

# How a strong primary care system saved lives in Brazil during COVID-19

Written by [Rodrigo Moreno-Serra](#).

Research Team: Adriano Dutra Teixeira, Fernando Postali, Natalia Ferreira-Batista, Maria Dolores Montoya Diaz, Rodrigo Moreno-Serra.



The COVID-19 pandemic strained healthcare systems globally, highlighting the crucial role of strong primary care. Our study examined the effectiveness of the Brazilian Family Health Strategy (ESF), a comprehensive primary healthcare initiative, in mitigating the pandemic's impact. ESF's extensive community-based structure, with healthcare teams based on community health workers assigned to local areas, positions it uniquely for responding to health crises. Brazil, which faced one of the highest COVID-19 death tolls worldwide, relied heavily on its primary care networks to support population health needs.

Using data from over 5,000 municipalities for the period 2016-2022, we conducted an in-depth statistical analysis, contrasting COVID-19 mortality and related cardiorespiratory deaths in municipalities with different levels of ESF coverage.

We found that stronger primary care helped prevent nearly 350 COVID-19 and cardiorespiratory deaths per million residents in areas with high ESF coverage. The study showed that high-coverage ESF areas consistently outperformed low-coverage areas, even after accounting for differences in health, demographic and socio-economic factors. We also explored the channels through which the ESF achieved its impact. Municipalities with higher ESF coverage achieved significantly better health outcomes by expanding home visits, prioritising preventive care and health promotion actions, and maintaining higher COVID-19 vaccination rates, compared to areas with weaker ESF coverage.

These results underscore primary care's potential not just to support population health directly in “normal” times, but also to improve health crisis management and community and health system resilience. The findings suggest that investment in primary care, especially through initiatives like the ESF, can dramatically improve health outcomes during health crises. High ESF coverage not only saved lives but also fostered preventive care habits in communities.

For policymakers, our research suggests that prioritising primary care is a key part of any strategy for providing an effective and resilient health system. Practitioners can view the ESF model as a useful benchmark for future health crises, given its demonstrated effectiveness in both managing immediate risks and supporting longer-term population health.

**Read the full paper, funding sources and disclaimer in [Social Science and Medicine](#).**

**February 2025**