Will Health Economists Become Extinct?
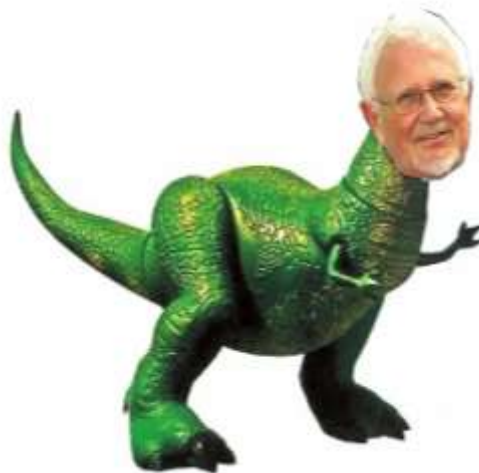
Over My Dead Body!

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The Heconosaurus

The Datadactyl

The Modelraptor

Is this the End for the Heconosaurus?

- Advances in computing have already impacted on the conduct of economic evaluation
- In the case of modeling, these advances have enabled us to:
  - run more complicated models in a reasonable timeframe
  - conduct PSAs for more complicated models
- Even more advances in computing are on the way

Why Will We Not Become Extinct?

- We should, and will, embrace these new advances
- There will always be analytic decisions that health economists will need to make
- We can use the freed time to develop our skills in new areas

Analytic Decisions made in Modeling

- *Study design*
  - type of model (eg cohort model or microsimulation)
  - model structure
- *Data collection*
  - appropriate sources of data to populate the model
- *Data analysis and interpretation*
  - analytic choices in sensitivity analysis (eg distributional form for parameters)
  - interpretation of model results for the decision-maker

Machine Learning may Actually Help

- More thorough analysis of large data sets may inform analytic choices through giving us:
  - a better understanding of patient heterogeneity
  - information on the distributional form for key parameters in the model
  - better estimates of model parameters relating to rare events

Decision Makers Will Not Want to Talk to Machines

- One area we might spend more time on is the interface between the analysis and the decision

- One growth area is in modeling the impact (for the various stakeholders) of managed entry agreements

- If advances in computing enable us to spend more time on these issues, I'd say 'bring it on'

KEEP CALM AND CARRY ON MODELING