



Vaccination nudges: Pre-booked appointments increase COVID-19 vaccination rates in Sweden

Carl Bonander, Mats Ekman and Niklas Jakobsson

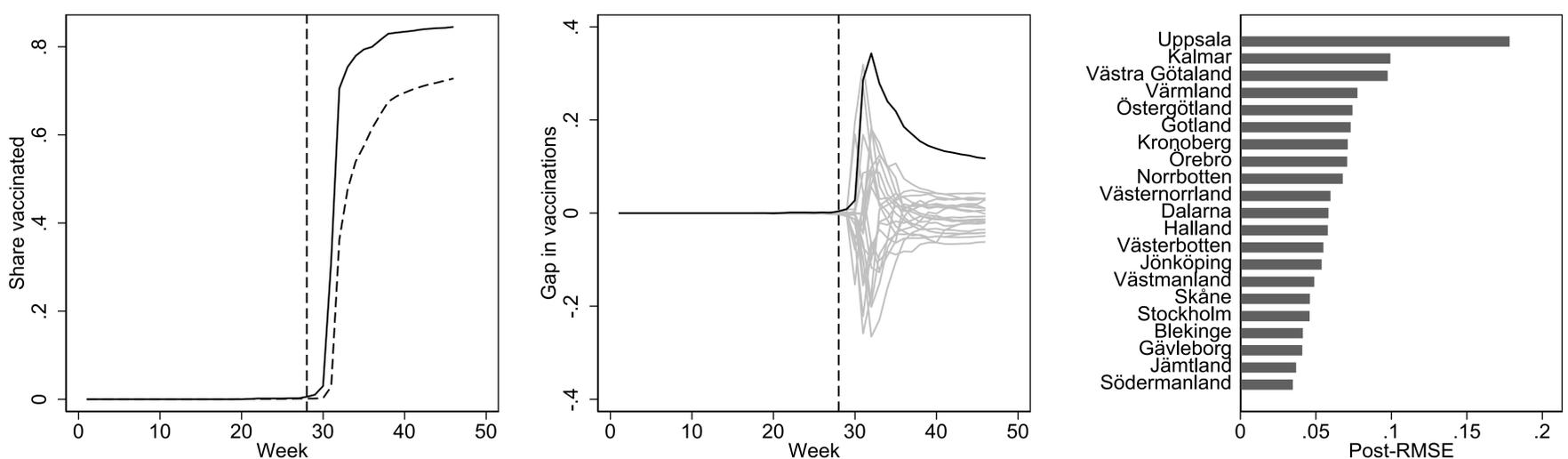
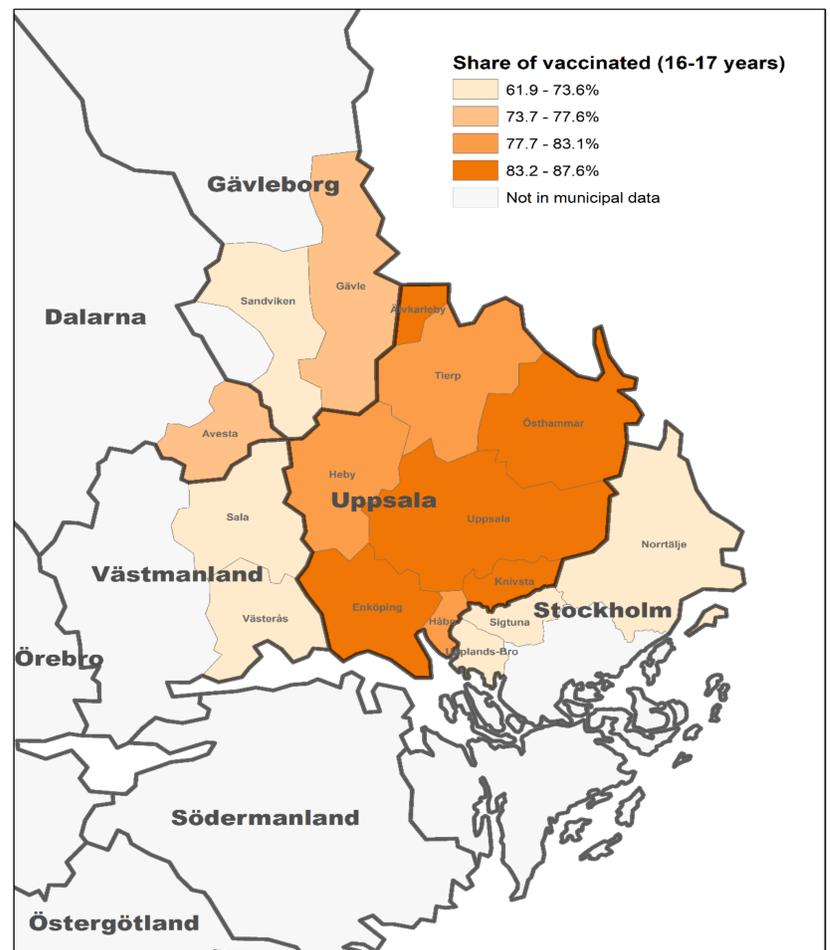
Karlstad University and University of Gothenburg, Sweden

Introduction

A nudge changes people's actions without removing their options or altering their incentives. During the COVID-19 vaccine rollout, Region Uppsala sent letters with pre-booked appointments to inhabitants aged 16–17, instead of just opening up manual appointment booking. This is a nudge, since it changed the default procedure for getting vaccinated without removing options. Using regional and municipal vaccination data, we document a higher vaccine uptake among 16- to 17-year-olds in Uppsala compared to untreated control regions constructed using the synthetic control method. We find very similar results if we instead compare neighboring municipalities that straddle Region Uppsala's border.

Findings

Our regional analysis suggests that pre-booked vaccination appointments increased vaccination uptake among 16–17-year-olds by 12 percentage points, compared to a counterfactual uptake of 73 percent. The municipal analysis suggests an effect of 7–13 percentage points. The results highlight pre-booked appointments as an effective strategy for increasing vaccination rates in populations with low perceived risk.



Depicted above are the results of regional analyses that use the synthetic control method. The left panel shows the share of first-dose vaccination by week in Uppsala (black) and synthetic Uppsala (dashed) among 16–17-year-olds. The middle panel shows effects estimated by assessing the vaccination share gaps between Uppsala and its synthetic counterpart (black) and equivalently defined placebo gaps in all 20 control regions (gray). The right panel shows the post-intervention root mean squared error (RMSE) in vaccination uptake from the synthetic control analysis in Uppsala and all other regions.

