



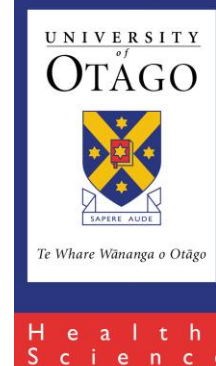
Projecting Smoking Prevalence in New Zealand and Scope for Achieving the Government's Smokefree Nation 2025 Goal

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Ikeda T, Cobiac L, Wilson N, Nghiem N, Blakely T. Projecting Smoking Prevalence
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Tobacco-free Aotearoa Conference 2012, 8-9 November 2012, Wellington.



Background

To achieve the National Smokefree 2025 Goal – NZ may need to consider additional plans beyond current activities

This presentation aims to see if NZ trends in initiation and cessation are sufficient to achieve a 5% smoking prevalence by 2025, and if not, what magnitude of change in initiation and cessation is required

Note that the results in this presentation are preliminary.

Methods

- Adapted a dynamic forecasting tobacco model for Australia^(Gartner et al, 2009) to NZ
- Markov model designed in Excel
- Input data:
 - Smoking prevalence from '81, '96, '06 censuses to determine past initiation/cessation
 - Annual birth projections
 - Life tables
 - Smoking relative risks from CPS II (USA)
 - Population

“Initiation” in this model is...

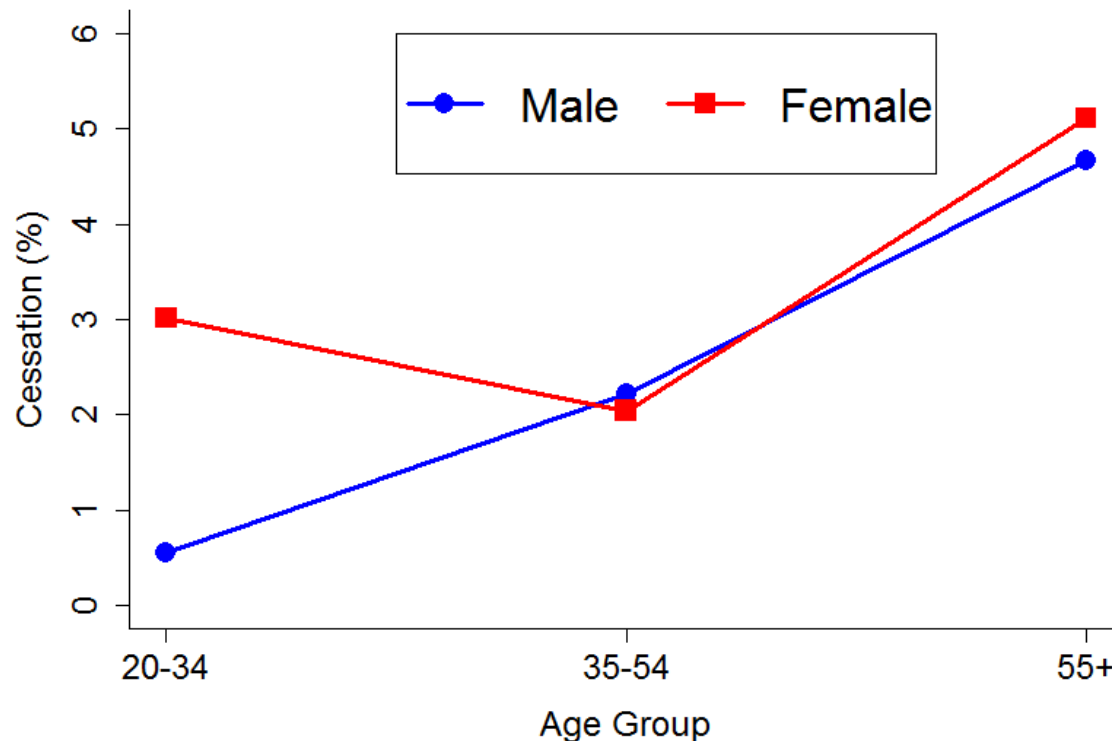
- the proportion of people at age 20 who smoke

		1981	1996	2006
Smoking prevalence (%)	M	40	31	32
	F	40	33	28
Annual % decline	M	-	1.6	-0.1
	F		1.3	1.6

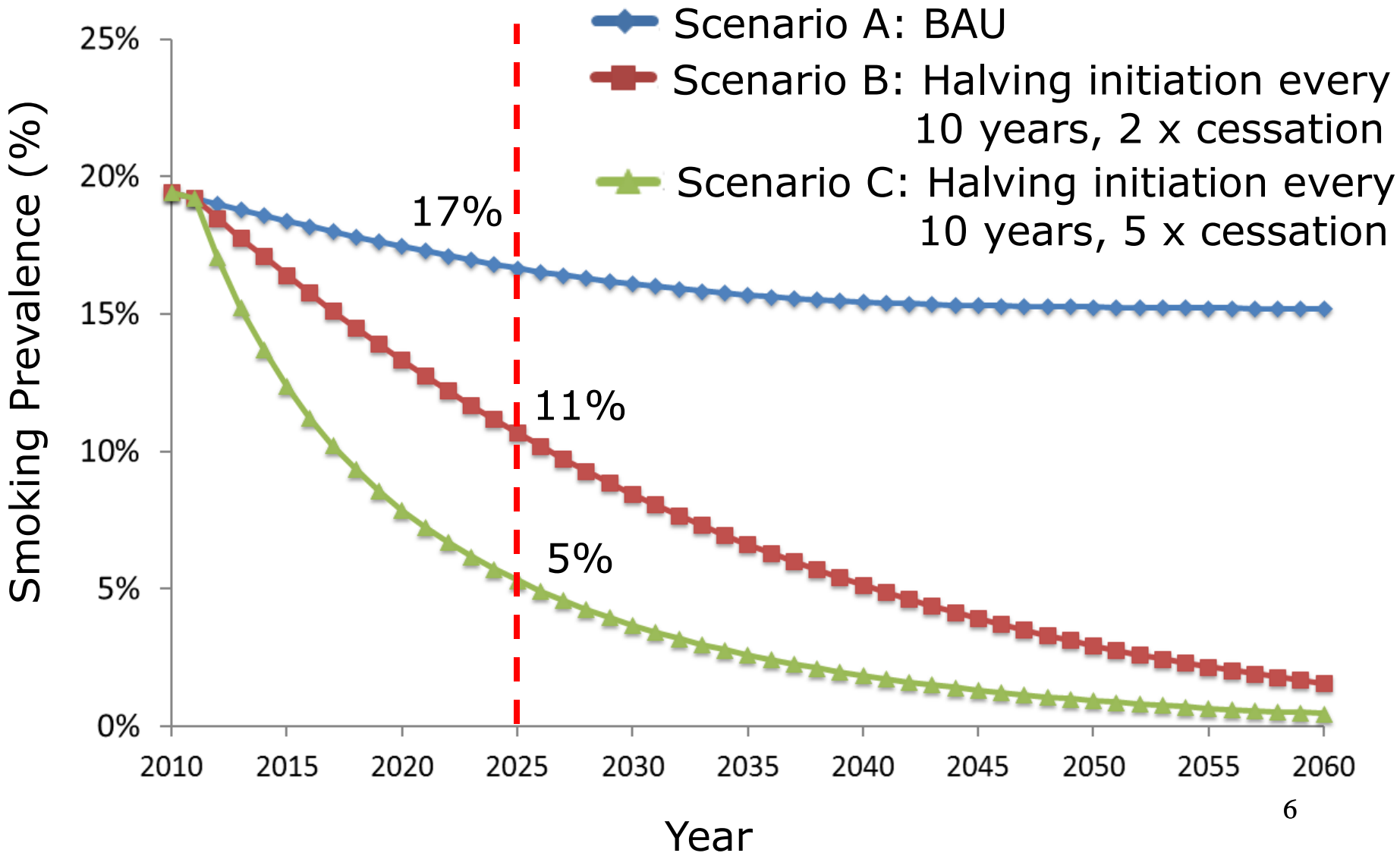
- The model derives how initiation changes over time

“Cessation” in this model is...

- a ‘simple’ cessation rate, which is a balance of:
 - Number of quit attempts
 - Success of each quit attempt (i.e. current → ex)
 - Relapse (i.e. ex → current)

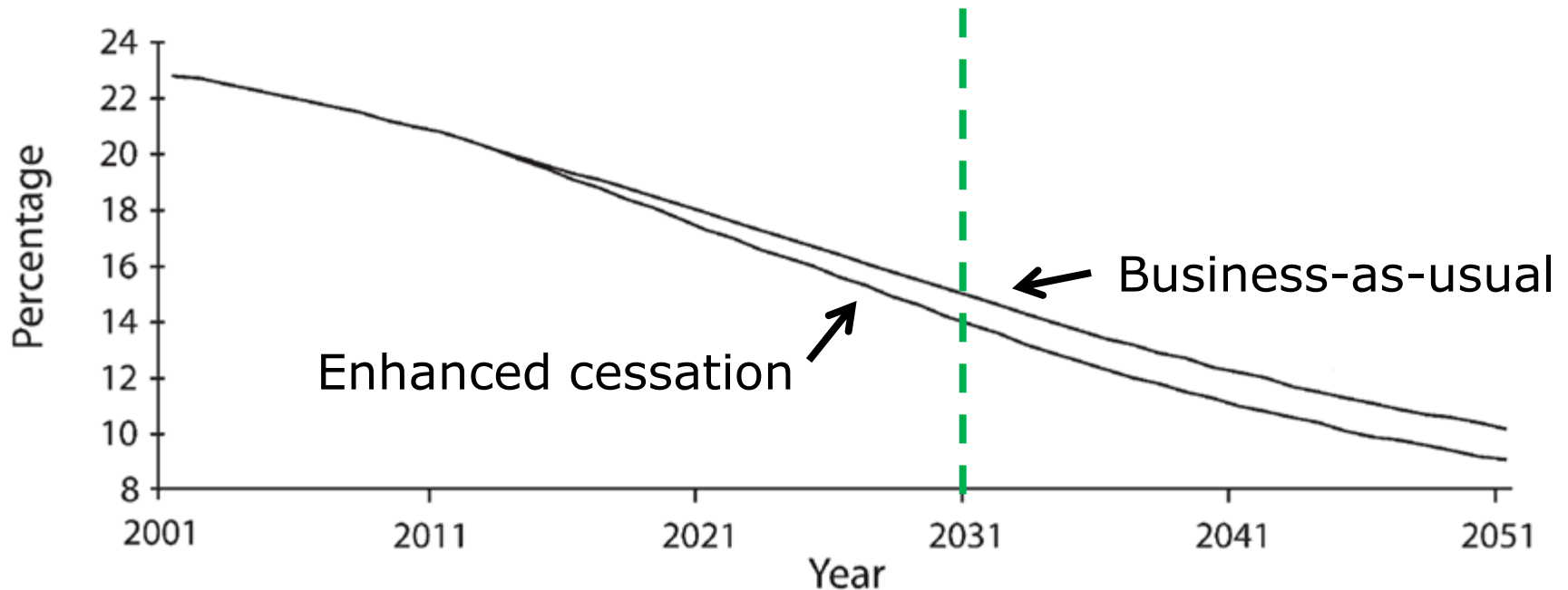


Results



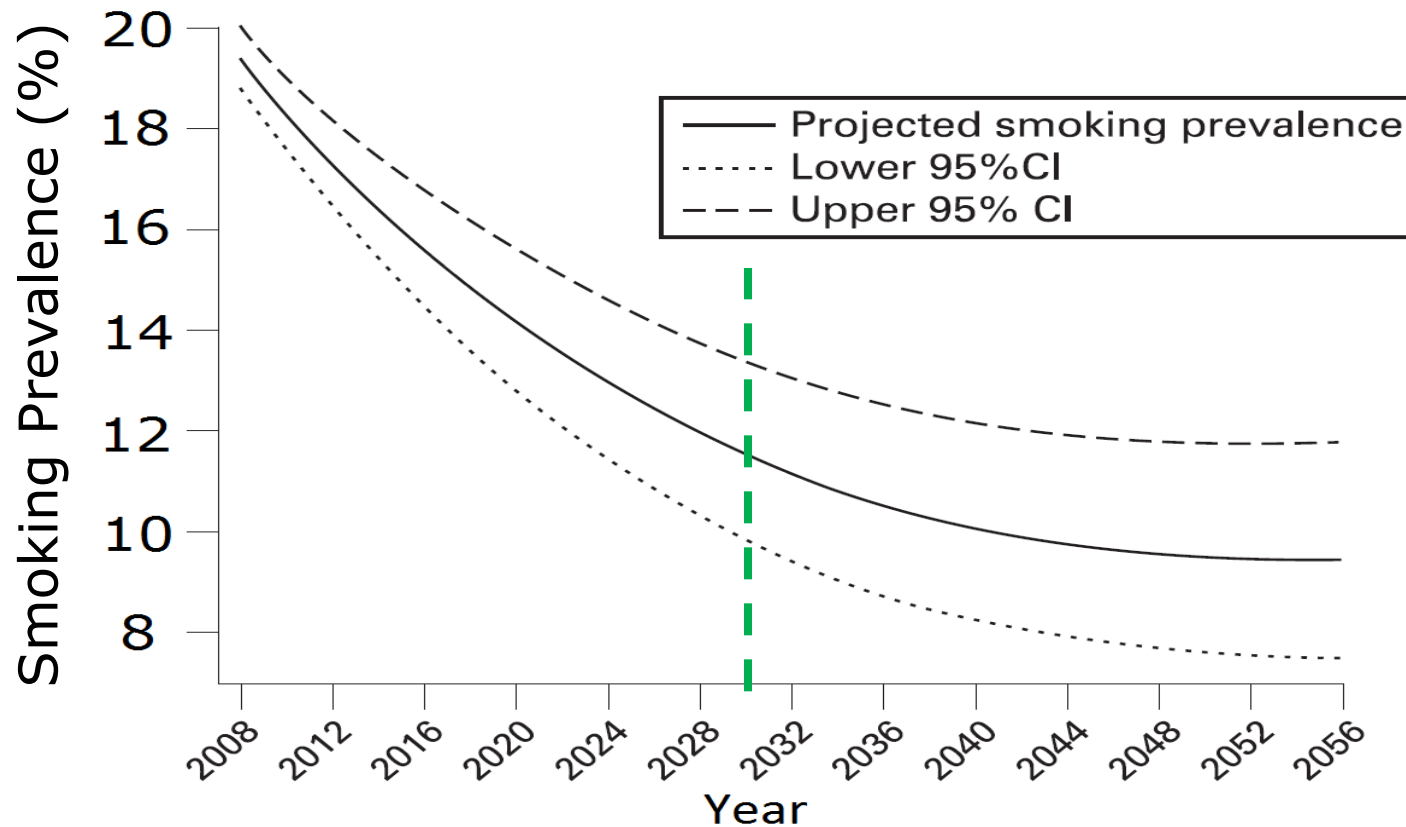
Comparison – Previous NZ work

- Previous NZ model:
14.8% in 2031 for BAU (Tobias et al 2010)



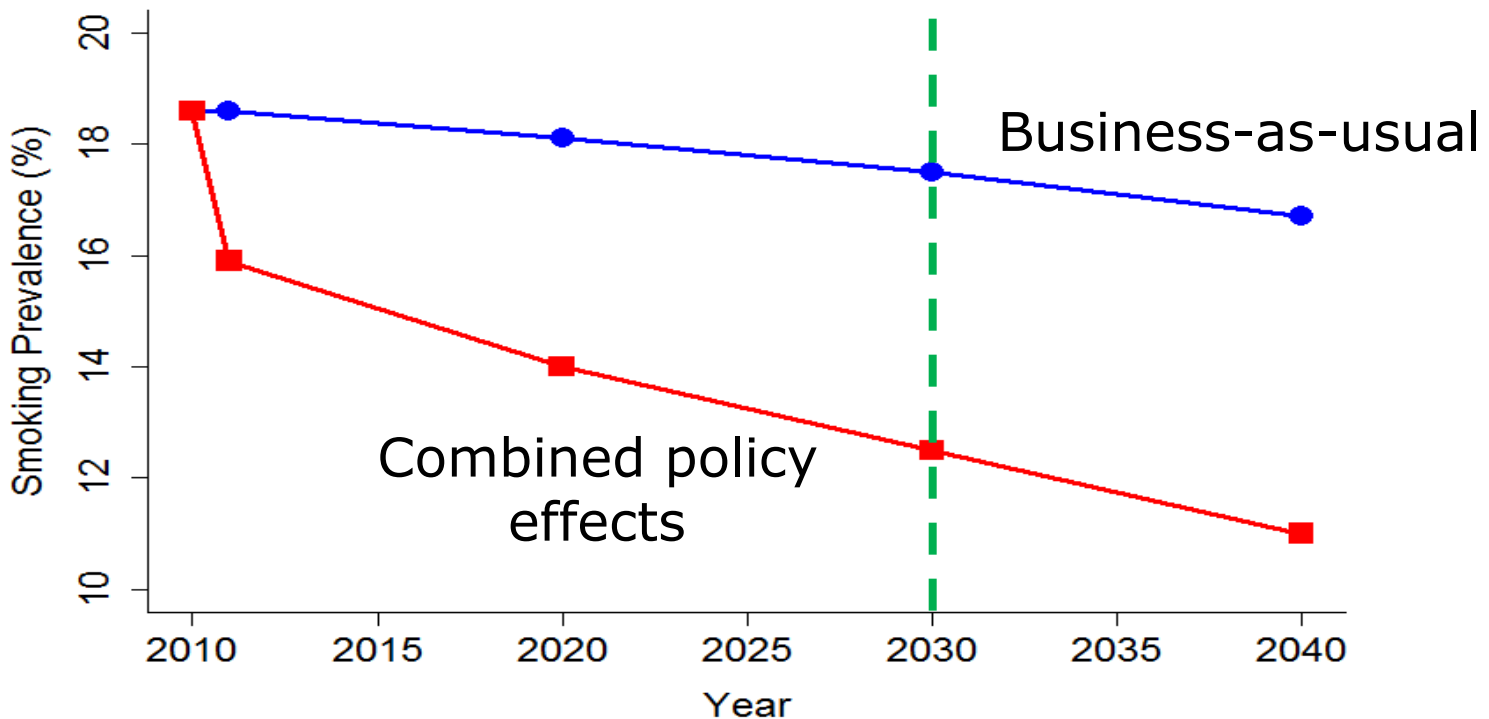
International comparisons

- Australian model: 12% in 2030 for BAU (Gartner et al 2009)



International comparisons

- Finland (also has a Smokefree goal): 17.5% by 2030 for BAU^(Levy et al 2012)



Limitations of this study

- No projections by ethnicity, deprivation (forthcoming)
- Census data might slightly underestimate prevalence
- No consideration of migration
- Assumes BAU for much of NZ society, economy into the future (no financial disasters)
- Did not use NZ-specific relative risks for current-ex-never smokers (NZCMS, forthcoming, by ethnicity)

Conclusions

- Reaching NZ's 2025 Smokefree goal will need very large changes from BAU with increased cessation & reduced uptake.
- NZ might need major new initiatives e.g. very major tax rises or supply side controls ("sinking lid on supply").



Thank you.

Acknowledgements:

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Ahakoā he iti, he pounamu

(Although it is small, it is precious)