

Evaluating Basic Annual Income Pilots

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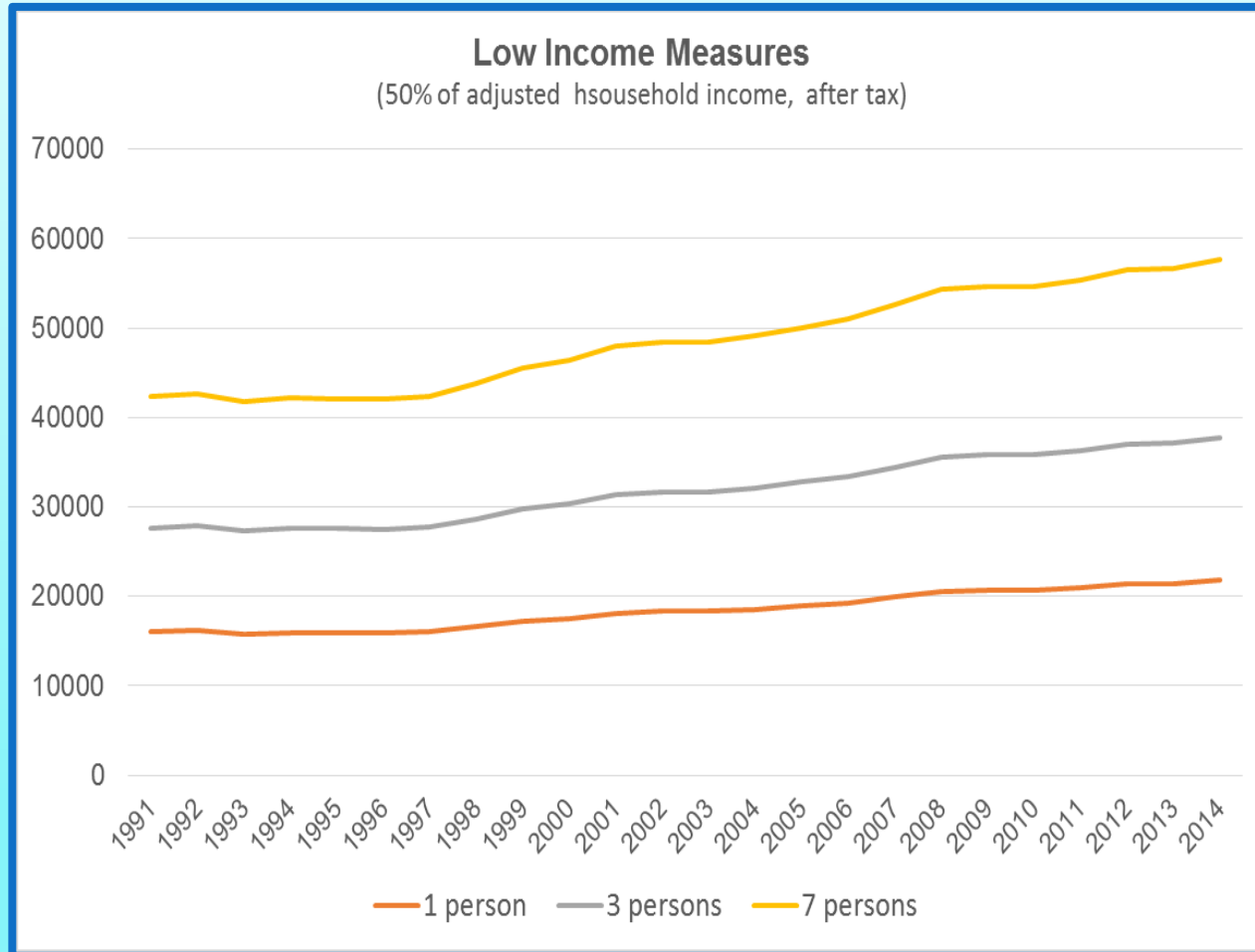
Basic income has two variants

- universal basic income where everyone is receives a minimum income
- negative income tax that guarantees a minimum, and increases support as a reduced rate as earnings rise

What does an ideal basic income look like?

- Enables individuals to have both
 - (1) autonomous income to meet their needs; and
 - (2) access to public services that benefit all of us;
- Replaces income provided through social assistance systems and other supports such as GST rebate;
- May not replace other income support such as Employment Insurance, old age security and public pension
- Is inflation adjusted and declines as other income increases
- Can be adjusted to meet specific needs (lone parenthood) ,
- Makes no one worse off by the transition from the existing system.
- Does not negate the need for labour adjustment programs or education
- Does not eliminate the income tax system

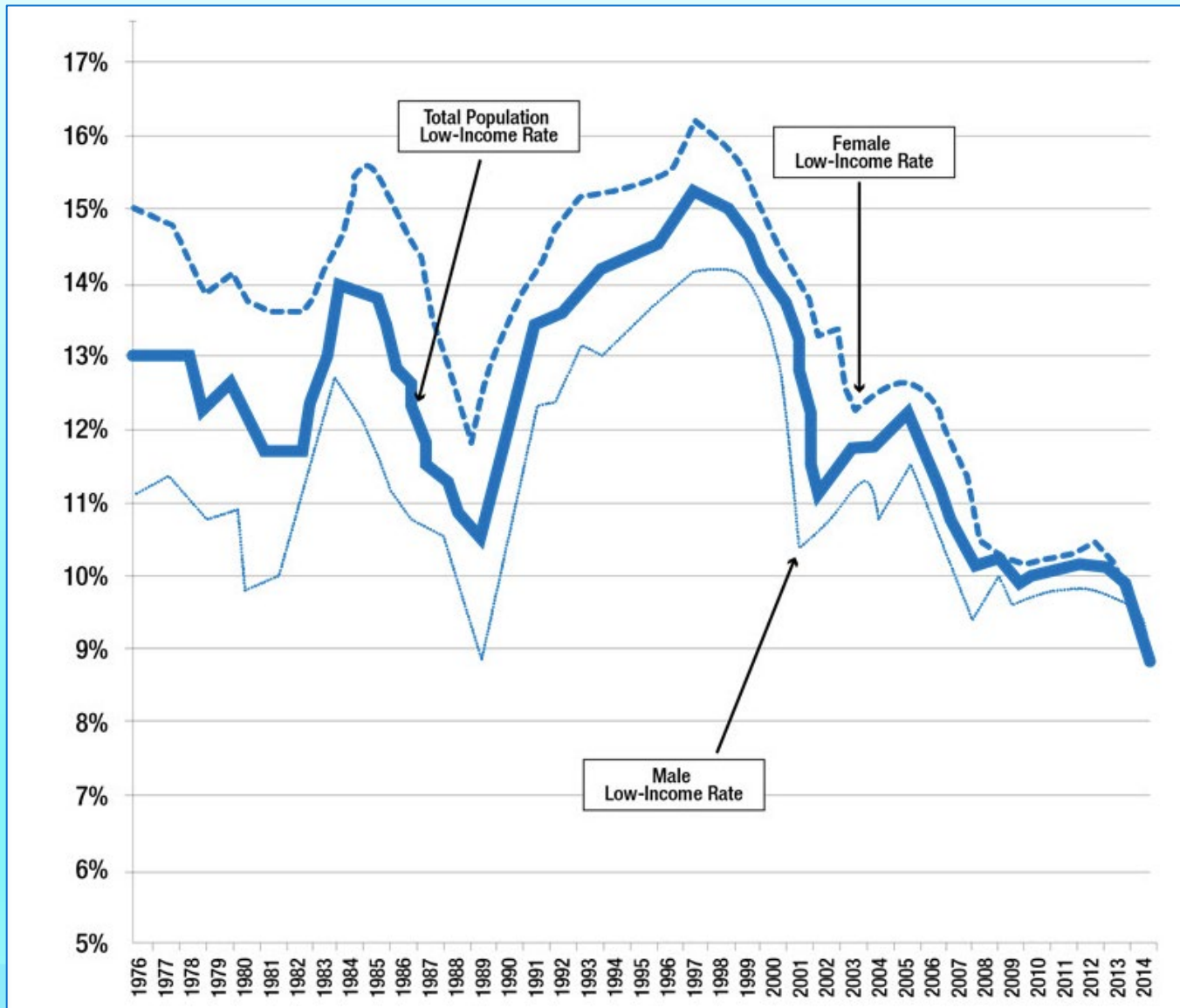
Reality Check – poverty and inequality in Canada



In 2014 a single person would be judged as “poor” if their income were below \$21,773

The Parliamentary Budget Office has costed the basic income for Canada at about \$75 billion per year. If all other support to low income persons is also cancelled, the net cost to the federal government is closer to \$42 billion or about 14% of the total budget

Canada's poverty rate has declined since 1997



Poverty has declined in Canada over the last 30 years.

The gap between male and female poverty rates has narrowed and all but disappeared.

Poverty among Canadian seniors has declined very sharply is now less than Canada's poverty rate for all persons.

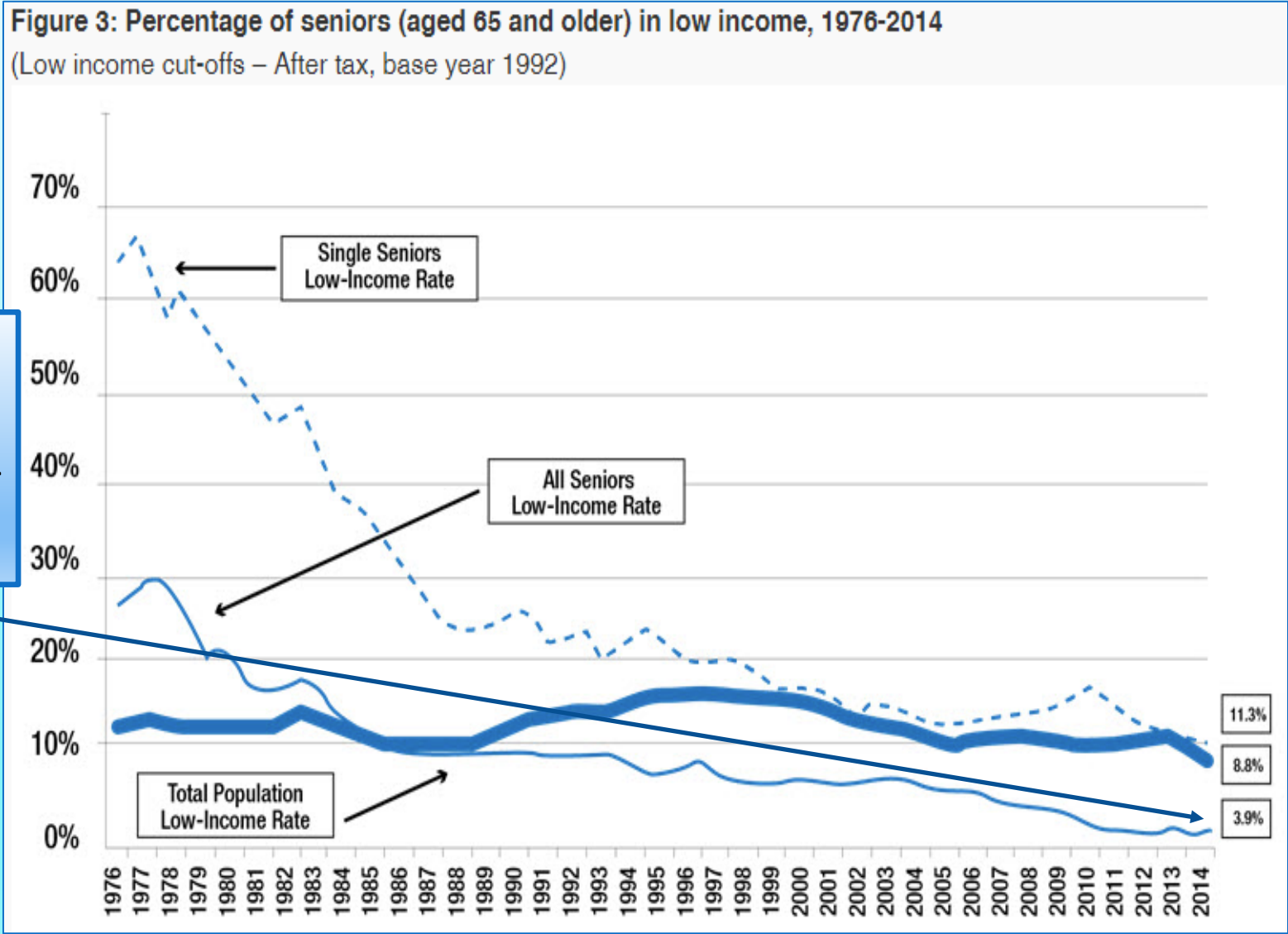
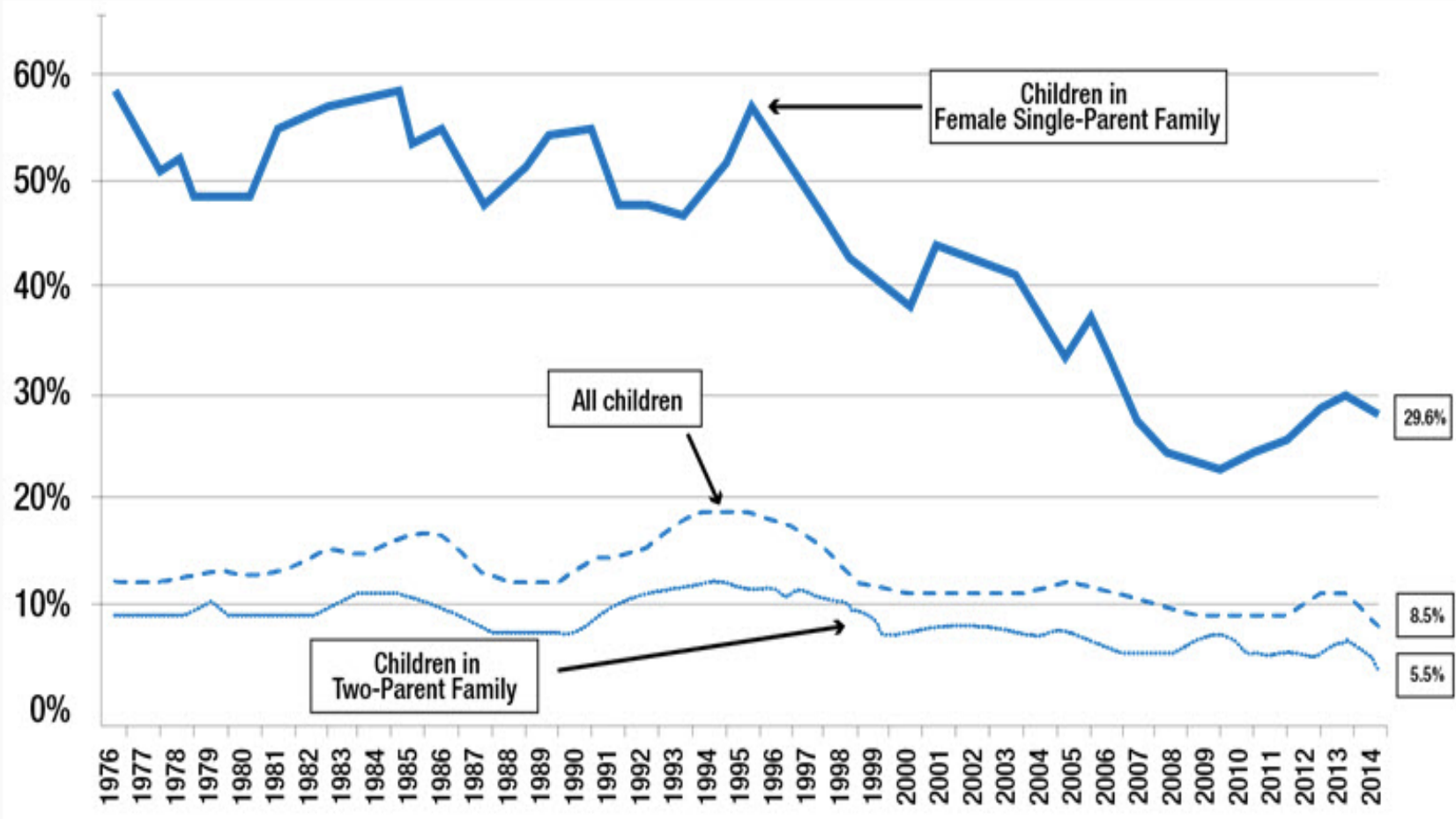


Figure 6: Trends in low-income rates of children (under 18 years old) by family type, 1976-2014
(Low income cut-offs – after tax, base year 1992)



Children in female single-parent families are at most risk of experiencing poverty.

Children in two parent families experience much less poverty than those in single parent families.

Two experiments in basic income

Manitoba Basic Annual Income Experiment (Mincome) 1974-78

Ontario Basic Income Pilot (OBIP) 2017 -

What was (is) unique about Mincome?

- Mincome was and remains a landmark micro-economic longitudinal study.
- It preceded development of the SWH/LMAS/SLID surveys of work history and the long-form census.
- It paralleled other major income maintenance experiments in the United States.

A focus on labour market behaviour conditioned all aspects of Mincome design

- Mincome had two primary and one secondary goal,
1. To “evaluate the economic and social consequences of an alternative social welfare system based on the concept of a negative income tax” ... and
 2. To “examine the labour supply responses of households and individuals to a guaranteed annual income”
 3. Over time, a third not explicitly stated in the design documents, evolved, which was to understand the administrative and logistical challenges involved in implementing such a system across the population.

Mincome was a longitudinal RCT

Research Questions

Mincome focused on testing a single null hypothesis “*a NIT will not reduce labour market attachment*”

All household members over 15 provided details on their labour force participation

Other data collected served as mediators for testing this hypothesis

Over time, researchers attempted to include other research objectives (such as impact on wealth, family relationships...) but these were always seen as secondary to the main purpose of testing labour force attachment.

Structure

Three sites supported the analysis

- Winnipeg (Main site) – Full RCT
- Dauphin – Single plan, volunteer sample
- Rural dispersed – Single plan, random selection

Dauphin is termed a “saturation” site, where all residents with qualifying income and wealth could enrol. Surprisingly, many who were eligible chose not to participate. (over 40%)

The Winnipeg Sample (n=526)

Table 1: Mincome Guarantee Levels and Tax Rates by Plan Type (Just Before Periodic Survey 1): Main Winnipeg Sample

| Guarantee at enrolment, \$ | Tax Rate on Total Income | | |
|----------------------------|--------------------------|--------------------------|-----------------|
| | 35% | 50% | 75% |
| 3,800 | Plan 1 (n = 55) | Plan 3 (n = 61) | Plan 6 (n = 49) |
| 4,600 | Plan 2 (n = 67) | Plan 4 (n = 70) | Plan 7 (n = 29) |
| 5,400 | Plan X | Plan 5 (n = 56) | Plan 8 (n = 45) |
| | | Plan 9 (Control; n = 94) | |

Mincome allocated participants to one of these nine plans using a complex sample design (Watts-Conlisk Model)

A birds-eye view of Mincome

The Baseline survey collected data in 1974/75 on earnings, work history, income, etc. to identify admissible low-income families and determine initial payments

Periodic surveys, approximately every 3 – 4 months tracked labour market, income, and other changes for the household

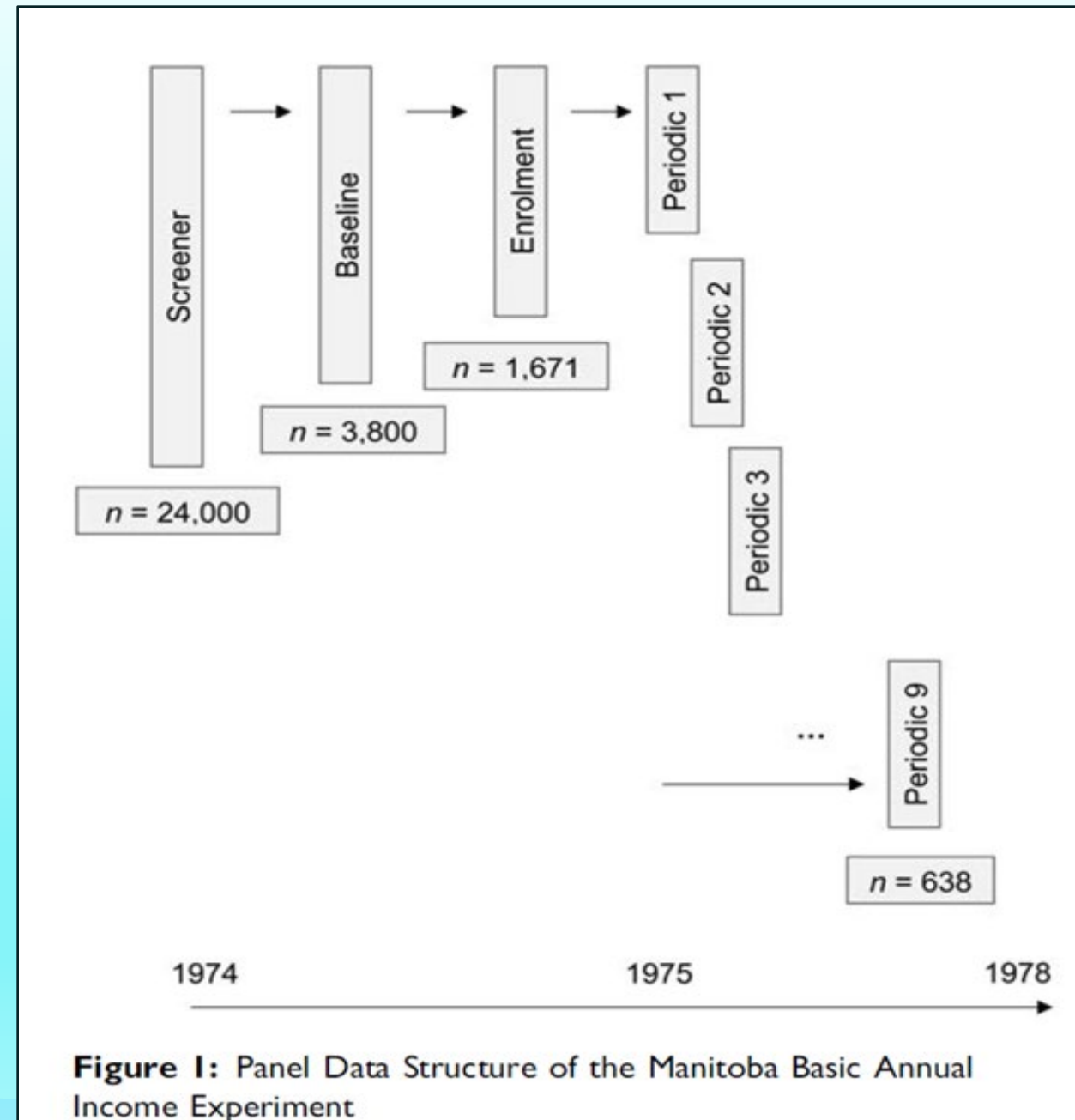
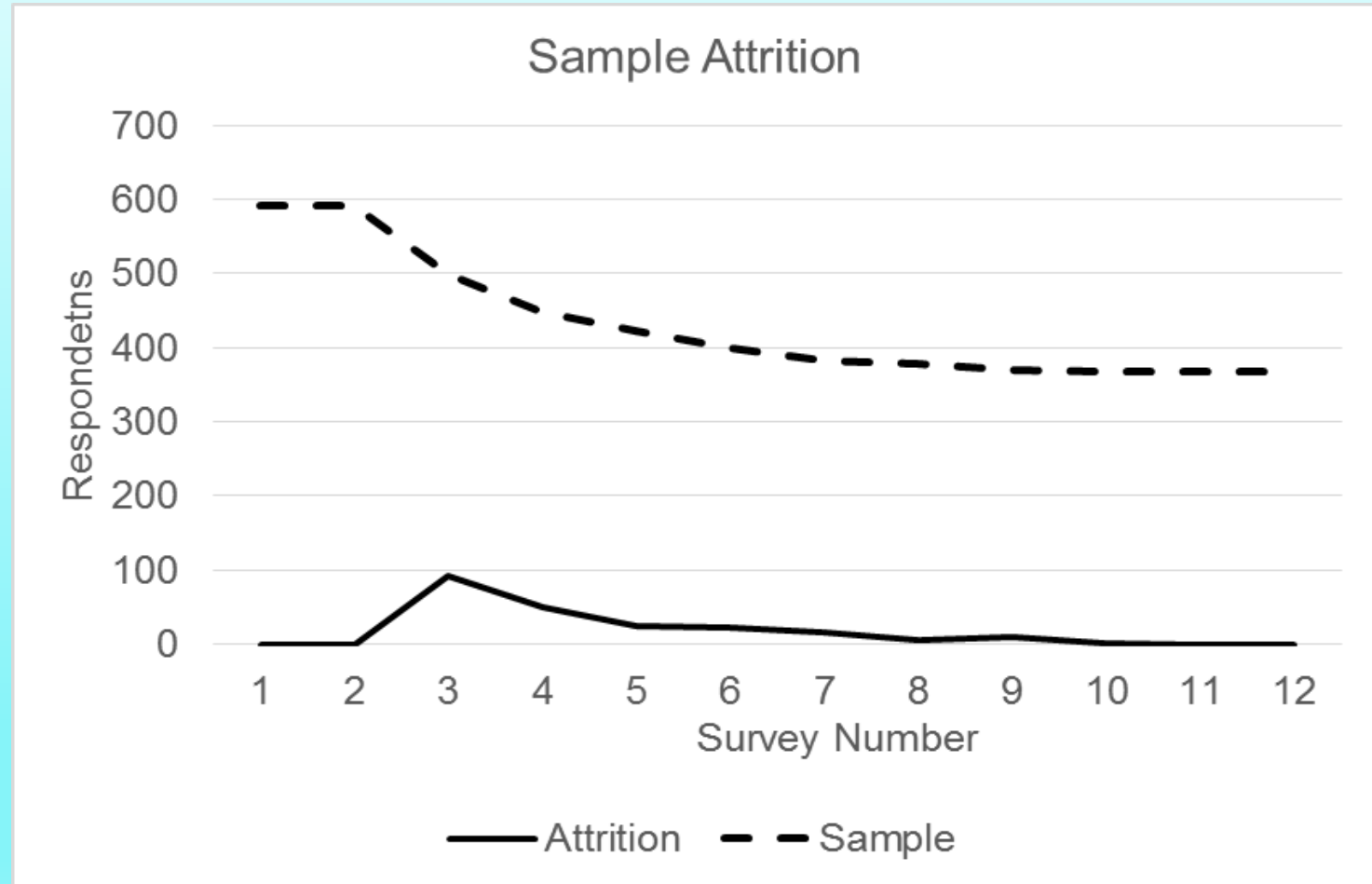


Figure 1: Panel Data Structure of the Manitoba Basic Annual Income Experiment

Survey based longitudinal data's "dirty secret" - Attrition

Mincome samples shrink by about 30% during the panel period

Participants left the experiment for many reasons, but often because their earnings rendered them ineligible for benefits



Mincome Findings

- Mincome/U.S. experiments were designed to answer questions about the work disincentive effects of a negative income tax (guaranteed income) program
- Dispersed Winnipeg sample linked family labour supply response and other data to randomly allocated (?) treatments (differing guarantees and tax rates) plus a control group
- Allow direct estimates of experimental impact
- Modest reduction in work effort ...1% for men, 3% for wives and 5% for unmarried women

Quasi-experimental findings from Mincome

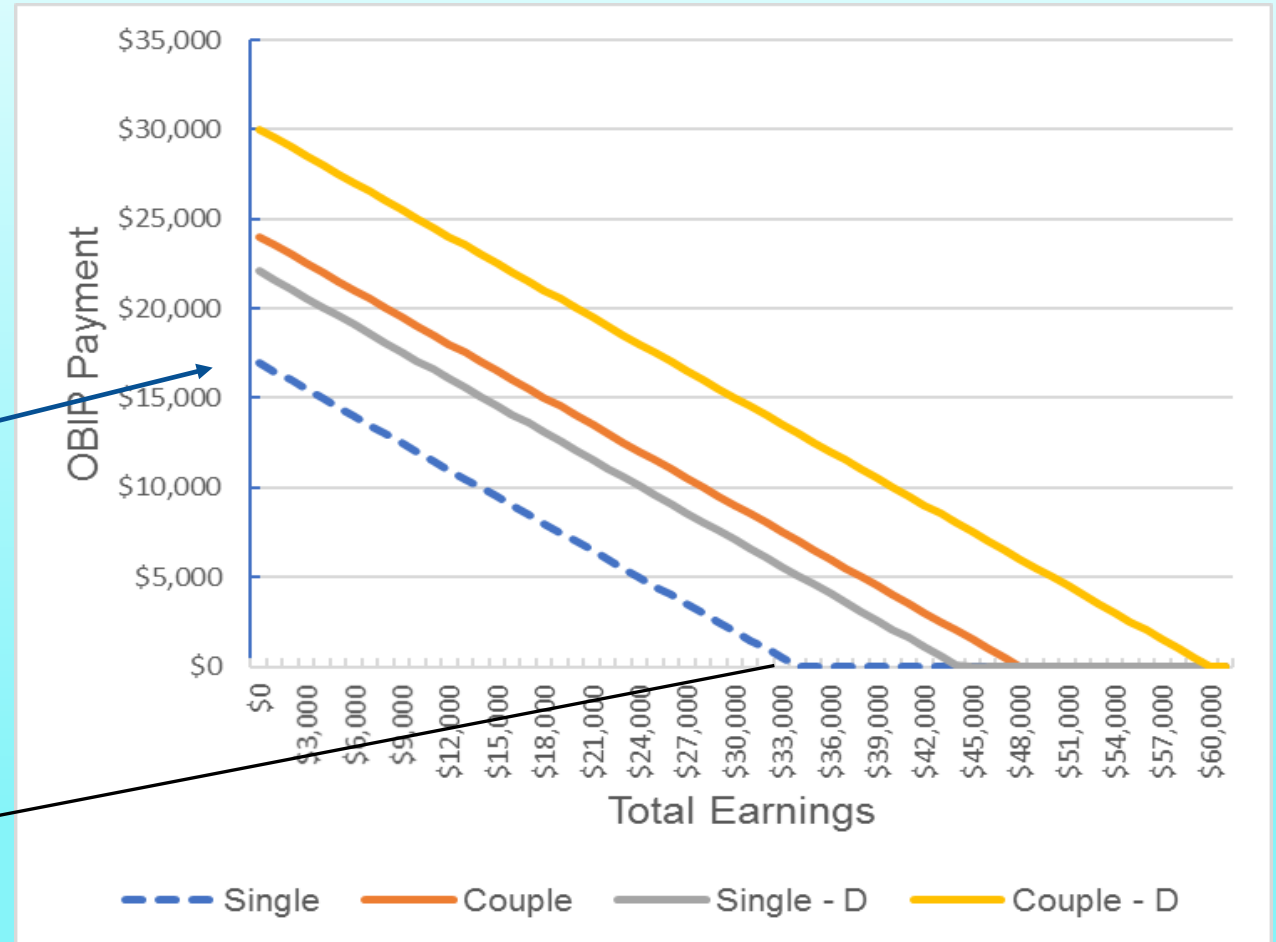
- Administrative health records for Dauphin estimate the impact of Mincome on health behaviour and outcomes.
- This study did not use Mincome data, but aligned health data to Dauphin and developed a matched control group elsewhere in MB.
- Quasi-experimental estimates find that Mincome's "town without poverty" reduced hospitalization rates by 8.5%
- Reduction in
 - accidents and injuries
 - mental health diagnoses

Key lessons for evaluators from Mincome

- Longitudinal survey data can collect a wide array of data generated by designer questions.
- Attrition is will occur and is non-random, implying that statistical correction and control are needed even when the design starts as an RCT.
- Narrow and specific hypotheses support increased experimental control through rigorous sample design.
- Asking questions outside the scope of the experiment and questionnaire, require increasingly artful statistical methods. Confounding will occur as unmeasured external changes affect outcomes.
- Expensive, long term studies try the patience of funders and political sponsors.
- This was the fate of all the major income-maintenance experiments of the seventies.

Fast forward to the Ontario Basic Income Pilot (OBIP)

| Ontario Basic Income Pilot – Maximum Benefits | | |
|---|----------|----------|
| | Single | Couple |
| Maximum Basic Income Amount | \$16,989 | \$24,027 |
| Maximum Basic Income Amount plus Disability Supplement for one person with a disability | \$22,989 | \$30,027 |



At \$33,000 in earnings, a single person exits OBIP

OBIP is a tax free benefit

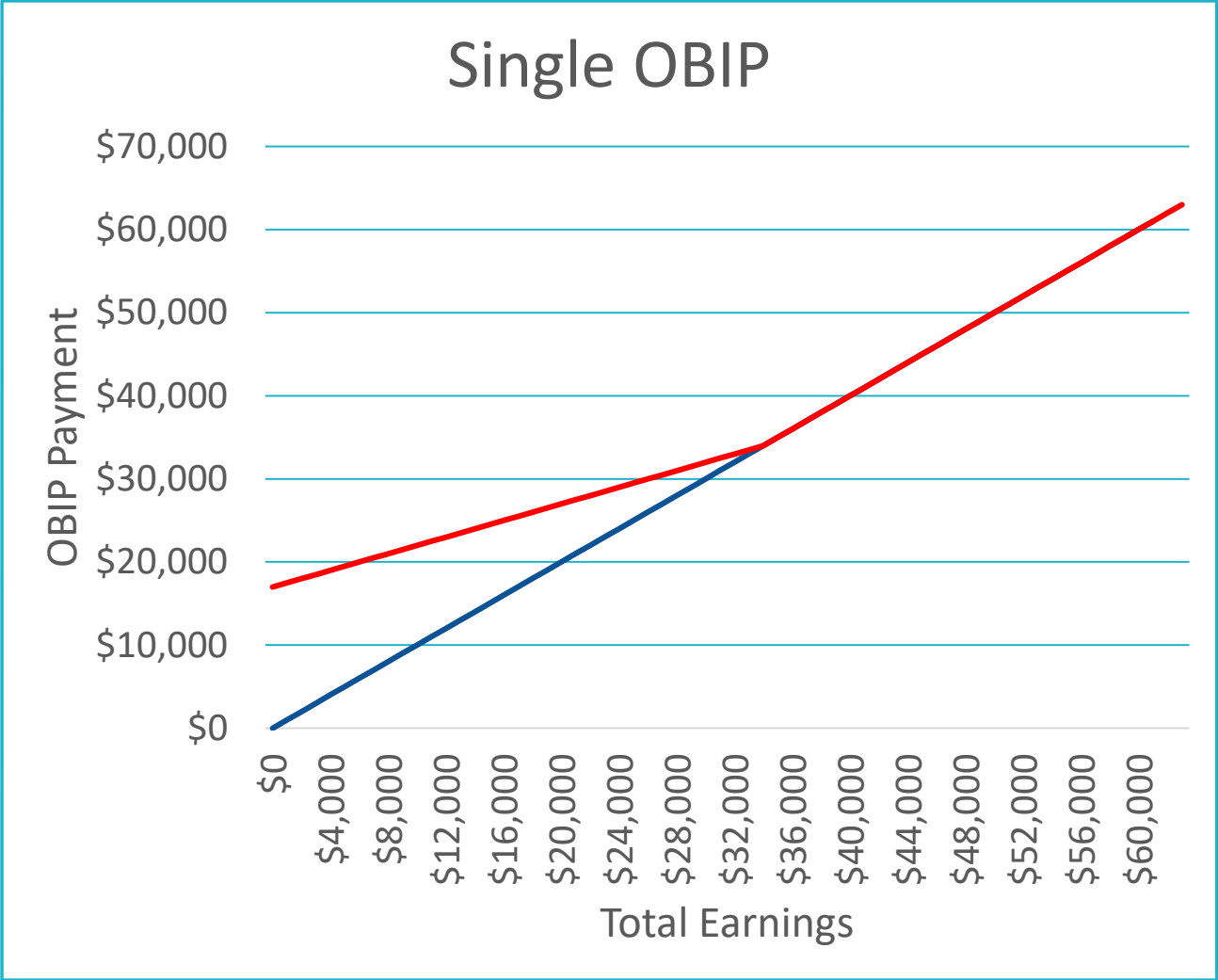
OBIP – Another perspective

For a single person with no income, OBIP provides \$16,989 .

As income rises, OBIP payments fall, until income reaches \$33,000.

As a negative income tax, every dollar of earned income results in a 50¢ reduction of OBIP.

It always pays to work.



Children are covered under the CCB and OCB

Examples:

- A single individual, without a disability, earning \$28,000, will receive a BI payment of \$2,989 to make total income to \$30,989.
- A couple, with one person disabled, and with part time employment between the two of them generating \$16,009, will receive \$22,027 in BI which will leave them with a total income of \$38,027.
- A single parent with two children under 6 and no earned income, will receive a BI of \$16,989 plus the CCB of \$12,800 to reach a total income of \$29,789 tax free.
- In the case of the single individual earning \$28,000, the combined federal and provincial tax (on earnings) will be about \$3,500 reducing their after tax income (with the BI on top) to about \$27,500.

OBIP vs SA (Ontario Works)

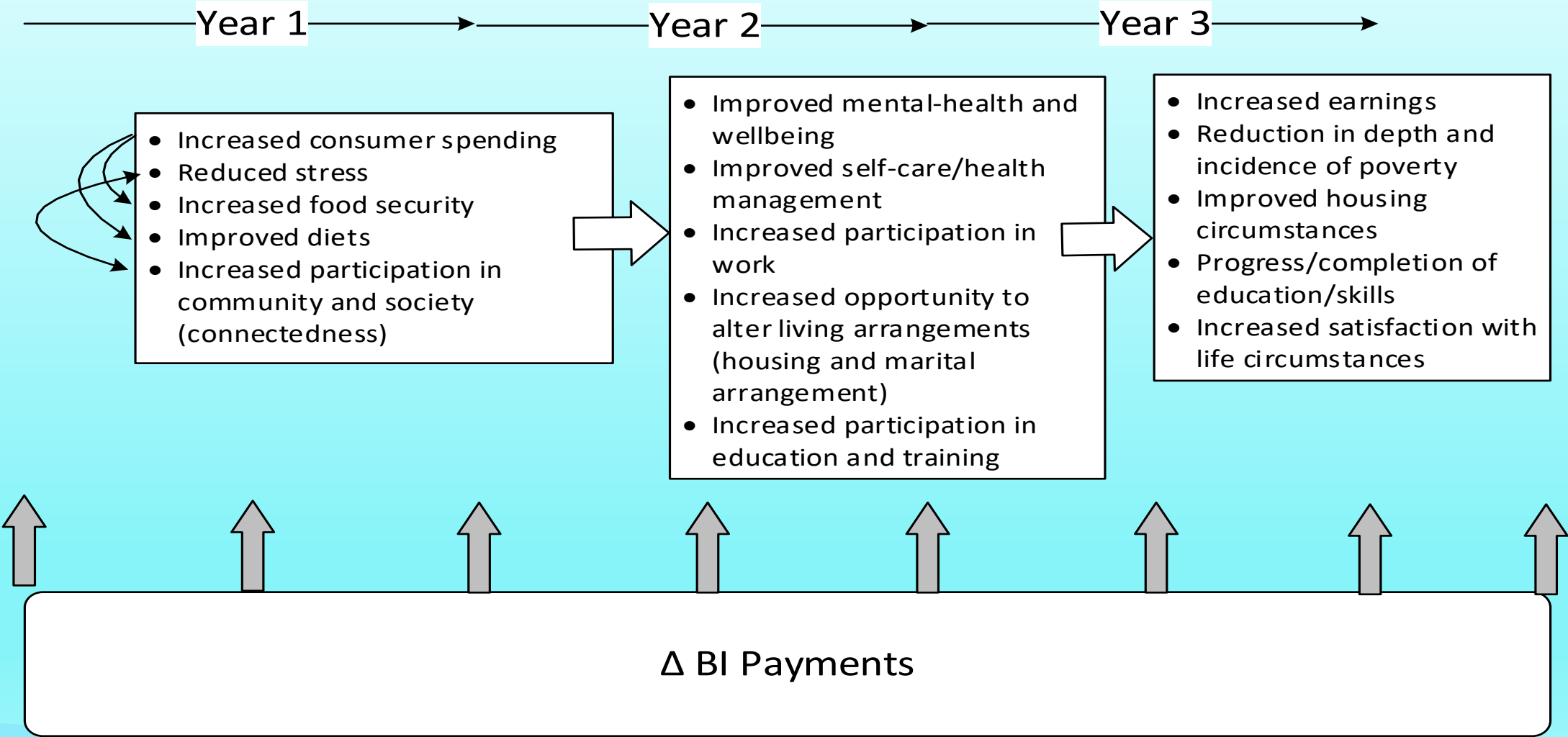
- BI offers more financial support than SA
 - a single person on OW receives \$1100/month and has other benefits (health, employment assistance, housing, etc.)
 - OW has a strict asset test (less than \$2500), with the principal residence exempted.
 - BI does not evaluate wealth.
- Everyone who files a tax return is eligible for the BI immediately experiences the following:
 - Reduce depth and incidence of poverty (higher income and wider eligibility)
 - Be less intrusive
 - Have an incentive to work

Theory of Change

Under OBIP, the goals for a BI have broadened, creating a need for complex evaluation designs

- Immediate outcomes (Year 1)
 - Poverty reduction
 - Increased food security
 - Lower anxiety
 - Educational planning and participation
- Intermediate outcomes (Year 2 and 3)
 - Mental health (self-reported and reduced use of services) should show improvement
 - Less contact with the criminal justice system
 - Marital changes, although the nature is hard to predict .
- Longer-term outcomes (at the end of the pilot) should become manifest:
 - Participants will consume better housing
 - Participants will have increased “connectivity” and purchase a wider range of consumer items
 - Educational initial and successful progress
 - Stable work attachment

Logic Model and Theory of Change



Evaluation Design of OBIP

- OBIP was intended to be an RCT, with two main sites (Hamilton and Thunder Bay) in Phase 1, and then with a saturation site (Lindsay) added in the second year (Phase 2).
- An early problem occurred since those on social assistance (SA) have non-financial benefits. Health benefits (HB) were the most important.
- A key tenet of a basic income is that former SA recipients transitioning to the BI need to pay for a range of goods and services formerly covered.
- Everyone moving from SA to OBIP retained their supplementary health benefits.

| Design matrix | | | |
|---|----------------|----------------|----------------|
| Intervention | | Comparison | |
| Single (WO HB) | Couple (WO HB) | Single (WO HB) | Couple (WO HB) |
| Single (W HB) | Couple (W HB) | Single (W HB) | Couple (W HB) |
| Single D | Couple D | Single D | Couple D |
| WO HB – no health benefits, W HB – health benefits on top of OCIP, D – disabled | | | |

Enrolees will participate in period interviews (every 6 months)

A single respondent reports on behalf of the household

The questionnaire intended to require 20 minutes

Continued participation requires sharing tax returns and participation in the follow-up surveys. Comparison group paid for survey participation

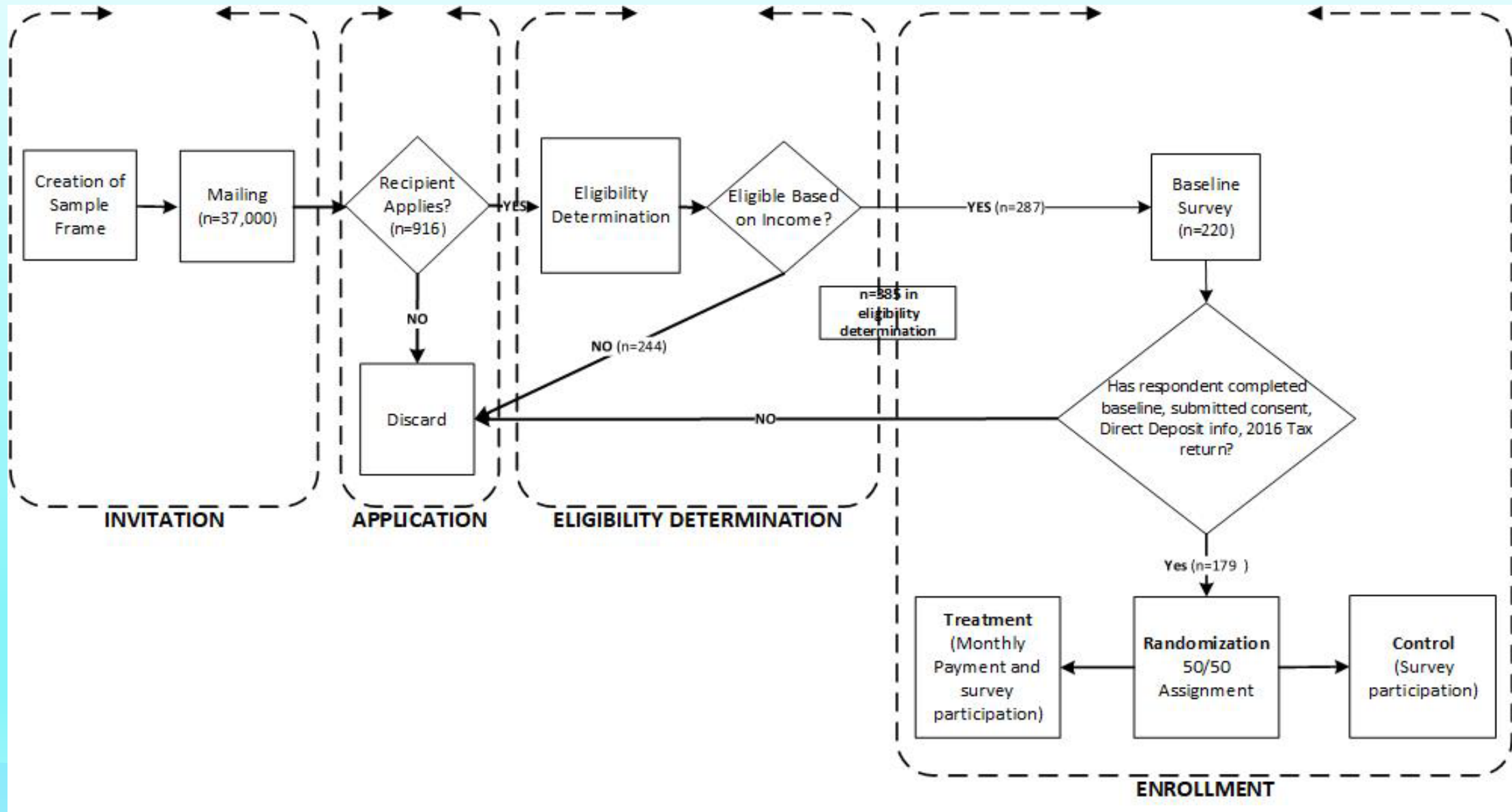
OBIP has two phases

- **Phase 1** (May 2017 – Dec 2017) Baseline
 - Test participation and sample maintenance (Hamilton and Thunder Bay)
 - Assess enrolment procedures
 - Validate questionnaire and survey logistics
 - Guide the development of Phase 2
- **Phase 2** (January 2018 - ?) and included the saturation site – Lindsay
 - Generate periodic samples to support hypothesis testing (Added saturation site at Lindsay)
 - Outcome monitoring
 - Link to health records to assess impacts on mental and physical health
 - Project final cost a province-wide rollout

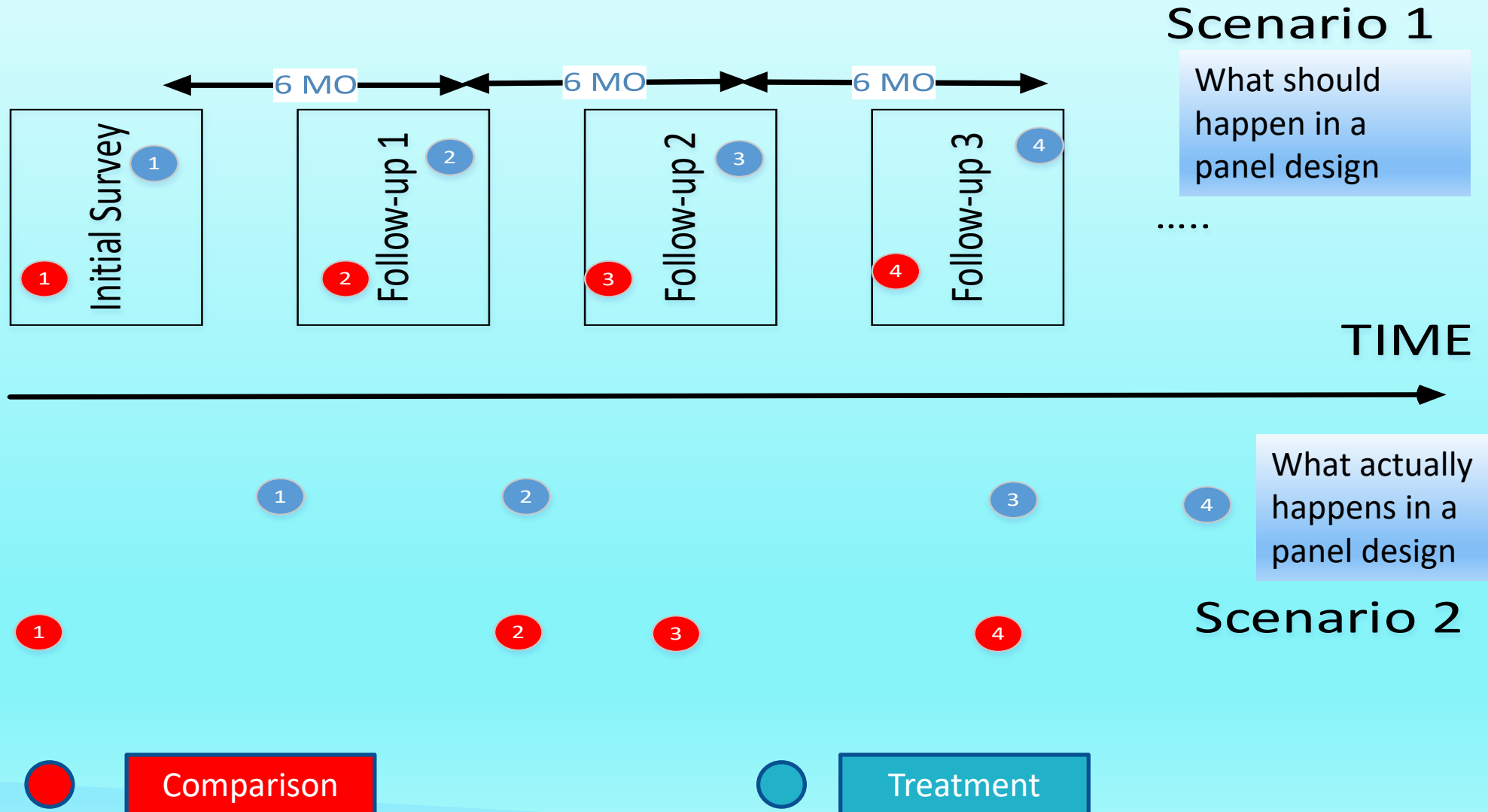
The realities of sample development

- The target sample for Phase 1 was originally 800+ over the two sites
- Initial advice was to replicate the operation of a basic income, by selecting and inviting eligible respondents from the tax returns. This encountered three problems
 - Canada Revenue Agency opposes the use of tax returns to test policy options
 - The Ministry of Finance, does not have the conduct of the basic income in its mandate
 - Most important, social assistance recipients and many low income households do not file an income tax return.
- The next option was a targeted mailing to low-income areas (census enumeration areas), but this was rejected because this would omit low-income households in high income areas.
- The selected approach was to randomly mail a sample of households in each area, but was very unproductive and costly.
- The final enrolment technique used samples generated by invitations by community organizations.

OBIP Enrolment



RCT Panels must align



Specific Lessons from OBIP

- The enrolment process was mind-bendingly complex and convoluted (Privacy lawyers were determined to earn their pay)
- Invitations to potential respondents read at a second year university level, and never got under grade 10 reading ease.
- The complex theory of change required a marathon questionnaire
- Many concepts used in the questionnaire that seemed clear, created all manner of ambiguity
- The use of sites is an unnecessary complication for evaluating a universal program
- On-line surveys should work in principle, but the fact is that most respondent preferred paper surveys submitted by mail
- Household composition is very hard to record and track
- Single instances can create political liabilities (single gamers, living free in their parent's basements, earn \$16,000 to eat cheezies and kill zombies on-line)
- The focus was more on enrolling and not the on-going data collection. Every enrollee creates future obligations to follow-up
- OBIP will become ever more expensive
- The sample distortions and panel irregularities will require complex inferential analysis, negating the analytical value of the

General Lessons Learned - We plan, God laughs

- Both experiments offers important lessons on conducting a basic income pilot
- Politics is paramount
 - With Mincome cost and the lack of results created a political liability and both Manitoba and Canada pulled out.
 - With OBIP the overwhelming need was start mailing checks... four consequences
 - OBIP became a social program and not a tax program
 - The theory of change reflected a wide range of interests – outcomes are “Hail-Mary”
 - The integrity of the RCT design was thrown overboard as enrolment stalled
 - Casual inference will need to rely on “stathocery” (statistical adhocery)
- Many SA recipients are “satisfied” with the system. The working poor tend to mistrust government
- An eventual economy wide roll-out may need to maintain SA as a transition, increasing overall implementation costs.
- Answering the important outcome questions requires a three year (minimum) evaluation period...governments and the public are impatient.