

Persistent inequities in access to immediate breast reconstruction following mastectomy for breast cancer: A population-based study in Ontario, Canada

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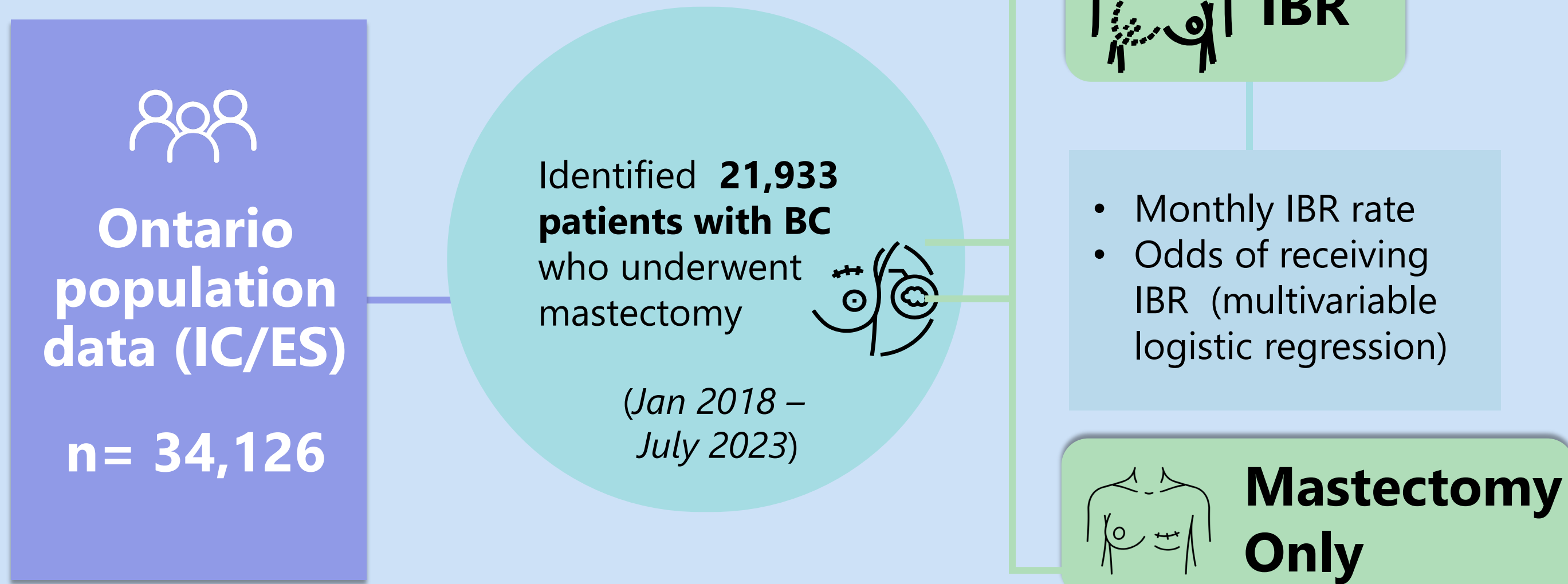
BACKGROUND

- There has been an **effort to increase access to immediate breast reconstruction (IBR)** for breast cancer (BC) in Ontario, Canada over the past decade.
- Despite this, **patients from equity-deserving groups** such as those who are racialized, living in rural areas, or from a lower socioeconomic status are less likely to receive IBR.

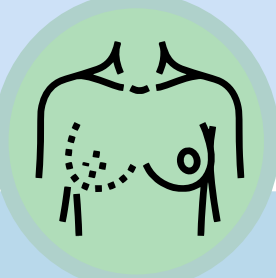
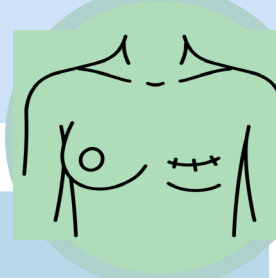
OBJECTIVE

To explore **temporal trends, regional variations, and sociodemographic factors** among patients with BC undergoing mastectomy with or without IBR in Ontario.

METHODS



RESULTS

Patient Characteristics	IBR 	Mastectomy Only 
	26.3% (n=5,758)	73.7% (n=16,175)
Mean Age (years)	52.8 ± 12.0	63.6 ± 14.0
Stage	1-2: 72.7% 3-4: 5.9%	1-2: 62.6% 3-4: 15.1%
Rural Residence	6.8%	11.7%
Material Deprivation (quintile)	Q1: 30.0% Q5: 12.5%	Q1: 20.6% Q5: 18.0%
Region	High: Toronto 25.3% Low: North West 1.2%	High: West 30.2% Low: North West 1.5%

Interpretation

- 1 in 4** patients received IBR (**20.9%** in 2018 to **30.0%** in mid-2023)
- Patients undergoing IBR were significantly **younger** (p<.001)
- Patients undergoing IBR had **earlier stage** cancer (p<.001)
- Fewer** patients living in **rural** areas received IBR (p<.001)
- IBR was more common in **wealthier** (Q1) groups (p<.001)
- Wide **regional variation** existed (p<.001)

Figure 1. Ontario Health (OH) regions

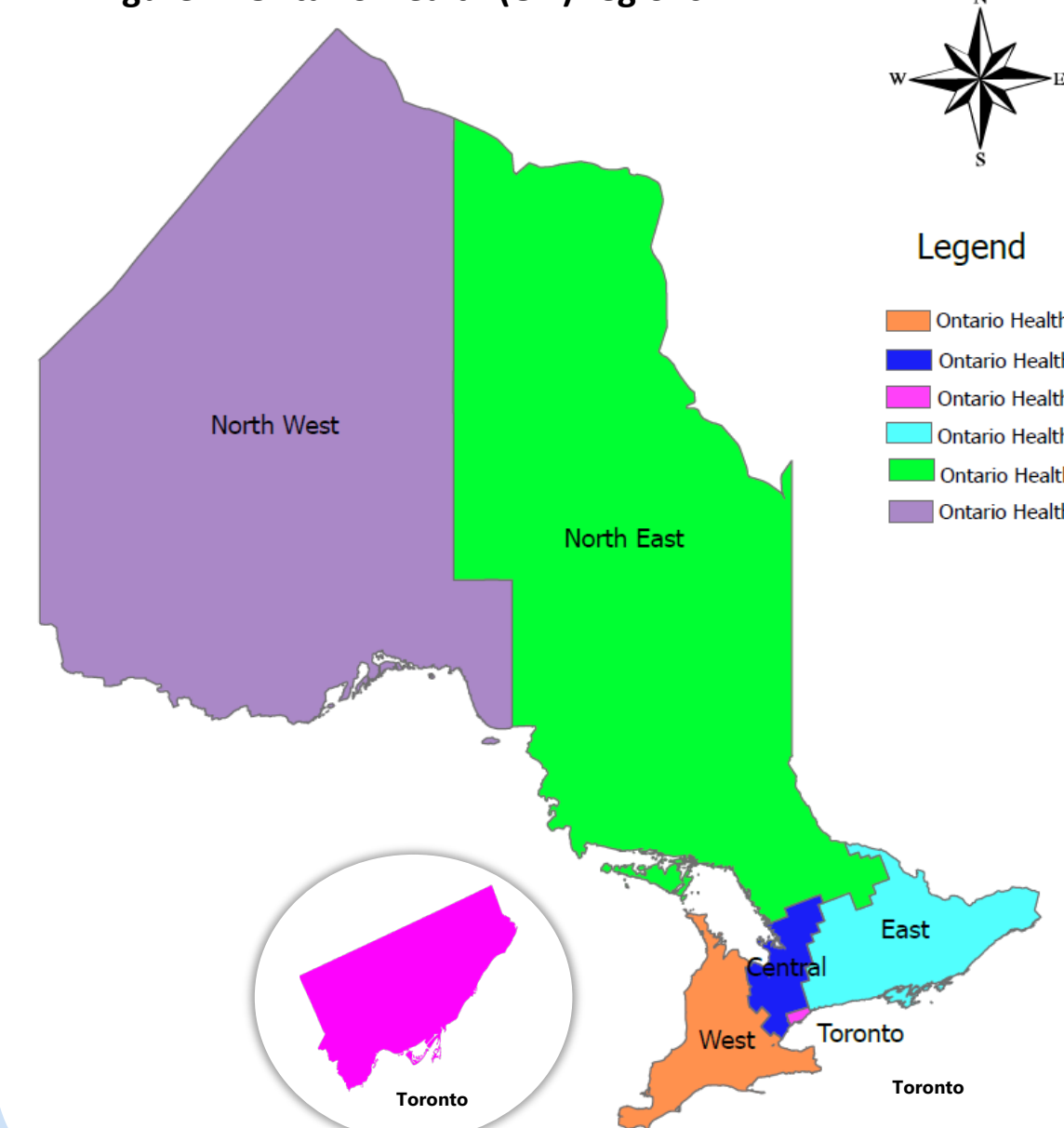
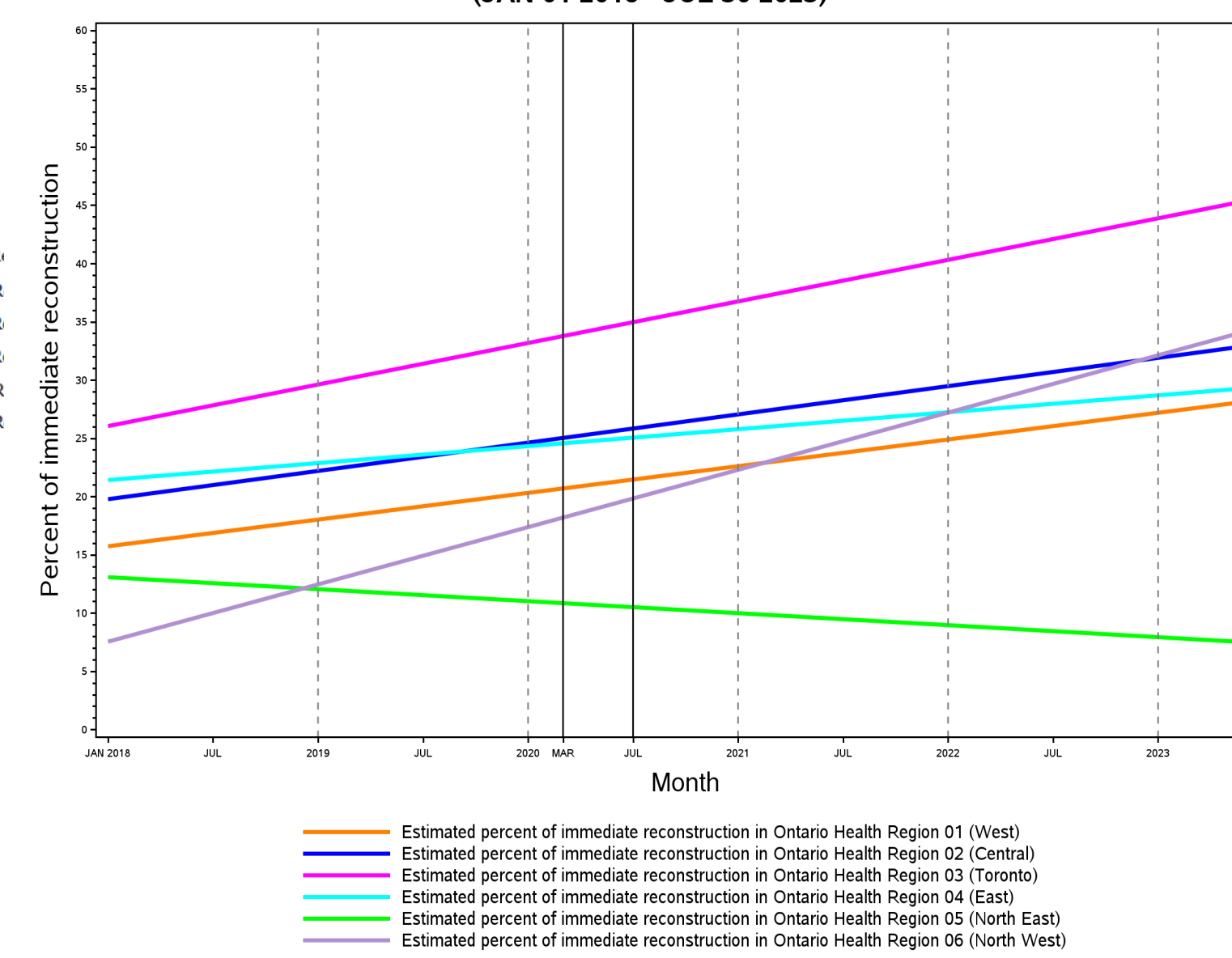


Figure 2 - Percent of immediate reconstruction in cancer related mastectomies per month (JAN 01 2018 - JUL 30 2023)



Factors associated with IBR

- Older patients were less likely to undergo IBR**
aOR 0.52 (per 10 years, 95% CI 0.51-0.54)
- Toronto had the highest rate of IBR**
aOR 0.22 (OH region 3vs5, 95% CI 0.18 - 0.28)
- Immigrants were less likely to undergo IBR**
aOR 0.70 (95% CI 0.65 - 0.77)
- Patients in wealthier areas were more likely to undergo IBR**
aOR 2.16 (Q5vsQ1, 95% CI 1.94-2.42)
- Patients who received neoadjuvant chemotherapy were less likely to undergo IBR**
aOR 0.54 (95% CI 0.50-0.58)
- Patients with frequent hospital visits (non-cancer related) were less likely to undergo IBR**
aOR 0.42 (95% CI 0.32-0.56)

CONCLUSION

Despite universal healthcare, access to IBR in Ontario remains inequitable with significant disparities based on **region, income level, and immigration status.**

Improvements in surgical capacity alone may be insufficient; further work to ensure **deliberate and targeted health system reforms** are needed to ensure equitable, patient-centered delivery of IBR.