Australian suicidal behaviour and suicide prevention strategies

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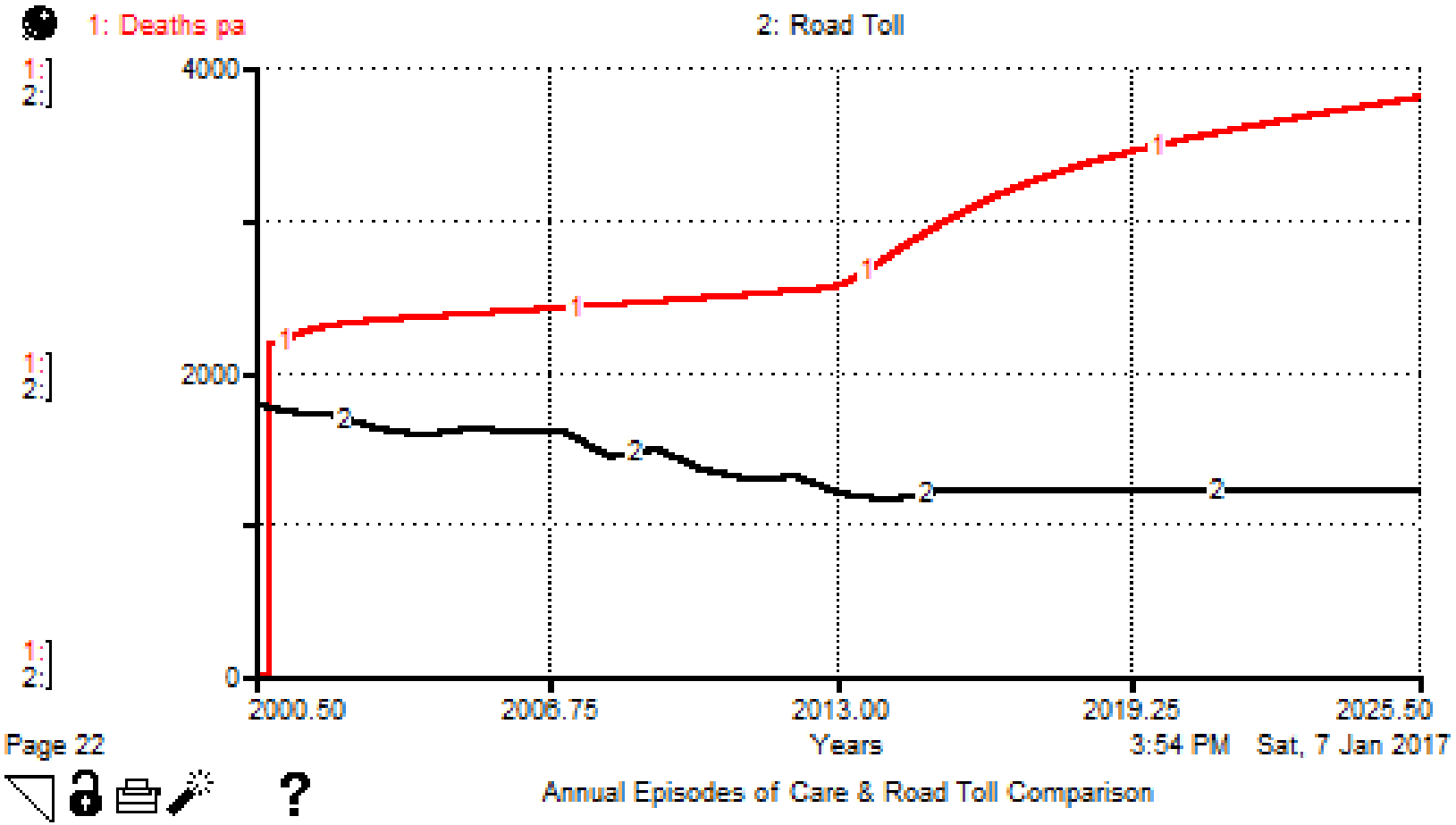
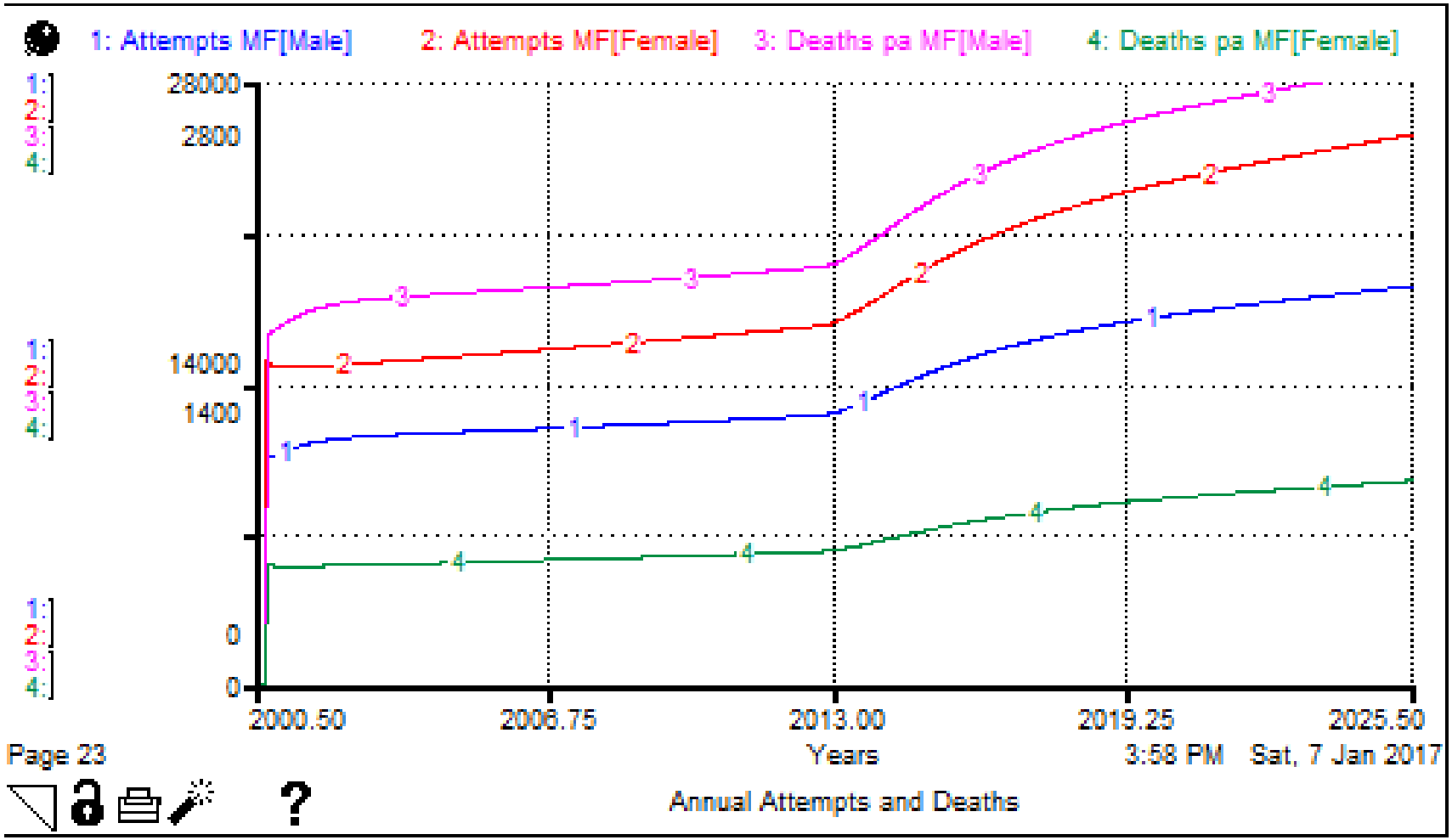
Suicides are Double the Road Toll

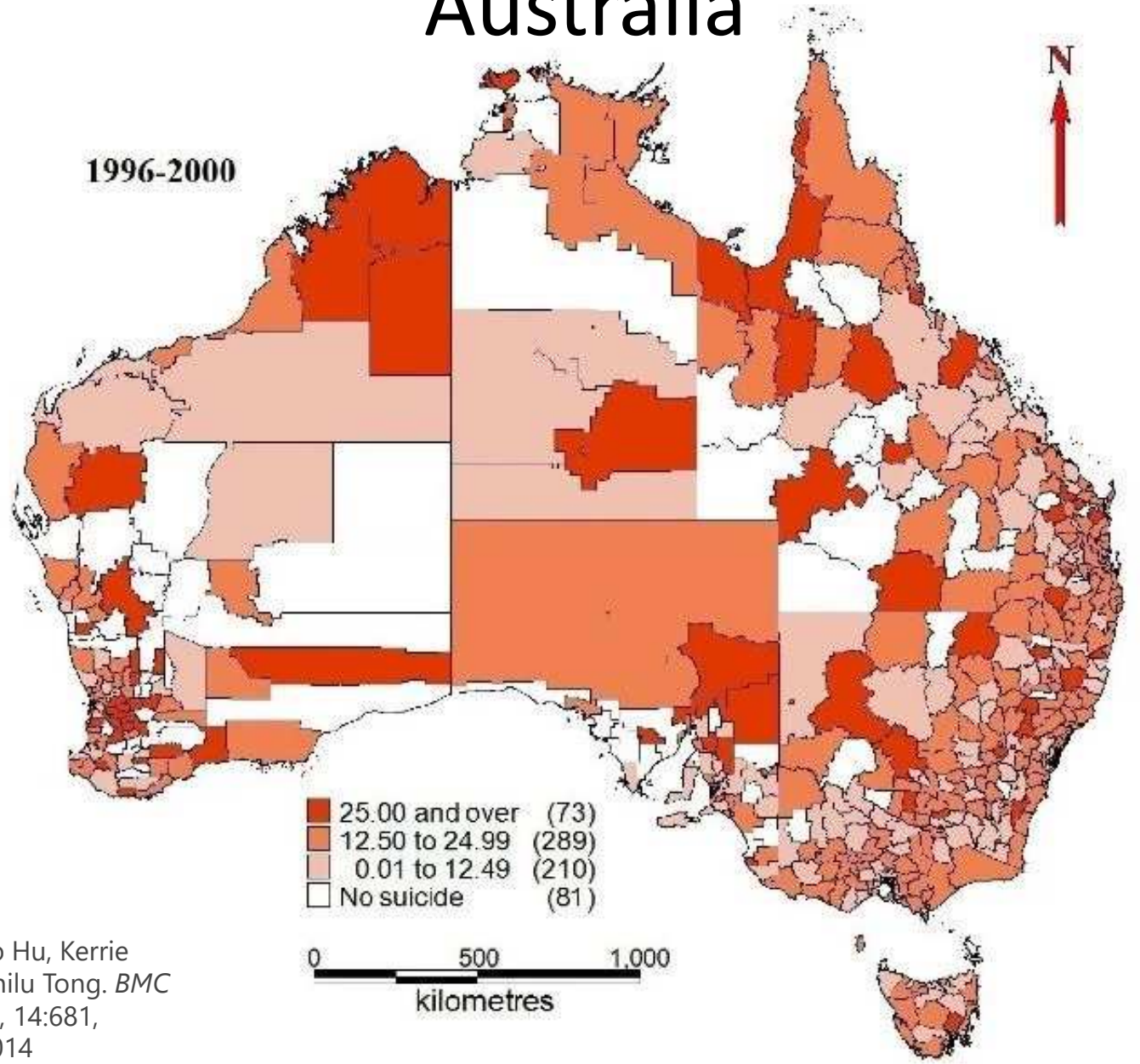


Female attempts are 30% more than Males but Male Deaths are 3 times Female Deaths



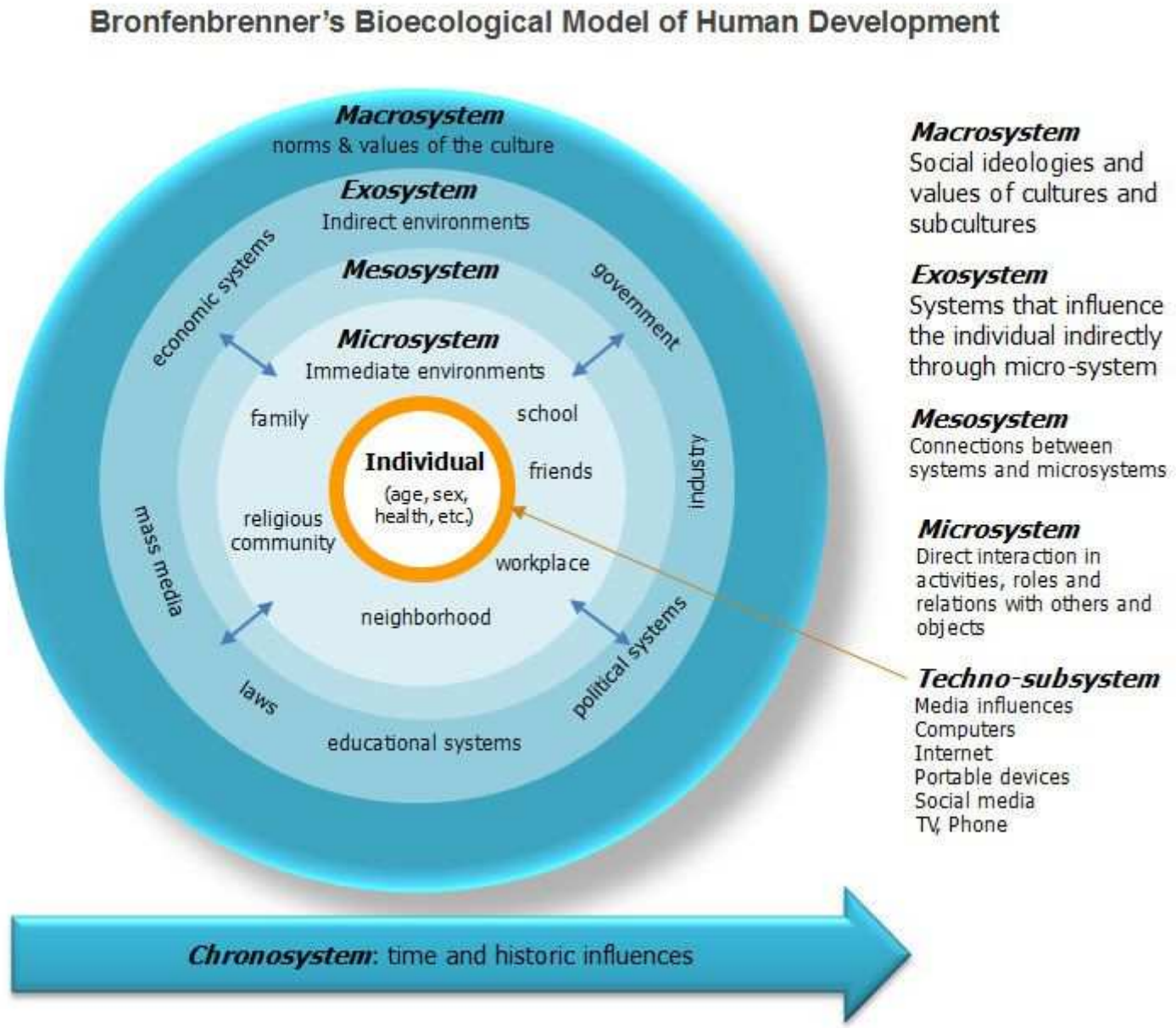
Challenges of decision making for suicide prevention

Rates per 100,000 vary widely across Australia



By Xin Qi, Wenbiao Hu, Kerrie Mengersen, and Shilu Tong. *BMC Public Health* 2014, 14:681, Published 4 July 2014

It’s a complex problem



Changing needs over time

Fears domestic violence, crime, suicide will rise in Adelaide following Holden plant closure

Updated 10 Nov 2014, 7:55pm

Rates of domestic violence, crime and suicide will increase in Adelaide's north if Holden workers cannot eventually move to other jobs, a Senate inquiry has heard.

The inquiry into income inequality in South Australia has been focusing on the consequences of Holden ending manufacturing at the Elizabeth plant in 2017.

Reverend Peter Sandeman is with Anglicare but is also a member of the State Government's Automotive Transformation Taskforce.

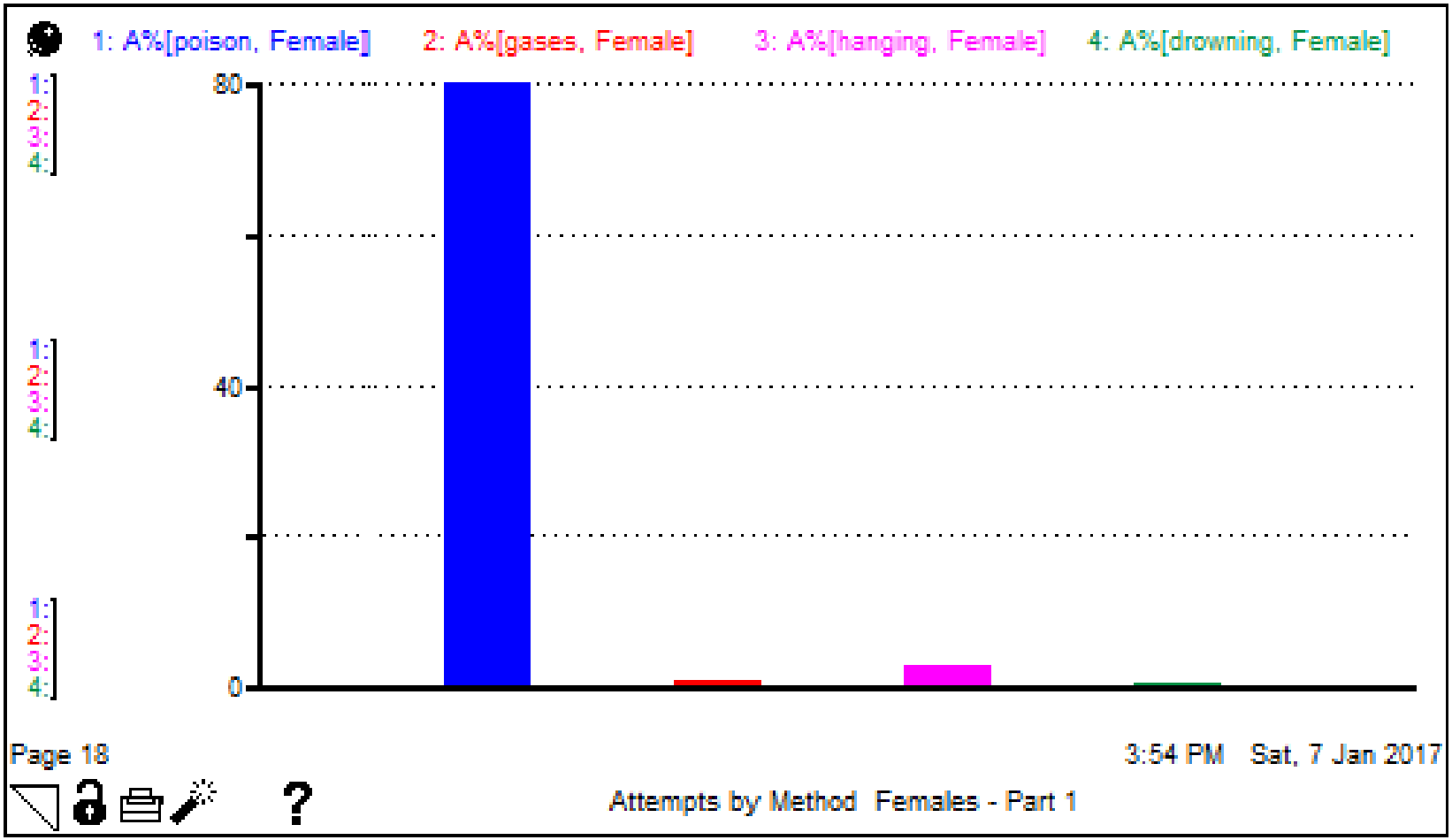
He told the inquiry there was only a short window of opportunity to train workers in other areas.

"If young people don't see a chance of getting employment at the end of school, why stay in school?" he said.

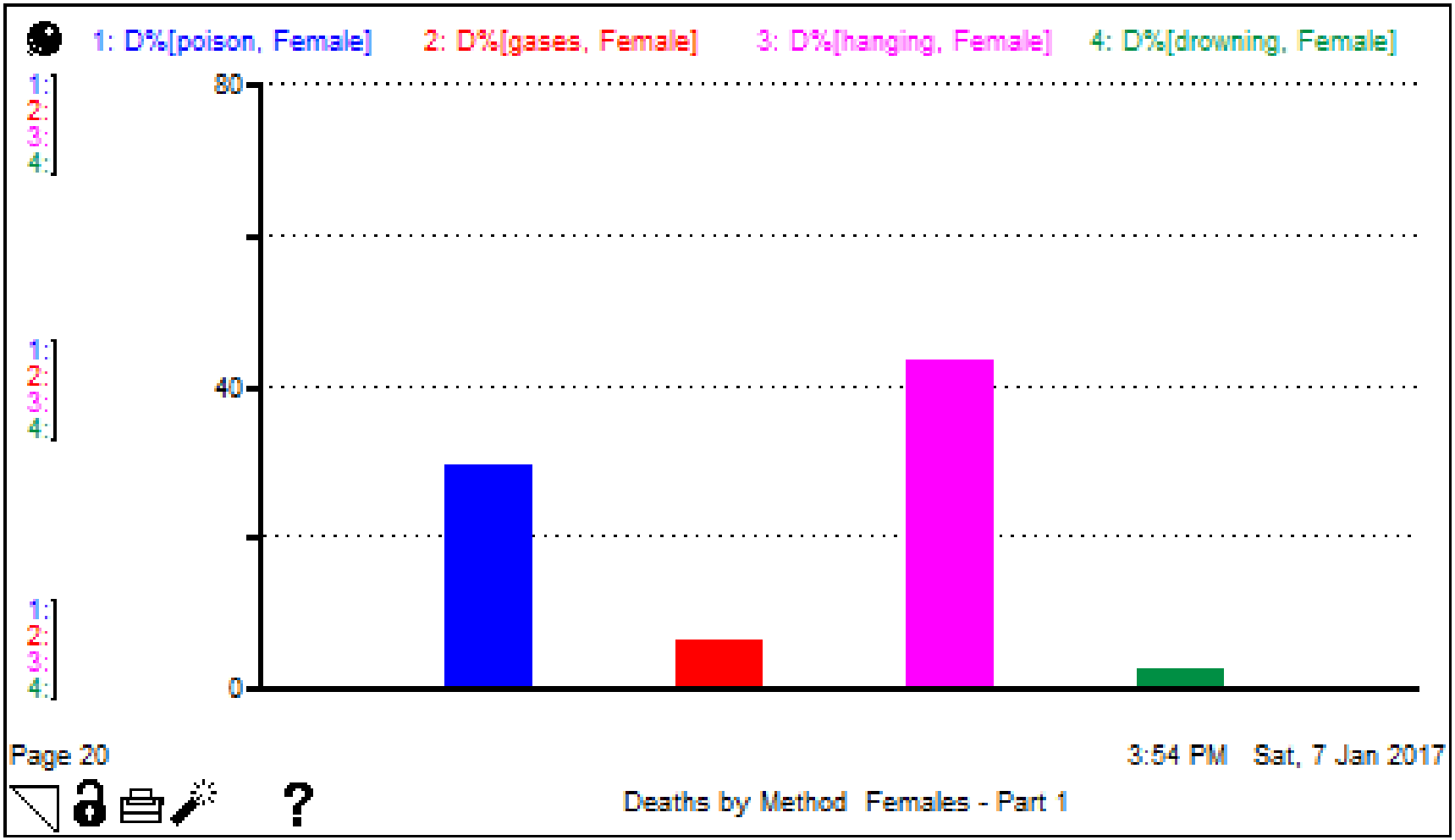
PHOTO: The future of Holden workers under the spotlight at the Senate inquiry into income inequality in South Australia. (ABC News)

NEWS

83% of female attempts are poisoning & less than 5% are Hanging

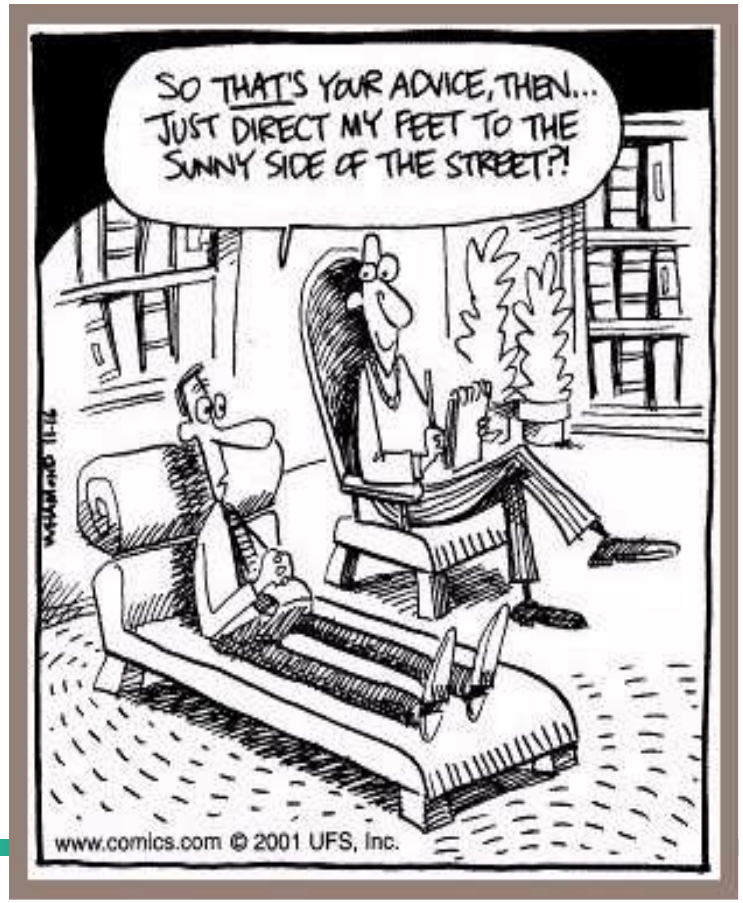


30% of deaths are poisoning and greater than 40% are hanging



Many options for intervening to prevent suicide - There are lists

- **Psychotherapy** (including programs for alcoholism, Cognitive Behavioural Therapy)
- **Screening** for individuals at high risk and providing early and crisis interventions
- **Education / awareness** programs targeted at:
  - Primary Care Physicians
  - General public
  - Community or organizational gatekeepers
- **Pharmacotherapy**
- **Follow-up care** for suicide attempts
- **Postvention**
- **Restriction of access** to lethal means
- **Media reporting guidelines** for suicide
- **Promotion of physical health**
- **Improving educational attainment**

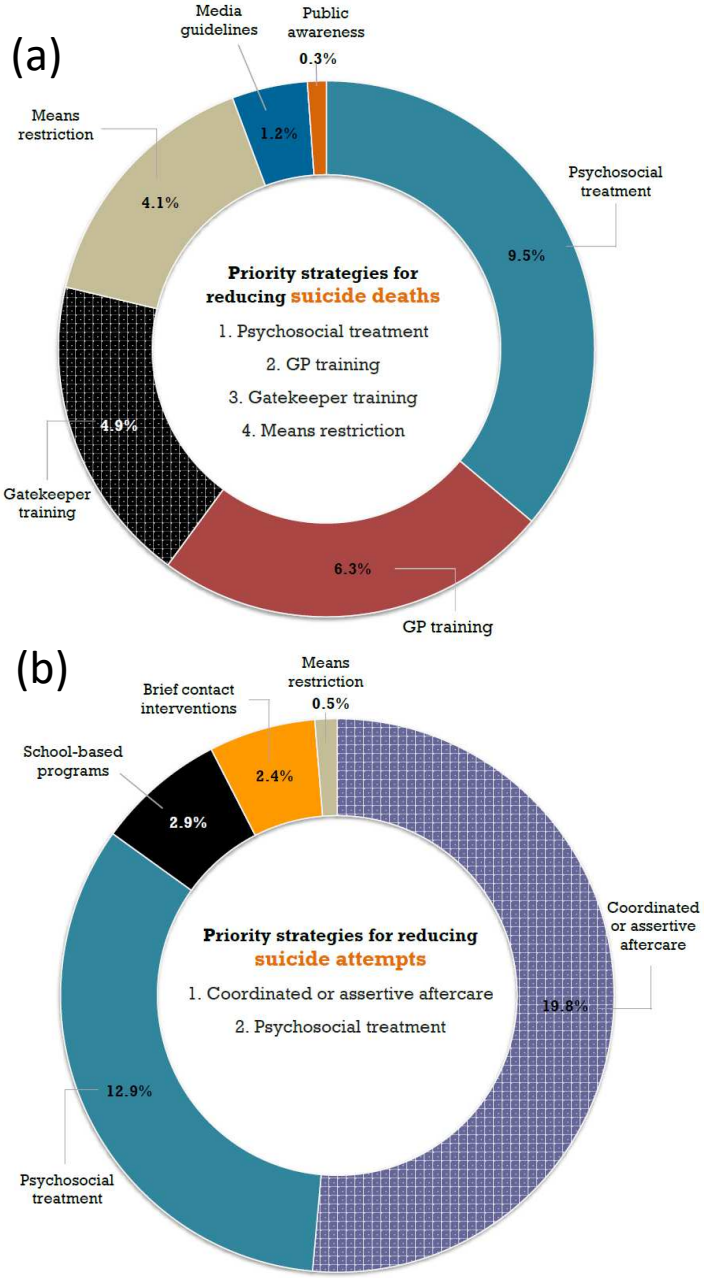


And Diagrams - But nothing computable

"The nine compulsory strategies in the NSW systems approach intervention"

Tye, M., Shand, F., Krysinska, K., Batterham, P., Konings, P., Calear, A., Cockayne, N. and Christensen, H. (2015). *A systems approach to suicide prevention: implementation plan*. Sydney: Black Dog Institute for the NSW Mental Health Commission

Estimated reduction in the risk of (a) suicide and (b) suicide attempts

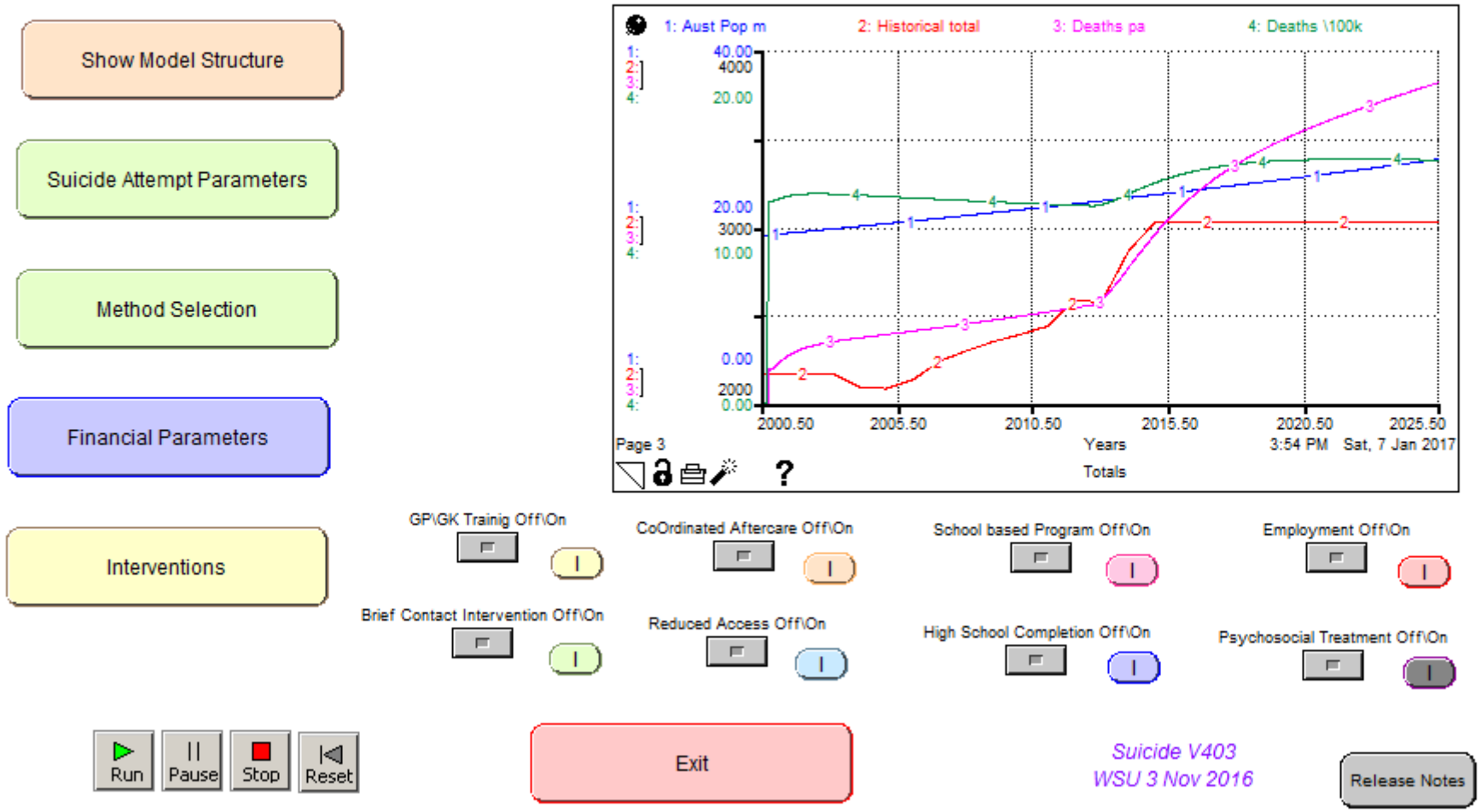


Which one (or ones) should we choose?

- 'Best evidence' from the literature?
- The one that reflects the current policy and funding priorities?
- Interventions that reflect existing capacity/ skills/ resources?
- The one recommended by the loudest voice in the room?

National Suicide Prevention Model

WESTERN SYDNEY UNIVERSITY



http://saxinstitute.scem.uws.edu.au/netsims/suicide-1/suicide_v403/index.html

Other important considerations:

- Local contested views about the likely effectiveness of intervention options;
- Community advocacy for options not supported by evidence;
- Industry lobbying against policy interventions that also impose on business.

Suicide prevention approaches in Australia

- Suicide prevention policies and strategies in Australia have had a limited impact on reducing suicide rates
  - Inability to monitor suicidal behaviour in a timely fashion
  - Impact and outcome evaluation strategies have not been incorporated into suicide prevention activity

- Questions around why $$ not translating to declines in suicide

- Part of the rationale for the NMHC's call for regional approaches and sustainable, comprehensive, whole-of-community approaches to suicide prevention

How do we know if the activity is working?

- Application of principles of program evaluation?
  - monitoring and evaluation of process, impact, and outcome measures, defined/implemented *a priori*
  - Follow-up for 3-5 years to assess effectiveness

- Retrospective investigation of secondary data sources to see if policies/activities had any effect (declines in suicide? suicide attempts?)

- Anecdotal evidence; Expert opinion?

- It doesn't matter, once the money has been committed we look to the next funding cycle?

To best target investments in prevention we need answers to:

- Which risk factors are more important than others in our context?
- Where in the course of people's lives should interventions be targeted to have optimal impact?
- What combination of interventions is likely to have the greatest impact on prevention of suicide behaviour?
- What intensity of investment is required?
- What are the equity implications of a particular policy?
- What are the projected costs, benefits and cost savings that could be expected over the short and longer term from each policy / intervention options being considered to prevent suicide behaviour?

Benefits of Approach

- People like SD because it is not too challenging to understand and it can address some of the challenges that bedevil traditional analytic approaches, policy making and strategic planning in the health sector.
- The interface allows us to make model assumption regarding intervention parameters explicit and provides end users with the ability to vary them if they don't agree with the default values (without having to go searching in the bowels of the model).
- Netsim is useful but doesn't replace the need to guide the process of interaction with the model. Training 'super users' would be a good alternative to always having to having the model architect present to guiding end users interaction with / understanding of the model and interpreting the output.
- Number 1 benefit: the participatory / consensus building process (and utility of making sense of disparate data sources).