The Healthcare System and Pandemics: Where Is the Market Failure?

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I. INTRODUCTION

Barak D. Richman and Steven L. Schwarcz argue that healthcare providers played a central—and failing—role in stemming the fallout from the COVID-19 pandemic.1 Analogizing to the financial crisis of 2008, they view our healthcare system as a collection of providers, each maximizing returns to its own stakeholders in a laissez-faire regulatory environment that ignored the essential interconnectedness of providers.2 Because neither hospitals nor regulators were attuned to this interconnectedness, our healthcare system was unprepared for the pandemic, resulting in a reduced standard of care.3 Just as Dodd-Frank and related legislation view financial institutions as part of a larger, interconnected system that must be regulated to minimize exposure to and build robustness against shocks, so too must federal regulators approach our healthcare providers as a “system” that can work as a collective to mitigate the fallout from shocks.

We believe this narrative overstates the role of healthcare providers in managing pandemics. The narrative hinges on a theory of market failure: Healthcare providers act in their own self-interest but, in doing so, impose a negative externality by rendering the healthcare system fragile in the face of a pandemic.4 We are skeptical of this view. To explain why, we draw on an accepted framework for pandemic management: Pandemics can be prevented and managed through (i) ex ante investments in prevention and (ii) ex post

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1 See Barak D. Richman & Steven L. Schwarcz, Macromedical Regulation, 82 OHIO ST. L.J. 727, 743 (2021).
2 See id. at 742–43.
3 See id. at 742–44.
4 Id. at 763–65.
strategies for containment and treatment. 5 Ex ante investments include monitoring systems that track infections globally, scientific research targeting vaccines and therapies, policies to prevent spread, and public education programs. 6 Ex post strategies include halting elective procedures, reallocating beds and other resources to infected patients, and sharing resources and information between healthcare providers. 7 Ex ante investments are arguably the most important steps a government can take in handling pandemics, and yet healthcare providers play a distinctly second-order role in making these investments. We do not see evidence that, during the COVID-19 pandemic, healthcare providers failed to act as faithful agents of government policy. Thus, with respect to ex ante investments, we see no market failure warranting macromedical regulation of healthcare providers.

Healthcare providers do play a first-order role in implementing ex post strategies, including halting elective procedures and reallocating resources. 8 Along this dimension, Richman and Schwarcz present compelling evidence of market failure: Atomistic healthcare providers failed to share information and resources at critical moments during the pandemic’s surge. 9 Although we agree with the authors’ diagnosis of the problem, we disagree with their solution. We worry about mandates that raise provider costs, which may be difficult to pass on to patients and, as a result, trigger distress or closures with adverse consequences for patient health. 10 Because public health is a social problem, like national defense, we recommend subsidies to providers that invest in pandemic-mitigation capacity (just as we have subsidized various industries during wartime efforts). 11 We also worry about changes to corporate governance because these changes assume that profit-maximization is what induces

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9 Richman & Schwarcz, supra note 1, at 767–68.


atomistic behavior of providers, who ignore the consequences of their behavior for public health.\textsuperscript{12} That may be true, but more evidence is needed. And if nonprofits behave like for-profits, as the authors state,\textsuperscript{13} this suggests that whatever is driving provider behavior is more complex than a simple profit-maximization motive.

II. SYSTEMIC RISK AND THE CASE FOR MACROMEDICAL REGULATION

Systemic risk describes the possibility that a key sector of the economy can collapse and destabilize the rest of the economy.\textsuperscript{14} There are many pathways for systemic risk.\textsuperscript{15} The pathway that has most concerned regulators is contagion: One institution may experience a financial shock that causes it to fail, and its failure can “infect” other firms and cause their failure.\textsuperscript{16} The 2008 financial crisis illustrates the contagion phenomenon. When real estate prices plunged in multiple parts of the United States, the shock destabilized the entire financial industry because (a) the industry had created financial instruments that allowed a wide cross section of institutions to make investments key to the value of the same real estate; (b) financial institutions had so many claims against each other that, even if one institution had no direct exposure to real estate, it had indirect exposure via its claims against other institutions; and (c) as some banks hemorrhaged, investors worried that others might be similarly fragile and responded by restricting the supply of credit to other institutions, thereby threatening their viability.\textsuperscript{17}

Richman and Schwarcz see parallels between the 2008 financial crisis and the COVID-19 pandemic.\textsuperscript{18} In the case of the pandemic, the trigger was the arrival of an infectious disease.\textsuperscript{19} The transmission mechanism was the ease with which COVID-19 can be passed between human beings, not the interconnectedness of health providers.\textsuperscript{20} But that interconnectedness was important nonetheless: It was a missed opportunity to mitigate the fallout from COVID-19 infections; providers failed to invest sufficiently in ICU beds, inter-hospital communications and transfers, and securing sufficient stockpiles of equipment and testing supply lines.\textsuperscript{21} This failure would have been avoided,

\begin{footnotesize}
\bibitem{12} Richman & Schwarz, \textit{supra} note 1, at 769–70.
\bibitem{13} \textit{Id.} at 772.
\bibitem{15} See \textit{id.} at 14–16.
\bibitem{17} See Richman & Schwarz, \textit{supra} note 1, at 733–35.
\bibitem{18} \textit{Id.} at 763.
\bibitem{19} \textit{Id.} at 728–29.
\bibitem{20} \textit{Id.}
\bibitem{21} \textit{Id.} at 744–48.
\end{footnotesize}
Richman and Schwarcz argue, if there had been greater regulation focusing on the way the healthcare industry operates as a system.\textsuperscript{22}

Richman and Schwarcz argue that healthcare regulators should follow the lead of regulators in the wake of the 2008 financial crisis: Financial regulators implemented a four-prong approach to managing systemic risk in the financial sector: (i) limiting risk-taking behavior that generates negative externalities; (ii) increasing the resilience of financial institutions by increasing the financial resources available to manage, withstand, and prevent the spread of a shock; (iii) managing market failures, including agency problems and misinformation; and (iv) vesting the federal government with power to stem contagion.\textsuperscript{23}

Richman and Schwarcz recommend the same approach for the healthcare sector. First, because profit-seeking hospitals underinvest in public health, regulators should “require hospitals to assume financial responsibility for the costs of pandemics” and invest in capacity to address sudden demand surges.\textsuperscript{24} Second, regulators should require hospitals to collect and share data on caseloads and the use of key resources.\textsuperscript{25} Hospitals should also be stress-tested to gauge their ability to respond to demand surges arising from crises.\textsuperscript{26} Third, regulators should consider imposing “some type of a public governance duty” on healthcare providers and thereby counteract current governance incentives.\textsuperscript{27} Finally, the federal government should empower an agency to monitor healthcare providers and be a source of support for stressed providers during a crisis.\textsuperscript{28}

\section*{III. THE LIMITED CASE FOR MACROMEDICAL REGULATION}

We are skeptical that the financial crisis of 2008 provides a useful framework for thinking about pandemics and regulation of healthcare providers.\textsuperscript{29} To be sure, there are parallels between the two crises. In both, a shock reverberated throughout the economic system.\textsuperscript{30} In both, a crisis was exacerbated by uncoordinated behavior of profit-maximizing institutions.\textsuperscript{31} But those parallels ignore key differences between the crises. In the financial system, banks and other institutions are \textit{both} (a) trigger and (b) vector of contagion.\textsuperscript{32}

\begin{itemize}
  \item\textsuperscript{22} See \textit{id.} at 775–76.
  \item\textsuperscript{23} Richman & Schwarcz, \textit{supra} note 1, at 736–39.
  \item\textsuperscript{24} \textit{Id.} at 765.
  \item\textsuperscript{25} \textit{Id.} at 767.
  \item\textsuperscript{26} \textit{Id.} at 768.
  \item\textsuperscript{27} \textit{Id.} at 771–72.
  \item\textsuperscript{28} \textit{Id.} at 774–75.
  \item\textsuperscript{29} See Thomas P. Miller, \textit{Will New Macromedical Regulation Be Prudential?}, 82 \textit{Ohio St. L.J.} 803, 803–06 (2021).
  \item\textsuperscript{30} Richman & Schwarcz, \textit{supra} note 1, at 728–29.
  \item\textsuperscript{31} \textit{Id.} at 763.
  \item\textsuperscript{32} See Paul Glasserman & H. Peyton Young, \textit{Contagion in Financial Networks}, 54 \textit{J. Econ. Literature} 779, 783–86 (2016) (offering examples of individual firms causing spillover contagion to interconnected firms during the 2007–2008 financial crisis).
\end{itemize}
That is, systemic risk can arise endogenously from financial institutions because (i) they are able to take enormous risks while (ii) anticipating government rescue if those risks go south.\footnote{Richman & Schwarcz, supra note 1, at 736.}

Healthcare providers are different. Generally, they are neither (a) trigger nor (b) vector of contagion.\footnote{See generally Dana Robinson & Ann Battenfield, The Worst Outbreaks in U.S. History, HEALTHLINE (Mar. 24, 2020), https://www.healthline.com/health/worst-disease-outbreaks-history [https://perma.cc/MV8K-9SM2] (detailing the history of noteworthy outbreaks of contagion in the United States; in that history, only the 1906–07 Typhoid Mary outbreak was an instance of a healthcare provider being either the trigger or vector of an outbreak).} Although it is theoretically possible for a hospital to be the trigger of a pandemic, it appears rarely to be the case (the one exception might be “Typhoid Mary”).\footnote{Id.} We are also unaware of evidence that the COVID-19 pandemic was transmitted across hospitals because of their interconnectedness.\footnote{See Chanu Rhee et al., Incidence of Nosocomial COVID-19 in Patients Hospitalized at a Large US Academic Medical Center, JAMA NETWORK OPEN (Sept. 9, 2020), https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2770287 [https://perma.cc/KK82-JZZS].} Indeed, the problem in healthcare is the lack of interconnectedness among hospitals: Inadequate coordination prevented many hospitals from providing the care patients needed.\footnote{Richman & Schwarcz, supra note 1, at 744–48.} Although Richman and Schwarcz emphasize that healthcare is a “system,” it is little different from any system that has complex inputs and whose performance is critical during times of crisis. Healthcare is a system in the same sense that the steel industry was a system during World War II.\footnote{In their rejoinder, Richman and Schwarcz ignore these problems with their conceptualization of healthcare as a “system.” See Barak D. Richman & Steven L. Schwarcz, On Skepticism, Modesty, and Embracing Those with Whom We Disagree: A Rejoinder, 82 OHIO ST. L.J. 869, 871–73 (2021). While there is some degree of interconnectedness among healthcare providers, that interconnectedness is rarely, if ever, a vector of contagion. See generally Robinson & Battenfield, supra note 34.}
health providers; (ix) ensuring that healthcare remains available for all conditions during a pandemic; and (x) vaccination.39

Most of these pillars require *ex ante* investments in pandemic preparedness by government agencies.40 This is most obviously true for (i) through (v), (viii) and (x). With respect to these pillars, healthcare providers play, at most, a *second-order* role in the management of pandemic risk. By second order, we mean that providers can help implement government policy (by, for example, administering vaccines). To the extent that healthcare regulation is needed, it is only to ensure that providers are faithful agents of government policy. For example, there is tentative evidence that for-profit providers were less willing than nonprofit providers to defer elective procedures during the pandemic.41 If so, regulation might be needed to ensure that for-profit providers adapt their operations in ways that are consistent with public policies seeking to limit spread. However, most pandemic strategies rely on the government, not healthcare providers.

With respect to the other pillars—(vi) protecting healthcare workers and minimizing spread at facilities, (vii) ensuring adequate supply of information and equipment, and (ix) ensuring that healthcare for non-pandemic illness remains available—healthcare providers play a *first-order* role. Hospitals need to invest in protecting their workers, equipping facilities for demand surges, and ensuring non-pandemic-related care. Notice, though, that the role of hospitals is to *react* to infections, not to preempt pandemics. In that sense, healthcare providers are playing, at most, a backup role to government policies investing in pandemic prevention. This is not to say that all pandemic preparedness going forward ought to rely on *ex ante* investments; instead, we suggest that focusing exclusively on *ex post* strategies neglects a critical part of preventing a public health crisis from spiraling out of control. To be sure, as Richman and Schwarcz emphasize, hospitals failed to play this backup role properly.42 They struggled with unmet demand surges and resource mismatches, in which some hospitals had too many beds or ventilators or personal protective equipment while others were overrun with patients and could not obtain the supplies they needed.43

40 See id. at 13–17.
42 Richman & Schwarcz, *supra* note 1, at 743.
Additionally, providers did not communicate effectively, making it difficult to collect comprehensive data and overcome resource disparities. Intervention is clearly necessary to ensure that hospitals fulfill their first-order roles.

What is the appropriate regulatory response to these failings? To answer that question, we first need to identify the pathologies underlying these failures.

IV. WHAT SHOULD MACROMEDICAL REGULATION LOOK LIKE?

Richman and Schwarcz point to two pathologies: the profit motive and the lack of interconnectedness among hospitals.

Many hospitals in the United States are for-profit institutions (and even the nonprofits behave like for-profits). The profit motive can distort the behavior of health providers in ways that are harmful to public health. For example, it seems to have induced providers to invest heavily in elective procedures at the expense of primary care. Many hospitals halted elective surgeries to reallocate resources to COVID-19 patients. As a result, a significant number of hospitals entered financial distress, especially those that took on a large number of uninsured patients and Medicaid patients. In 2020, at least thirty-six hospitals filed for bankruptcy in the United States and almost

45 Richman & Schwarcz, supra note 1, at 763–64, 767–68.
46 E.g., Hospitals by Ownership Type, KAIser FAM. FOUND., https://www.kff.org/other/state-indicator/hospitals-by-ownership/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D [https://perma.cc/XV2X-MG8Z] (showing that, in 2019, twenty-four percent of hospitals were for-profit entities).
47 Richman & Schwarcz, supra note 1, at 772.
48 Id. at 763.
two-thirds of hospitals were in financial distress. It is estimated that rural hospitals lost around 70% of their income in 2020 due to delayed procedures.

Perhaps, then, macromedical regulation should constrain the profit-seeking motive of hospitals, as Richman and Schwarcz recommend? We are skeptical that the profit motive is a key driver of hospital missteps during the pandemic. Our skepticism derives from the fact that for-profits account for less than a quarter of all hospitals in the United States and from the absence of data showing that nonprofits were better prepared for the pandemic than their for-profit counterparts. Some preliminary data suggests that nonprofits were more likely to suspend elective procedures, but more data is needed before we can conclude that hospitals will be better equipped to handle pandemics if regulators constrain their profit motive.

Moreover, we worry that resource constraints—not the profit motive—explain the failures at many hospitals. High-profit hospitals, especially those in urban areas, had far more beds and fewer COVID-19 deaths than less profitable hospitals. High-profit hospitals were also able to obtain supplies, such as personal protective equipment, because they could outbid other hospitals. Thus, some disparities across hospitals appear to be a function of resources and funding, not excessive risk-taking or a failure to prepare for demand surges. To


54 Hospitals by Ownership Type, supra note 46.

55 See Jean, Ironside, Sack, Felbaum & Syed, supra note 41, at 1236.

56 Perhaps lessons can be drawn from New Jersey’s experiment with governance during the pandemic: Three nonprofit hospital CEOs were authorized to make strategic and operational decisions for all acute care hospitals in the state. See N.J. DEP’T OF HEALTH, EXECUTIVE DIRECTIVE NO. 20-007, AUTHORIZATION FOR NEW JERSEY’S LEVEL I TRAUMA CENTERS TO COORDINATE REGIONAL EFFORTS RELATED TO COVID-19 SURGE PLANNING & EXPANDING HOSPITAL BED CAPACITY 3 (2020), https://nj.gov/health/legal/covid19/4-11-20_ExecutiveDirectiveNo20-007RegionalCoordinators.pdf [https://perma.cc/SZZW-9L2J].


be sure, many providers prioritized profits and underinvested in public health, even going so far as to try to avoid accepting transfers of COVID-19 patients without insurance, but many hospitals in poor and rural areas could not invest further in pandemic preparedness. In fact, most hospitals in the United States likely could not shoulder this new financial burden. The median operating margin for a hospital in 2018, prior to the start of the pandemic, was 2.0% and the median hospital had about fifty-three days’ cash on hand; hospitals at the twenty-fifth percentile, however, had a -4.4% operating margin and 7.6 days cash on hand. The average margin among the bottom quartile was -14.5%. These statistics show that, if hospitals are unable to pass on the costs of mandates to patients (which, the evidence shows, they are unable to do), we should worry about their ability to shoulder those costs. Mandating that hospitals further invest in their capacity to address demand surges could bankrupt many hospitals, especially in poor and rural areas where there are fewer available options.

Another potential pathology is the fragmentation of our healthcare system. The atomistic behavior of providers, Richman and Schwarcz argue, prevented coordination that could have ensured a more effective response to the pandemic. Yet global data suggest that the severity of COVID-19 is not strongly correlated with the interconnectedness of healthcare providers. Although the United States continues to have the most confirmed cases over the course of the pandemic, differences between the United States and other countries attenuate when case rates are normalized by population. The United States, for example, had comparable death rates to Italy and the United Kingdom, both of which have universal healthcare systems without a profit

61 Khullar, Bond & Schpero, supra note 49, at 2127.
63 See, e.g., Lindrooth, Perraillon, Hardy & Tung, supra note 10, at 119.
64 See Tribble, supra note 53.
65 Richman & Schwarz, supra note 1, at 743–45.
67 Id.
68 Id.
motive. Spain and France had slightly fewer deaths per 100,000, yet France is considered one of the best universal healthcare systems in the world. If we look at the case-fatality rate, the puzzle deepens further. The United States had a lower case-fatality rate than Italy, Australia, the United Kingdom, Germany, Belgium, Spain, Portugal, and France. Although exact calculations for case-fatality rates can vary based on country, these data raise doubts about whether healthcare interconnectedness had a sizable impact on pandemic outcomes.

Even if fragmentation was an important driver of pandemic outcomes, the nature of the “fragmentation” needs to be specified carefully. In the United States, a major fragmentation problem was the lack of information-sharing across hospitals. The federal government, for example, was able to obtain a large supply of ventilators, but lacked the information necessary to distribute them to hospitals in most need.

What is the appropriate policy response to this fragmentation problem? Richman and Schwartz argue that health providers should be required to “assume financial responsibility for the costs of pandemics and thus financially induce them to prepare for population crises.” Regulators might “stress test”...
providers to verify that they have made necessary investments to address
demand surges.\textsuperscript{78} And because regulators are often fighting “last year’s war,”
Richman and Schwarcz suggest imposing a governance duty on healthcare
providers to promote public health.\textsuperscript{79}

It is telling, though, that when Richman and Schwarcz advocate a “duty to
stockpile,” they defend this duty, in part, on the ground that the government has
a poor track record in stockpiling.\textsuperscript{80} The authors, in other words, believe that the
private sector has an advantage, relative to the government, in performing a
public health mission. But when the government pursues a public policy
mission, we expect it to fund that mission using tax dollars because the mission
benefits society generally. That’s most obviously true for public health
missions, which definitionally benefit the public. Richman and Schwarcz,
however, would impose unfunded mandates on private healthcare providers.\textsuperscript{81}

Hospitals would not be subsidized for protecting public health (a positive
externality).\textsuperscript{82} They would have to bear the costs and, to the extent they can,
shift those costs to patients.\textsuperscript{83} If providers shift all costs to patients, we will—in
theory—have a world that’s similar to one where tax dollars are used to
subsidize healthcare providers. Either way, patients will be paying for the public
health investments—through higher health costs charged by providers or
through higher taxes charged by the government. We should worry, however,
that many hospitals may be unable to shift all costs to patients.\textsuperscript{84} If so, these
hospitals could suffer financial distress and potentially shut down, with adverse
health consequences for patients.\textsuperscript{85}

\section*{V. Conclusion}

We think unfunded mandates are a mistake. Public health is a public
problem. If health providers must be enlisted to protect the public, they should
be subsidized as they foster this positive externality. Imposing unfunded
macromedical regulations is far more likely to bankrupt hospitals servicing low-
income or rural regions, leaving these areas even more vulnerable.\textsuperscript{86}

\textsuperscript{78} Id. at 768.
\textsuperscript{79} Id. at 772.
\textsuperscript{80} Id. at 769; see also Amy B. Monahan, Two Cheers for the US Health Security
\textsuperscript{81} Richman & Schwarcz, supra note 1, at 767 n.235.
\textsuperscript{82} See id. at 772.
\textsuperscript{83} AM. HOSP. ASS’N, REGULATORY OVERLOAD: ASSESSING THE REGULATORY BURDEN
ON HEALTH SYSTEMS, HOSPITALS AND POST-ACUTE CARE PROVIDERS 3 (2017), https://
w wwn.aha.org/system/files/2018-02/regulatory-overload-report.pdf [https://perma.cc/YTR4-
RAGP].
\textsuperscript{84} See Lindrooth, Perrailon, Hardy & Tung, supra note 10, at 117; Austin B. Frakt,
How Much Do Hospitals Cost Shift? A Review of the Evidence, 89 MILBANK Q. 90, 109–10
(2011).
\textsuperscript{85} Gujral & Basu, supra note 10, at 14–15.
\textsuperscript{86} See Coleman-Lochner, supra note 52.
Regulations ought to instead focus on preventing hospitals from getting overwhelmed and helping to provide resources to ensure that a crisis like COVID-19 does not happen again. This has little to do with regulating the healthcare industry as a system and much more to do with reassessing our understanding of the likelihood of a pandemic, thus making sure the government is fulfilling its first-order role in preparing for public health emergencies and that healthcare providers are acting as good second-order agents.