

# Testing Health Systems for Pandemic Preparedness

**Richard Coker**

**Visiting Professor, SSHSPH**

**Professor, LSHTM**

**28<sup>th</sup> June 2012**

- **Preparedness**
  - Prevention
  - Containment
  - Mitigation
  - Recovery
- **Surveillance**
- **Mitigation**
- **Research, preparedness and Singapore**



# Prevention

**Transformation of  
ecological systems and  
emergence of new  
ecological niches**

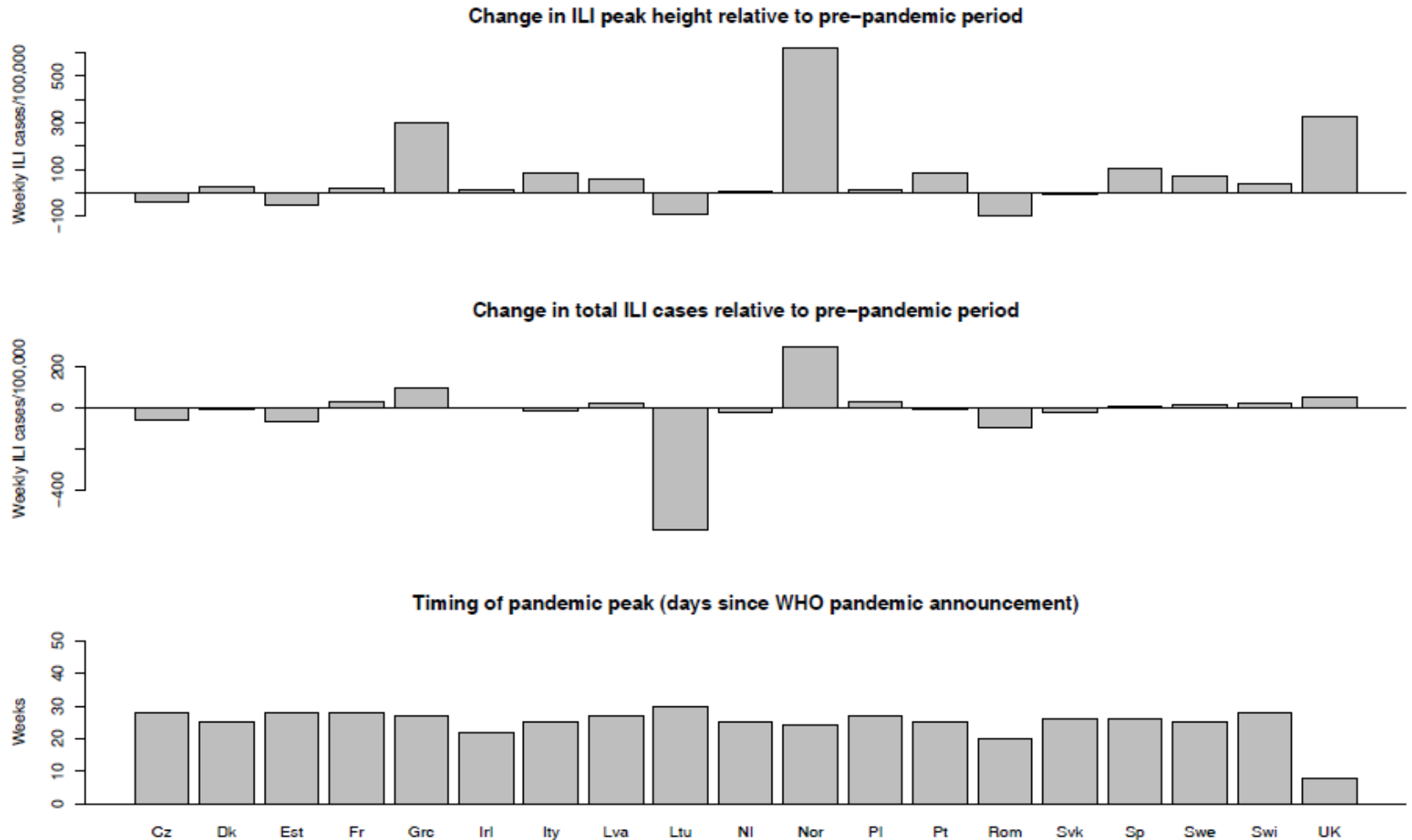
**NOWHERE MORE  
TRANSFORMATIVE  
THAN SE ASIA**



# The purpose of surveillance – information for action

- Prediction to inform prevention
- Informing clinical interventions in a timely manner
- Informing health system responses

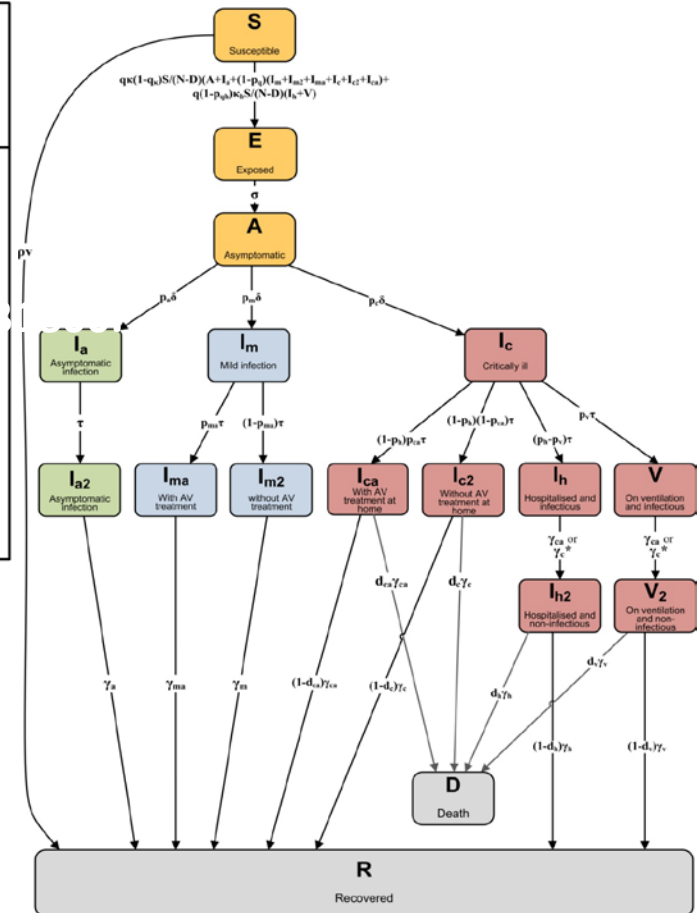
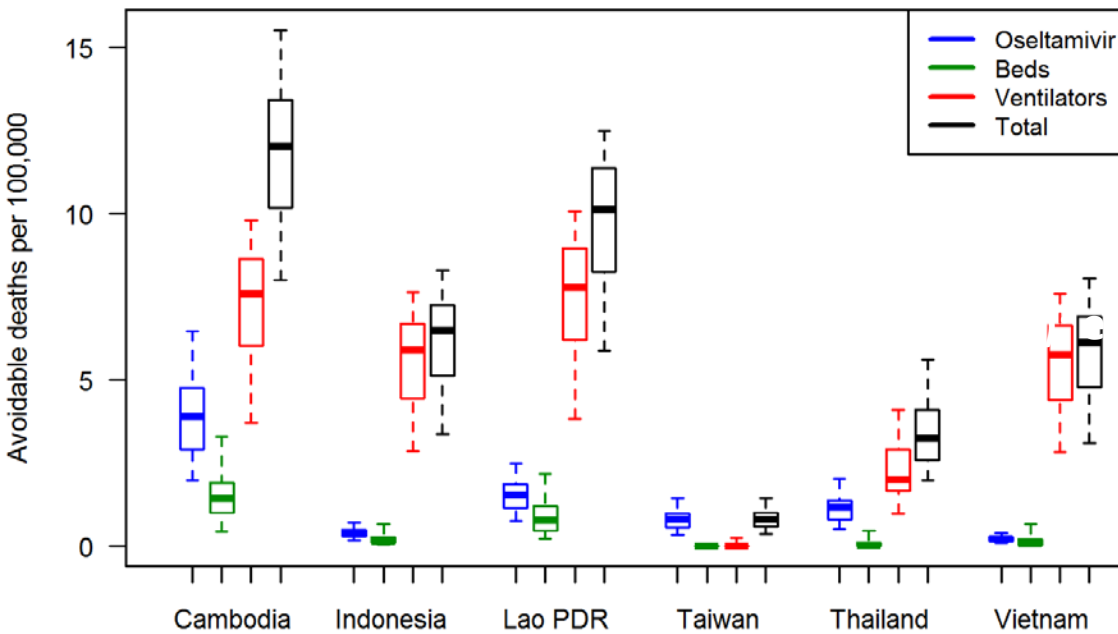
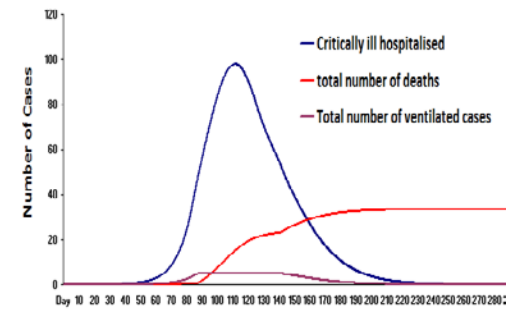
# The Power of Planning?



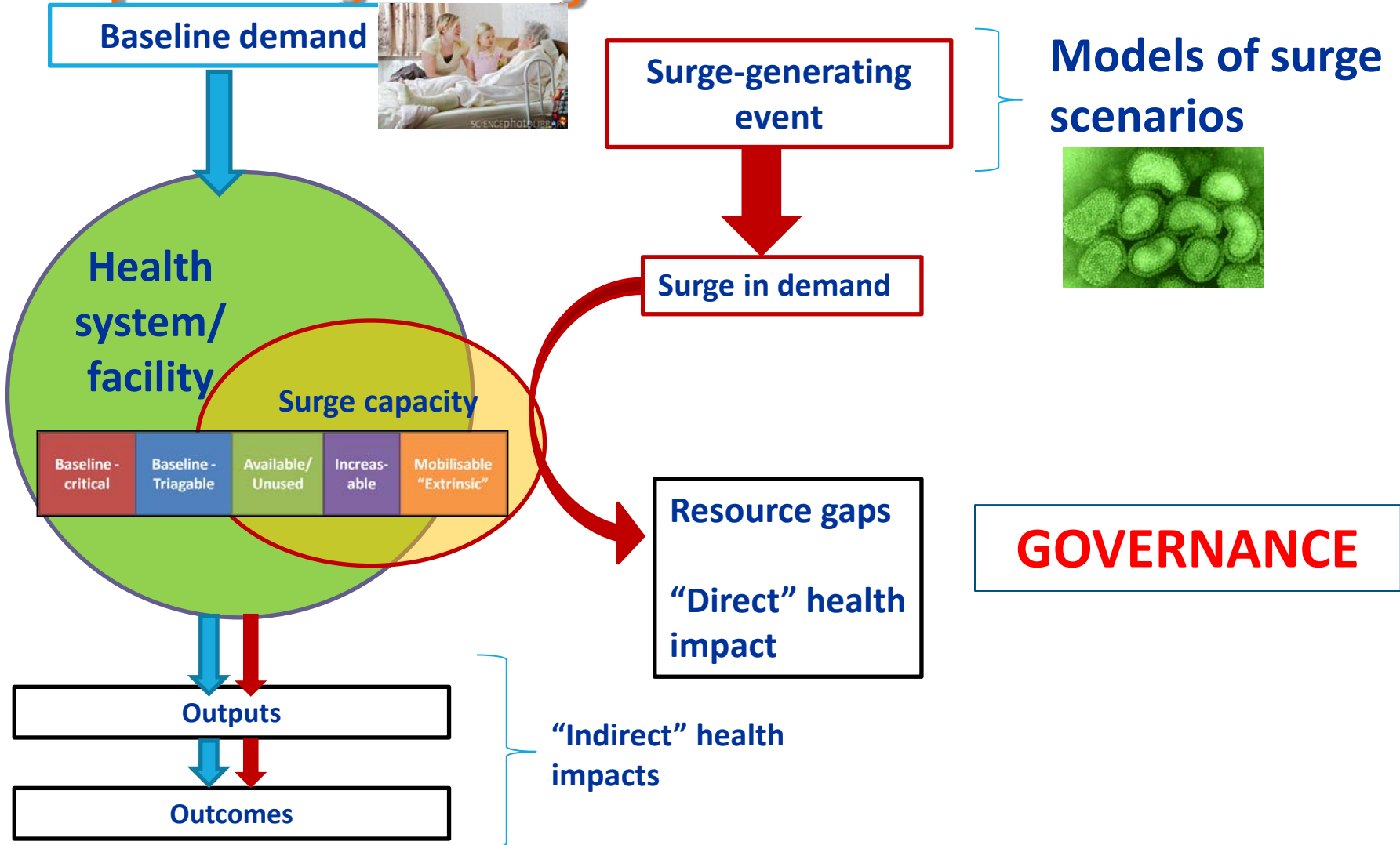
# Capacity or Capability?



# Capacity to respond to pandemic flu in SE Asia



# Surge response capability analysis





# Preparedness: a research agenda for Singapore?

- Predicting SE Asia public health threats – enlightened self-interest. Research to improve surveillance design.
- Understanding changing ecological niches.
- Clinical interventions – what works clinically
- Improving health system capability – in the face of uncertainty



Human cases of H5N1 in 2012