

# **Mathematical models informed the UK Vaccination Policies**

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## **Abstract**

In the UK, the government take recommendations from the Joint Committee of Vaccination and Immunisation for their decision-making processes on the UK national vaccination programmes. Mathematical models provide with potential impact of considered vaccination programmes on infectious diseases burden. The outputs from these mathematical models are used for cost-effectiveness analysis of these vaccination programmes which is one of key parameters that the JCVI considered to make recommendations to the UK government. I will briefly present some of these mathematical models and how they were implemented in the UK.

**Keywords:** *Mathematical model, Vaccination, Infectious diseases, Decision making*

## **Biography**

Dr Yoon Hong Choi has BSc, MSc and PhD in Mathematics. He has worked in Australia, Ireland, and England on modelling various biological systems. Since he started to work at the Public Health England in 2004, his work was focused on mathematical and economic modelling of infectious diseases and intervention programmes to reduce disease burden in the UK. His research outcomes have been used as scientific evidences for the UK vaccination policy changes.