

**COVID-19 vaccination: what are the costs we should include?**

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As for previous communicable diseases, the vaccine against SARS-CoV-2 can be a truly “game-changing” factor to tackle the COVID-19 pandemic. A lot has been discussed about what is the less expensive vaccine and how health expenditures might be overrun with pandemic containment measures. There are interesting questions on cost estimation of this technology that should be discussed. The focus has been mainly on vaccine costs rather than on immunization delivery costs, which might also represent an important constraint. This includes human resources, equipment or maintenance which cannot be ignored. Such programs are highly dependent on labor supply, as well as on opportunity costs of reallocating an important share of health care workers for COVID-19 vaccination. On the other hand, costs regarding prevented health care use on COVID-19, from testing to intensive care unit, cannot be neglected, with associated opportunity costs as well. However, prevention of potentially needed measures such as lockdowns with effects in all spheres of society, such as economy and education, are of utmost relevance and are not commonly accounted for in health technology assessments. Furthermore, vaccines have important effects that are not commonly present in prescription drugs such as herd effect, protection against comorbidities or others to be explored in such a recent disease. Only a few efforts for COVID-19 vaccines’ economic evaluations exist. However, at the same time, vaccines (and the rollout of vaccination programs) continue to be developed and improved. Therefore, such assessments will be important for studying boosters or revaccinations later on, but also for future pandemic preparedness. Moreover, such efforts on estimating vaccination cost-effectiveness, considering a wide range of costs, might be essential for sub-population prioritization.