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**A Framework for Estimating Health Spending
in Response to COVID-19**

by Paolo Dudine, Klaus-Peter Hellwig, and Samir Jahan

I N T E R N A T I O N A L M O N E T A R Y F U N D

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Fiscal Affairs Department

A Framework for Estimating Health Spending in Response to COVID-19

Prepared by Paolo Dudine, Klaus-Peter Hellwig, and Samir Jahan¹

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Abstract

We estimate the additional health spending necessary to treat COVID-19 patients. We expand a Susceptible Infected Recovered model to project the number of people requiring hospitalization, use information about healthcare costs by country, and make assumptions about capacity constraints in the health sector. Without social distancing and lockdowns, countries would need to expand health systems ten-fold, on average, to assist all COVID-19 patients in need of hospitalization. Under capacity constraints, effective social distancing and quarantine reduce the additional health spending from a range of \$0.6–1 trillion globally to \$130–231 billion, and the fatality rate from 1.2 to 0.2 percent, on average.

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