provider), pap tests (to screen for cervical cancer), and prescriptions of beta-blockers after a heart attack (often used to assess quality of care). These all had small gaps, which suggests that the health system is functioning fairly. Rates dropped and gaps increased for both pap tests and continuity of care, providing a cautionary note even here where the achievement of equity has been most successful.

# **Closing the health gaps**

Many of us would assume that providing programs for people most at risk would give the greatest improvements to health. This is debatable because a large number of people at small risk can result in more disease than a small number of people at high risk. Consequently, achieving even a small shift towards better health in the whole population will have a much larger effect than a bigger improvement in a small number of people. It is important to maintain programs that aim to improve everybody's health so that as many people as possible will benefit.

#### Table 2: Translating Findings into Policy Recommendations\*

High Inequality: Universal and highly targeted policies	Medium Inequality: Universal and targeted policies	Low Inequality: Universal policies	
Hospitalizations for Tuberculosis	Potential years of life lost (rural)	Dementia, age 55 and older (urban)	
Dental extractions before age 5	Premature death, before age 75 (rural)	Ischemic Heart Disease (urban)	
Amputation due to diabetes	Death before age 5	Prescriptions for beta blockers after a heart attack	
Teen pregnancy	Diabetes, age 19 and older	Breastfeeding (urban)	
Suicide deaths and attempts	High school completion	Cumulative mental illness (rural)	
Potential years of life lost (urban)	Ischemic Heart Disease (rural)	Continuity of Care	
Premature death, before age 75 (urban)	Cumulative mental illness (urban)	Pap test	
	Breastfeeding (rural)	Multiple Sclerosis	
Inequality classified based on Gini coefficients in most recent time period (low, .06; Medium = .0620; high20)			

outcomes are fairly distributed across all income groups, there is no need for a targeted approach. Effective strategies for the whole population will improve health for everyone. Indicators in the last column of Table 2 fall into this category.

The greater the amount of ill health that occurs in low-income people, the greater the need to work on closing health gaps. Adding targeted programs to universal ones should help the least healthy catch up to the rest of Manitobans. Both universal and targeted approaches are recommended for a large and persistent gaps, or pre-existing gap that widened. This includes all the other indicators in the table.

The report shows growing gaps in

Inequality classified based on Gini coefficients in most recent time period (low, .06; Medium = .06-.20; high. .20
Blue type indicates the gap widened over time in both rural and urban populations.
Green type indicates the gap widened over time in only the rural population.

(ellow type indicates the gap widened over time mainly in the urban population.

However, universal programs do not address health gaps. If everyone's health improves equally, the gap between the most and the least healthy stays the same. This is sometimes okay,

Targeted programs and policies are needed where the health gap is large and/or growing. as for prescriptions of beta blockers where the initial gap was small. It is not acceptable when a large gap stays large, as we saw for deaths in young children. The gap also stays the same if everyone

worsens to the same extent, as occurred with dementia. If everyone improves, but the most healthy improve more than other people, the health gap will widen as happened in rural areas for tuberculosis and teen pregnancies.

Policy planners will want to see everyone get healthier and will also want to see wide gaps shrink. These results should help them consider how best to achieve both these goals. Where income are accompanied by growing gaps in many areas of health. Narrowing the health gaps likely requires narrowing the income gap. Education is seen as a major pathway out of poverty. Unfortunately, there was little or no improvement in high school graduation rates for lower income groups in either rural or urban Manitoba while most other income groups improved. This widening educational gap suggests that things may continue to get worse.

On the whole, it seems that wealthy equals healthy, and wealthier equals healthier. It also seems that we are mostly going in the wrong direction with too many health gaps growing and too few shrinking. Reversing these trends to achieve a more equitable distribution of health presents a challenge for Manitobans from all sectors of society.

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