Modelling public health policies for influenza vaccination campaigns

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Issue/problem:
Public health policies (PHP) are crucial for controlling infectious diseases. Namely, those focused on influenza stand out for the permanent threat of seasonal and the risk of pandemic flu. The COVID-19 pandemic revealed many frailties in PHP, part of which may be lessons to improving responses to future flu epidemics and pandemics. Among the tools available to control influenza, vaccination stands out, a matter where much remains to be improved regarding PHP and communication with the public, among others. The Kassianos model (2021) seeks to create a qualitative conceptual tool to optimizing influenza vaccination campaigns, being organized into 5 pillars with 42 categories.

Description of the problem:
We seek to take a step forward based on the Kassianos model, making it quantitative. This project is the mathematical modelling and the testing in a country (Sweden). It started in January 2021 and will be completed towards the end of the year.

Results:
This work will allow health authorities and similar partners to have a tool to support the optimization of influenza vaccination campaigns in effectiveness and efficiency. The work is expected to be pre-completed in October 2021. The international presentation of results is intended to be simultaneous at the European Parliament and, if possible, at the 14th European Public Health Conference 2021. The results will cover the dimensions of vaccination and relations to VCR:

- Campaign accountability
- Access to vaccination
- HCP engagement
- Burden of Disease Awareness
- Communication with the public

Lessons:
It is possible to increase the effectiveness and efficiency of vaccination campaigns through the quantitative modelling of aspects related to influenza vaccination, usually worked as qualitative.

Key messages:
- It is essential to have PHP as rigorous for supporting public health action.
- The need for really effective influenza vaccination is critical and must be achieved in the shortest time.