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Do Guidelines Influence Physician Behaviour? Case Study of MMT in British Columbia: 1996-2007

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Clinical Practice Guidelines

- Evidence-Based Medicine has led to an explosion in Clinical Practice Guidelines
  - Based on Evidence and Best Practices
  - Limited evidence for impact on practice
  - Improved by incentives and monitoring

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Methadone Maintenance Treatment

- Long history of availability in Canada (since 1959)
- Rapid expansion in availability since 1995
- Shift from Federal to Provincial oversight has led to guidelines linked to training and monitoring

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Guideline Support

- Specific exemption required to prescribe
- Training prerequisite
- Annual training event available following exemption
- Peer-based audits based on guidelines
- Exemptions renewed based on audits

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BC MMT Guidelines

Starting Dose

- Non-tolerant/opiate naïve: 5-10mg pd
- Unknown Tolerance: 15-25 mg pd.
- Known Tolerance: 20-40 mg pd.

Stabilization (Titration) Phase

- Dose adjustments: 5-10mg range, not more frequently than every 3-5 days.

Maintenance Phase

- Most patients will achieve stability on doses between 60-100mg daily.

Carry Policy

- Recommended that carries not exceed 4 days or 400mg.
- Criteria: clinical stability (incl. urine drug screens free of all mood-altering drugs for a min. of 12 week)

Tapering Phase

- Maximum weekly reduction should be no more than 5% of total dose

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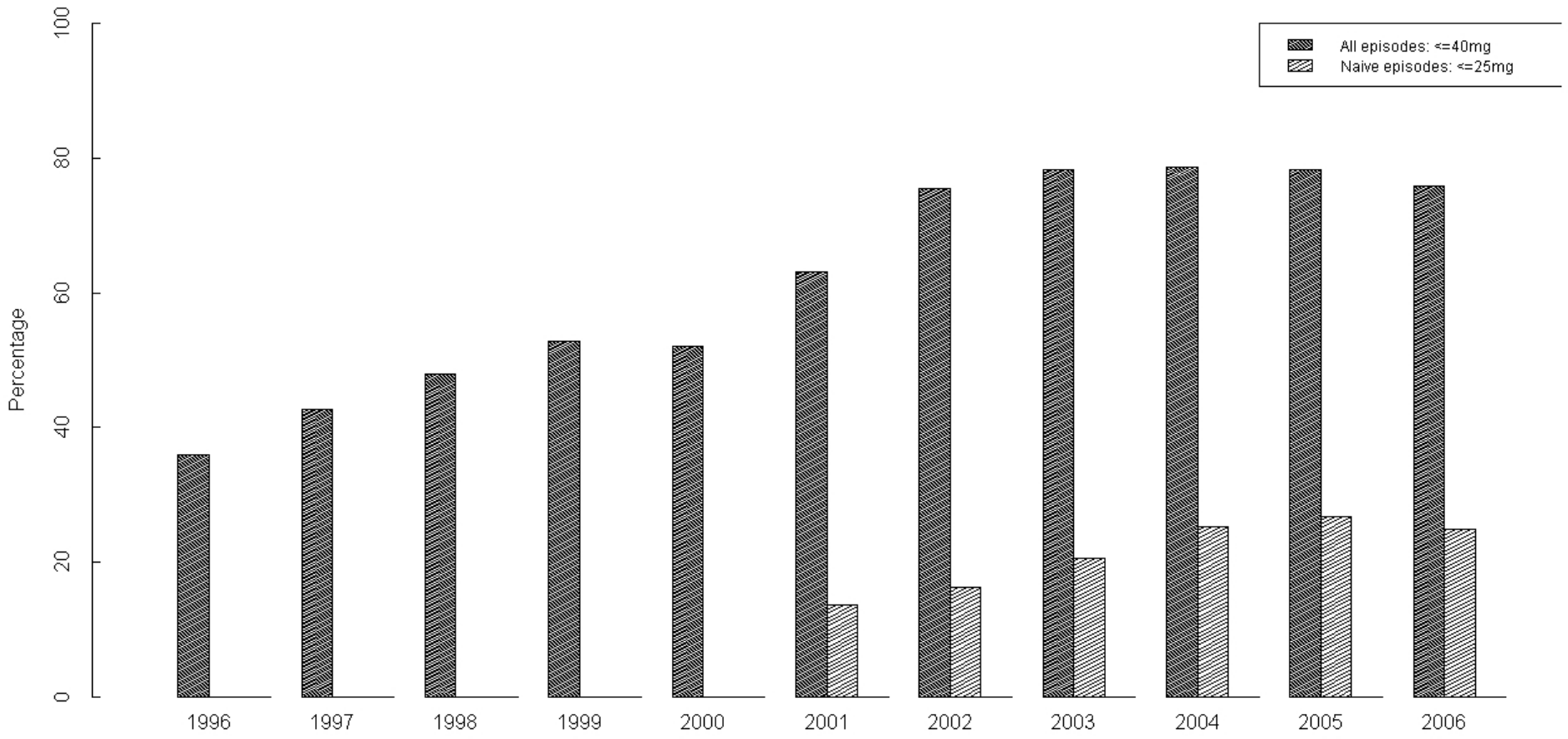
PharmaNet Data Analysis

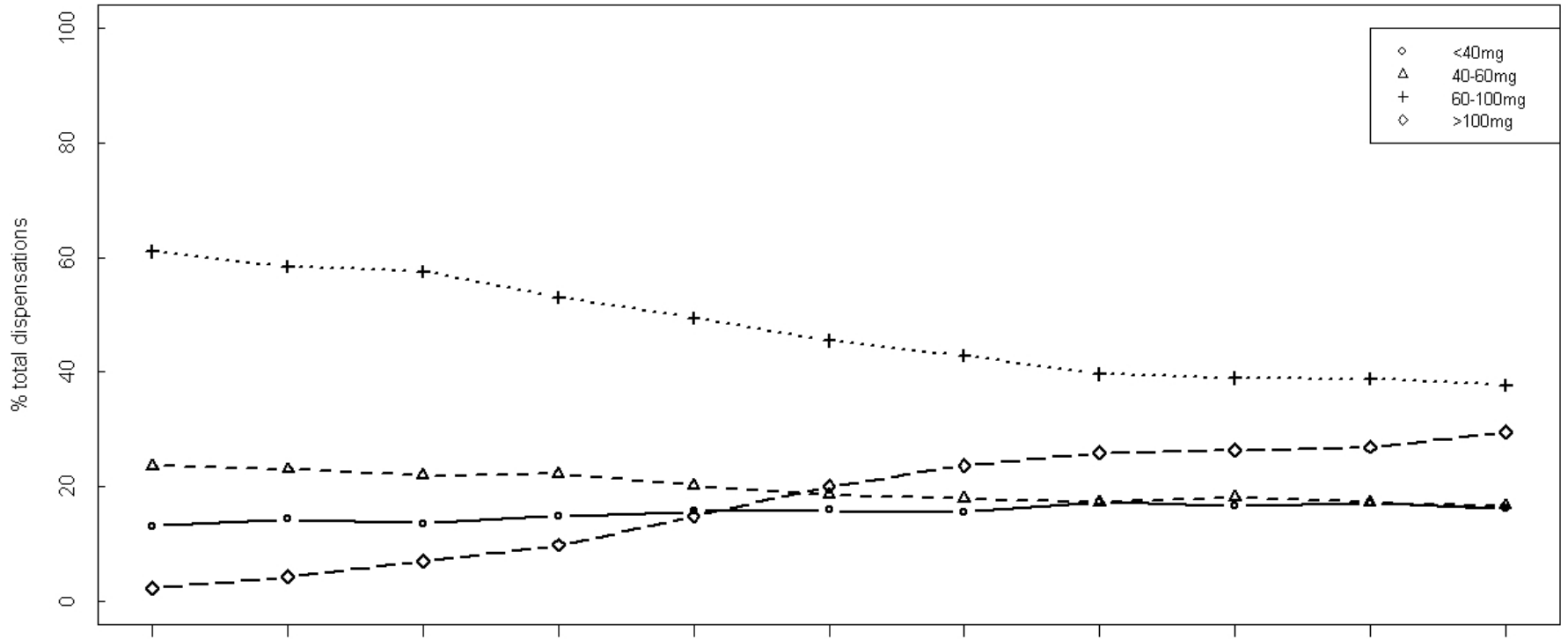
- Every individual residing in British Columbia who received at least one prescription of methadone for opioid maintenance between January 1st, 1996 and December 31st, 2006.

- All PharmaNet data (including other prescription drug utilization) for **18,160** patients, comprising **34,725** methadone maintenance treatment episodes (i.e. **11,031,480** doses).

Adherence to Starting Dose

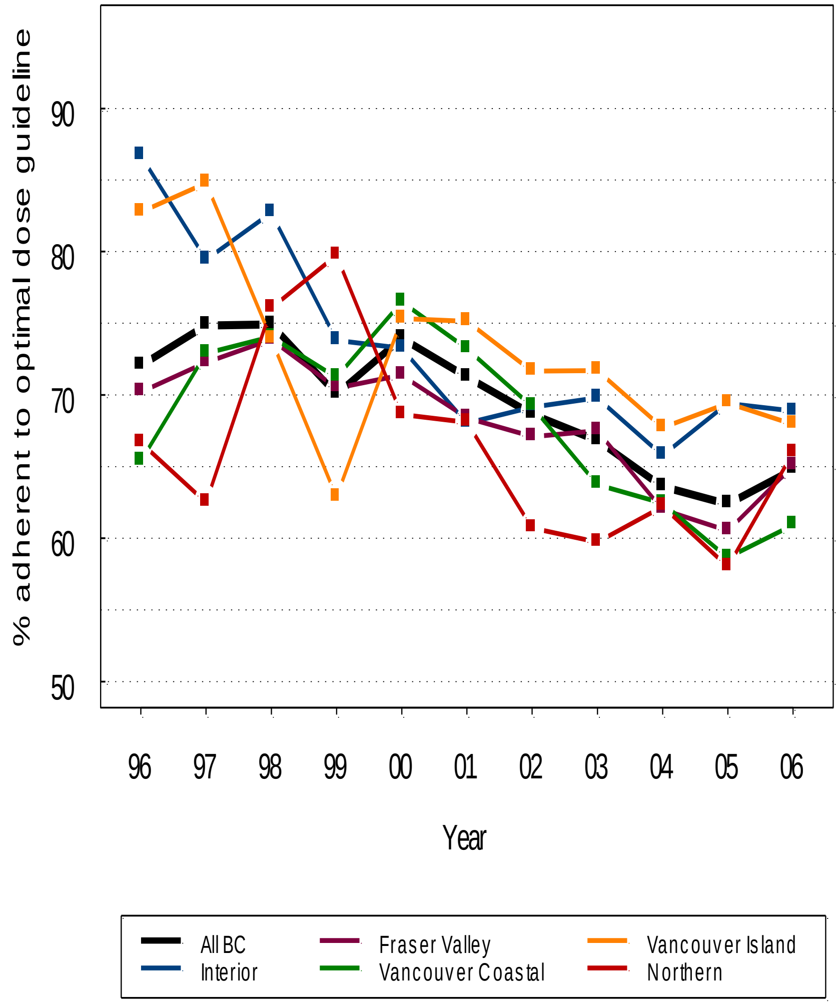


Daily Dose Distribution



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
pat (1000s)	2.83	3.83	4.96	6.33	7.32	8.1	8.76	8.45	8.84	9.14	9.6
disp (100,000s)	2.8	3.84	5.05	6.53	8.27	11.16	13.7	13.55	14.19	14.58	15.5

Adherence to Dosing Guidelines



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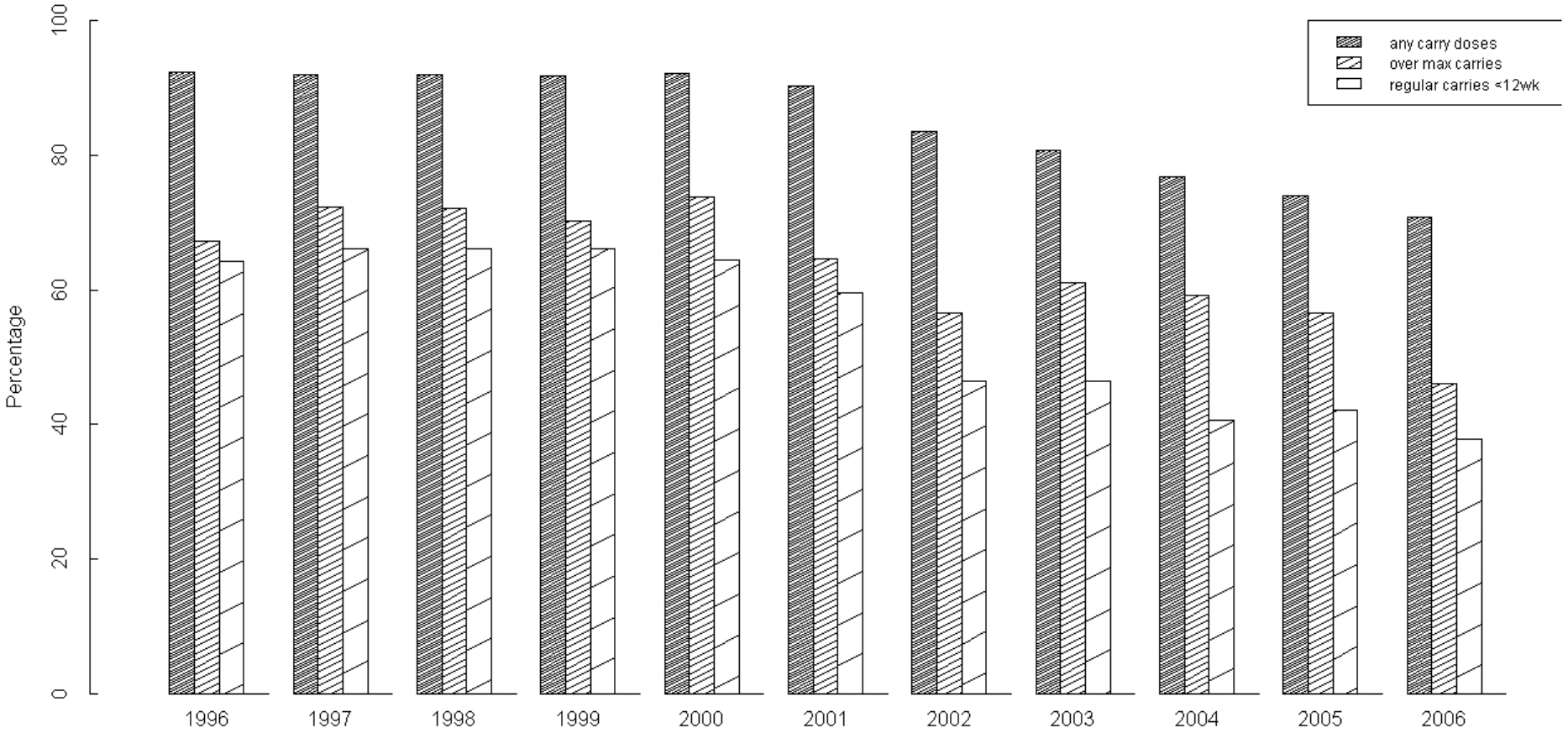
Adherence with Carry Guidelines



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Adherence to Guidelines: Summary of Results

- Improvements over time, across all regions in adherence to:
  - Start dose guideline (40 -> 80%)
  - Titration guideline (40 -> 60%; exc. Interior)
- Carry guidelines adhered to less frequently in rural regions (Northern, Interior, VI) –
  - Implication: less stringent restrictions may be appropriate
- Lower adherence to Optimal dose guideline (70-65%)
  - Driven by Fraser, VC: 75% in 2000, 60% in 2006

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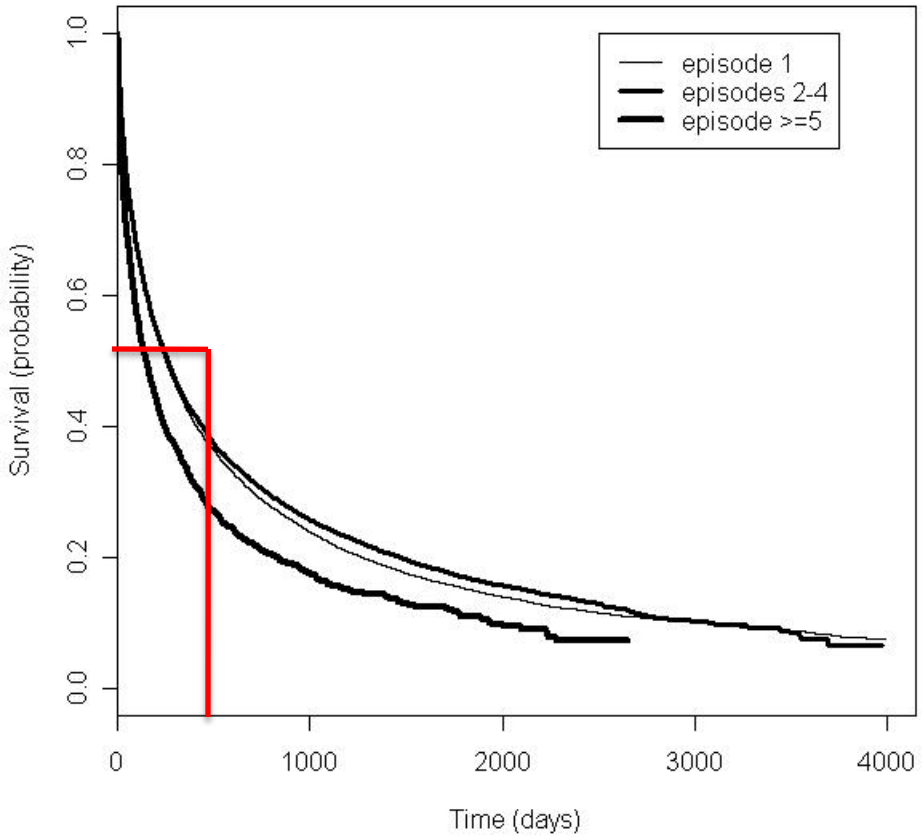
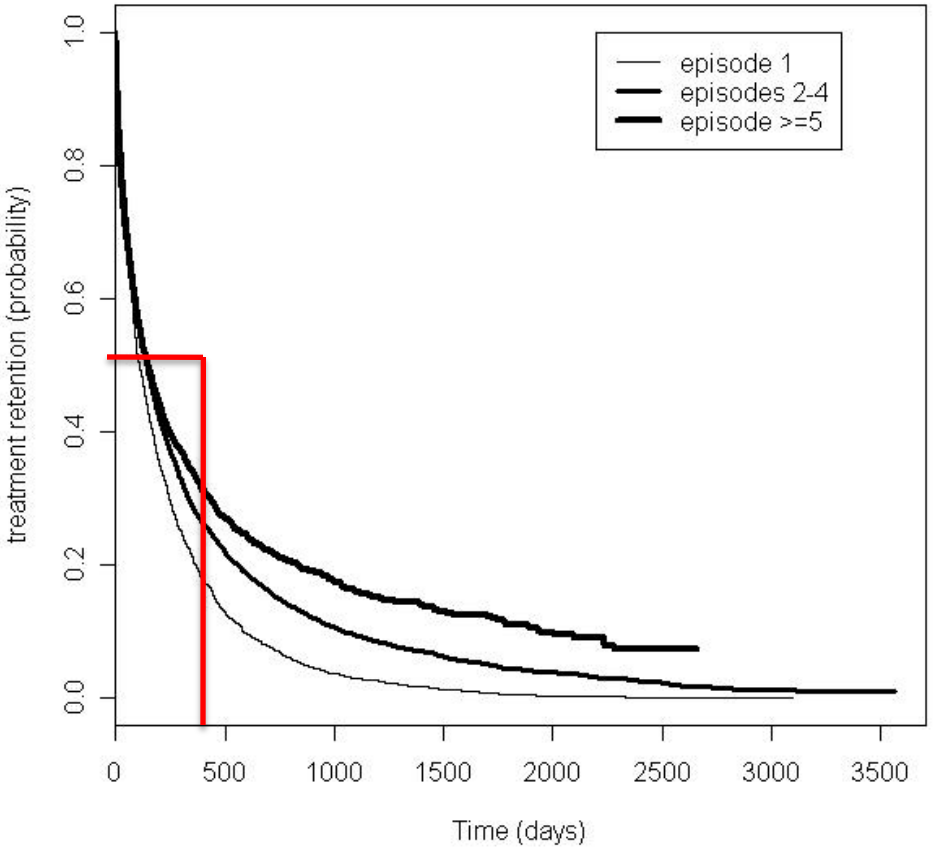
Time to discontinuation by episode

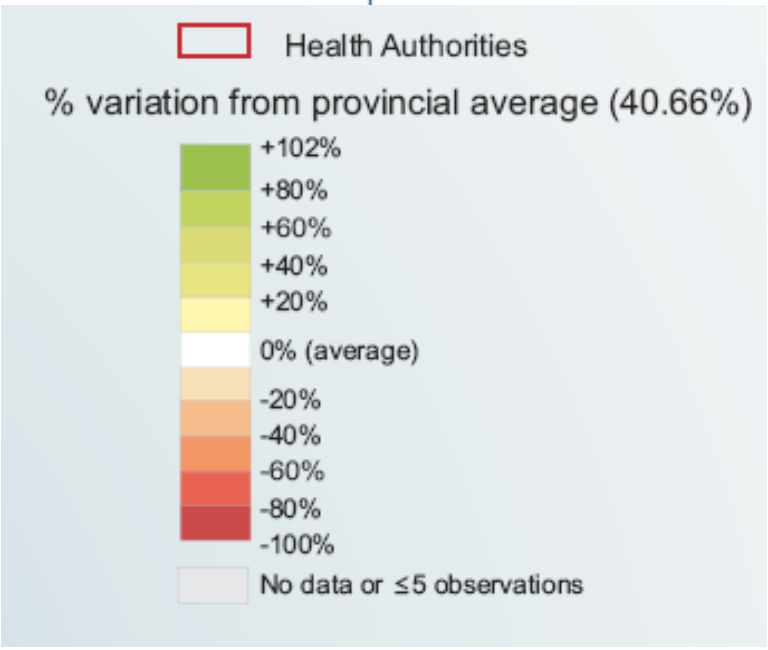
Overall

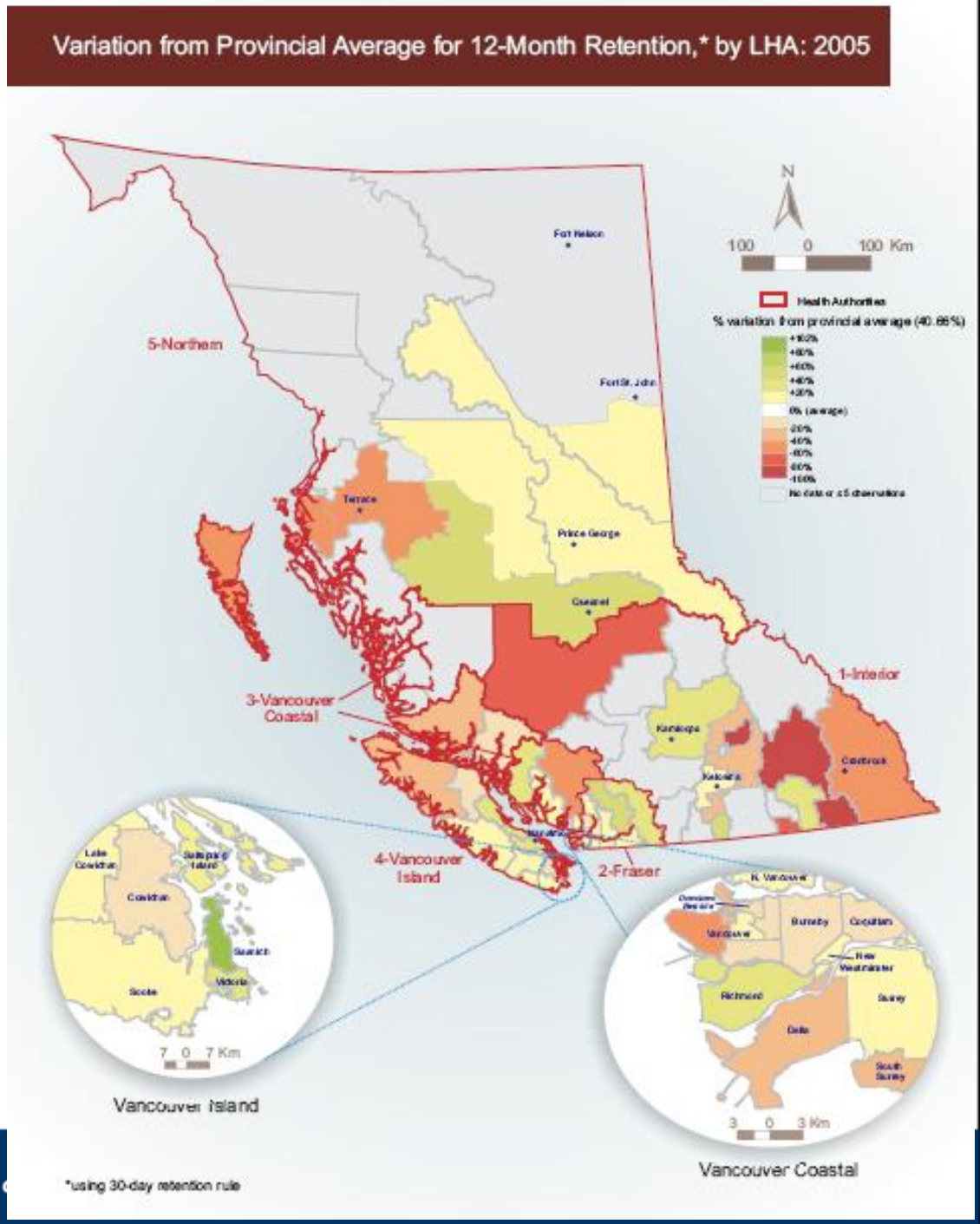


Individuals with >= 4 episodes



- Variation from provincial average
- Green = good (positive numbers)
- Red = bad (negative numbers)
- LHAs with <5 episodes not shown





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Key Messages

- MMT ideal candidate for evaluation of impact of Clinical Practice Guidelines
- Some positive changes in practice patterns over time
- Even with requirement for training and peer-based audits coupled to potential loss of prescribing, adherence with guidelines and treatment outcomes suboptimal

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Acknowledgements

- Co-Investigators and Collaborators:
  - Aslam Anis, Health Economist, UBC
  - Ying MacNab, Statistician, UBC
  - Martin Schechter, Epidemiologist, UBC
  - Sonia Sizto, Research Associate, CHEOS
  - Huiying Sun, Statistician, CHEOS
- Funding:
  - BC Ministry of Health Planning
- Logistical Support
  - Centre for Health Evaluation and Outcome Sciences
  - Centre for Addiction Research BC