

# COVID-19 and Primary Care: Taking Stock

Trisha Greenhalgh

University of Oxford, Oxford, England

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The Lancet Commission report on COVID-19 recently described a “staggering” death toll (approaching 7 million at the time of writing)<sup>1</sup> and declared the pandemic response “a massive global failure at multiple levels.”<sup>2</sup> How did this tragedy happen—and to what extent did primary care help or hinder?

There is no simple answer to that question, partly because at the outset, policy makers and planners in many (though not all) settings failed to recognize or factor in the potential contribution that primary care could make, and partly because researchers have to some extent overlooked the opportunity to measure what contribution it actually made. The story is that, broadly speaking, primary care stepped forward and did its best—providing assessment and triage of individuals with suspected acute COVID-19 (often remotely), vaccination, management of post-COVID symptoms, and essential ongoing services such as long-term condition reviews—but that this effort was largely reactive rather than a strategic and proactive component of a national system-wide response, and it failed fully to compensate for dramatic reductions in care-seeking behavior and socioeconomic inequities.<sup>3-10</sup>

In 2005, Professor Barbara Starfield and colleagues published a foundational paper entitled “The Contribution of Primary Care to Health Systems and Health.”<sup>11</sup> Drawing on the then World Health Organization’s definition, they characterized good primary care as made up of 4 main elements—first-contact access for each new need; long-term person- (as opposed to disease-) focused care; comprehensive care within the primary care team for most health needs; and coordination of care when the patient is referred beyond that team. They added 2 supplementary elements—orientation to both the family and the community.

These 6 features formed the basis of Starfield et al’s Primary Care Assessment Tool (PCAT). In their 2005 paper, they applied the PCAT to the health systems of multiple countries. After controlling for potential confounders (notably income inequality and smoking rate), Starfield et al

demonstrated that the better a country’s PCAT score, the better its health outcomes and the lower its costs. Small wonder that this paper has been cited over 5,000 times to support the argument that whatever the country, disease, demographic group, or policy under question, “strengthen primary care” is often a good answer.

It is tempting to hypothesize that, all other things being equal, settings with strong primary care systems will have weathered the pandemic’s impact better than those without. This hypothesis is untestable, of course, since all other things were not equal. Countries—and often regions within countries—differed hugely in dozens of potential confounding factors that could distort the findings of research studies into the impact of primary care, such as prevailing advice, guidance, and mandatory restrictions; local infection rates (and which variants of SARS-CoV-2 were causing these); vaccination rates in different age groups at the time the studies were undertaken; public attitudes and behaviors; resources; and the extent to which these and other potentially confounding variables were identified and measured.<sup>2,4,6,9</sup>

These complexities should be borne in mind when reading this month’s collection of new research studies from 5 countries on different aspects of the primary care response to COVID-19.

In a prospective national survey in Japan conducted in 2021 (ie, after vaccination had attenuated the devastating population-level impacts of the virus), Aoki et al used the PCAT to show how the better the primary care service to which an individual had access, the less likely they were to be admitted to hospital for any cause.<sup>12</sup> This study adds to the many which have affirmed Starfield’s work on the key contribution of primary care in general, but was not designed to assess the primary care response to COVID-19 itself.

Wong et al conducted a small qualitative study of patients and their primary care physicians in China to explore their perceptions and experiences of digital detection surveillance tools for outbreak monitoring (mostly reporting and contact tracing), which were widely used in China in the early months of the pandemic along with extensive testing, compulsory quarantining, border controls, and mass mobility restrictions.<sup>13</sup> Unsurprisingly, perhaps, the researchers found considerable variation between patients in their understanding of the purpose and value of such tools and fear that using the tools could lead to them being compulsorily quarantined. Physicians’ concerns included “lack of transparency in using

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## CORRESPONDING AUTHOR

Trisha Greenhalgh  
University of Oxford  
[trish.greenhalgh@phc.ox.ac.uk](mailto:trish.greenhalgh@phc.ox.ac.uk)

patients' data" and "potential disruption to the current fragile trust-based doctor-patient relationship in China" (since the physician was responsible for noting a COVID-19 infection which would set in train the quarantine process). In this example, primary care is depicted as a somewhat reluctant agent of an overbearing state—with awkward knock-ons for the therapeutic relationship.

In a study from Germany, Klocke et al report a survey of symptoms and experiences in a post-COVID online support network undertaken in mid 2021.<sup>13</sup> Of 499 responders (81% of whom were female) who had had been unwell for 12 weeks or more, the commonest symptoms were (in order of prevalence) fatigue, poor concentration, psychological impairments, shortness of breath, headaches, and loss of smell or taste. Respondents frequently complained about difficulty accessing care and not being taken seriously by doctors; they used a wide range of self-help therapies, most commonly nutritional supplements which were (respondents felt) of variable efficacy. This paper adds to the literature on self-help groups for "long COVID" and affirms previous work that members of such groups are predominantly White, educated, and female and often have great difficulty persuading their primary care physicians that their condition is real.<sup>15,16</sup> Those who are yet to be persuaded might like to read a recent *BMJ* review aimed at primary care clinicians.<sup>17</sup>

Leslie et al from Canada used qualitative interviews to draw out both the operational challenges and clinical benefits of an initiative to build a "data bridge" between primary care and public health, enabling test results to be visible to primary care clinicians as well as to public health surveillance staff.<sup>18</sup> This study illustrates how, in the heat of the emergency response, the key role of primary care appears to have been overlooked. As many of us discovered in the early months of 2020, it's hard to provide holistic care for individuals or proactive advice to families and communities in a fast-moving pandemic when we have no access to testing or to the results of tests that have been ordered by others.

In a study from Wisconsin, Ramly et al used survey methods to show that during the pandemic, patients preferred to find their own way to their allocated examination room ("self-rooming") than sit in a waiting room before being escorted to the examination room.<sup>19</sup> Staff vastly underestimated levels of patient satisfaction with self-rooming and overestimated levels of patient confusion. This simple change has potential to reduce nosocomial infection, though the study was not designed to demonstrate that impact directly.

Solberg et al report a longitudinal survey of 269 primary care clinics from Michigan, with 3 rounds of data (2017, 2019, and 2021).<sup>20</sup> Among responders, care management processes for chronic diseases were similar or better in 2021 than in the pre-pandemic years despite considerable disruption from the pandemic. The authors describe larger clinics in particular as "resilient." The finding that well-resourced primary care clinics were able to keep the show on the road mid-pandemic is reassuring, but should be interpreted in the context of wider

data (much of it cited by the authors of this paper) that deficiencies in provision and inequities of access were the norm rather than the exception as primary care took the strain of the pandemic.<sup>4,6,9,21</sup>

Sirkin et al describe an initiative by the US Agency for Healthcare Research and Quality (AHRQ) to establish a learning community for primary care clinicians.<sup>22</sup> Its intended purpose was "to share learning and peer support, better understand the stressors and challenges confronting practices, ascertain needs, and identify promising solutions in response to the pandemic." The community was popular and enabled geographically isolated primary care practitioners to become part of a supportive community which generated real-time knowledge as well as sharing it. Key topics covered—how to build and maintain trust, achieve patient-centeredness, ensure that patients' needs were prioritized over demands, and reduce inequities—reflected the core values of primary care.

As the pandemic enters its fourth year, it is becoming ever more evident that its impacts are set to continue and to be strongly patterned by socioeconomic inequities.<sup>5,23,24</sup> As Starfield demonstrated a generation ago, a strong primary care sector confers health system resilience.<sup>11</sup> One of the most troubling findings of recent research in primary care is high levels of burnout and declining commitment among primary care clinicians.<sup>25,26</sup> The pandemic hit primary care when it was already under unprecedented strain. Exhausted as we are, we must continue to fight for the resources needed to restore our existing workforce, incentivize the next generation, and defend the core values that underpin our mission-critical work with individuals, families, and communities.



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