## Plan

#### The United States ought to reduce intellectual property protections for opioids. For enforcement, I’ll defend a patent buyout system that reduces IPRs on opioids.

Hemel et al 20 - Daniel J Hemel, Assistant Professor of Law at U Chicago and Visiting Professor of Law, Stanford and Lisa Larrimore Ouellete, Associate Professor of Law at Stanford Journal of Law and the Biosciences, June 9th 2020 “ Innovation institutions and the opioid crisis” [https://academic.oup.com/jlb/article/7/1/lsaa001/5854401] // SAO/emi 9/17/21

A bolder approach than a Medicaid best-price carveout would be for the federal government to offer to buy the family of Evzio-related patents from Kaléo and then to place those patents in the public domain.294 One potential concern with buyouts is that they remove the patent holder’s incentive to invest in commercialization—though by this point, the publicity surrounding the naloxone auto-injector may already have accomplished much of what marketing efforts can achieve. Another, more daunting, challenge is how to set the price for such a buyout. **Academics have proposed auction systems to place some market bound on patent buyout prices, but perhaps the most straightforward approach for a one-time buyout is for Congress to appropriate a specific amount, in effect making a take-it-or-leave-it offer to the manufacturer.** Given that Kaléo does not appear to be turning a profit from Evzio yet,295 it is not crazy to think that the firm would say yes. **Optional patent buyouts are attractive if the optimal buyout price is higher than the patentee’s expected market return,** which may be the case in the Evzio context given both the product’s positive externalities and Kaléo’s apparent financial struggles. **For unwilling sellers, the government has legal options to effectively force patent buyouts. If all the relevant patents were created under federal grants, the government has a license to practice the invention and can also exercise ‘march-in’ rights to grant additional licenses if ‘action is necessary to alleviate health or safety needs which are not reasonably satisfied’ by the patentee.**296 And for any patent, 28 U.S.C. § 1498 allows the government and its contractors to manufacture and use the invention ‘by or for the United States’ in exchange for monetary damages based primarily on the patentee’s risk-adjusted research and development costs.297 These statutory mechanisms potentially allow the government to address the problem of ‘over-reward,’ although the government has shown reluctance to embrace this authority in other contexts.298

#### Patents are undeniably the cause of the epidemic– removing them solves.

Hemel 2 - Daniel J Hemel, Assistant Professor of Law at U Chicago and Visiting Professor of Law, Stanford and Lisa Larrimore Ouellete, Associate Professor of Law at Stanford Journal of Law and the Biosciences, June 9th 2020 “ Innovation institutions and the opioid crisis” [https://academic.oup.com/jlb/article/7/1/lsaa001/5854401] // SAO/emi 9/17/21

Of course, these powerful patent incentives still may be subject to the same distortions described in Part II. Patents also skew research toward treatments that require repeated use—and thus generate steady streams of revenue—rather than preventatives which are effective after a single administration.234 Patent law may therefore be more helpful, for example, in encouraging the development of nonaddictive painkillers than in the development of anti-addiction vaccines.235 Patent law likewise will do little to facilitate research and development directed at ideas that are difficult for a single firm to commodify—for example, reducing the default number of pills per prescription,236 informing doctors when their patients overdose,237 or encouraging the use of alternative pain treatments such as physical or behavioral therapy.238 Patents are also ineffective incentives for non-pharmaceutical addiction recovery tools such as mobile phone reminders that track the number of days that a patient has remained substance-free,239 for creative ideas like using reverse motion detectors in clinic bathrooms (ie devices that detect lack of motion) to prevent fatal overdoses,240 and for research on the comparative value of supervised drug use clinics241 or different drug court protocols or streamlined ER-to-outpatient transfers for preventing relapse.242 Episodes such as Indivior’s effort to undermine the tablet form of Suboxone243 highlight the need to consider broad changes to patent law and its interactions with FDA regulatory law, antitrust law, tort law, and other institutions that might cabin its pathologies.244 These changes, however, may take years to formulate and implement. In the meantime, the opioid epidemic’s daily death toll reminds us of ‘the fierce urgency of now.’245 While patents may play a role in promoting the development and commercialization of opioid alternatives, antidotes, and addiction treatments, we think it is clear enough that America will not patent its way out of the opioid crisis. Policymakers will need to look elsewhere for solutions.

## Advs

### ADV –

#### Opioid induced Labor shortage leads to US economic downturns. The impact is manufacturing production disturbance.

Callaway and Shi, 18 [Jennifer Callaway is the Vice President of Research at the MAPI Foundation and Yubing Shi is a Research Analyst at the MAPI Foundation, 2-22-18, “Ignorance Isn’t Bliss. The Impact of Opioids on Manufacturing”, <https://mapifoundation.org/economic/2018/2/22/ignorance-isnt-bliss-the-impact-of-opioids-on-manufacturing>, BP]

There Is No Sugarcoating It—The U.S. Is in Crisis **The U.S. is in the midst of its third drug crisis in the last 50 years. Drugs are now the leading cause of death for prime working age Americans.** In 2016, drug overdose deaths from opioids increased fivefold compared to 1999. Drugs are now more fatal than car accidents were at their peak in 1972, than guns were at their peak in 1993, and AIDS was at its peak in 1995. Drug overdoses also killed more people in 2016 than the total number of U.S. soldiers who died during the entire Vietnam War. **The culprit is the opioid crisis; two-thirds of drug overdose deaths in 2016 involved a prescription or illicit opioid**. The economic and societal implications of the drug crisis are broad and deep. In 2015, the U.S. spent 2.8% of its GDP on the opioid crisis according to The White House Council of Economic Advisers (CEA). **Drug crises generate excess medical, substance abuse treatment, and drug prevention costs. Opioid abuse puts pressure on the criminal justice system due to increased policing efforts, associated legal efforts, and correctional facility costs.** The Social Security Administration (SSA) doesn’t grant disability for drug addiction, but misuse of pain medication can lengthen disability claims. These are direct costs, but the indirect costs shouldn’t be overlooked. Some are easy to estimate, such as caregiver Family and Medical Leave Act (FMLA) requests and paid time off. Others are harder to estimate. How can we begin to quantify the impact of the suffering associated with fatalities and addiction? Why aren’t more people talking about the impact of the current drug crisis on the workforce and productivity in general? A few studies exist. A 2011 U.S. Department of Justice study explored the impact drug use has on the labor force participation rate and productivity. Another study found that nearly half of prime working age men not in the labor force are taking daily doses of prescription pain medications. **The rate of opioid prescriptions and labor participation are intertwined. Areas with higher prescription opioid rates have lower labor force participation rates.** For some injured workers, a prescription can be a gateway to substance abuse and their eventual exit from the workforce. For others, who may have already left the labor force, abusing a prescription opioid helps numb the emotional pain of the deteriorating economic conditions of their community. In addition to the potential risks of losing an abled worker, **drug addiction leads to medically-related absenteeism, disability costs for the users, and caregiver-related absenteeism that adds to productivity loss for companies.** In fact, a 2014 study published by the Workers’ Compensation Research Institute (WCRI) found that on average three-quarters of injured workers receive prescription opioids for pain relief after a workplace injury, but few receive services to help them navigate chronic opioid management. These factors are costly to families and individual companies, and they should be studied at an industry level. **Unchecked this drug crisis will erode the health of the U.S. economy. This is particularly troublesome as the U.S. economy’s recovery from the Great Recession has been slow and unspectacular.** Two key components of the U.S. economy are the performance of U.S. multinationals and foreign multinationals operating in the U.S. Together they account for a significant portion of output, productivity, employment, and exports. **The manufacturing sector contributes disproportionately** to these key economic indicators, **and the recent rallying cry for a manufacturing renaissance shows that many Americans want to see it remain a critical driver of the economy in the future.** The importance of manufacturing to the U.S. economy is so crucial that many optimists are forecasting its return to global dominance. But, we shouldn’t be too quick to predict the sector’s return to its 1950s and 1960s glory. **Optimists are ignoring the impact of the drug crisis on the manufacturing industry.** It’s a classic example of inattentional [ignorance] blindness. The MAPI Foundation analyzed the intersection of the current drug crisis and manufacturing to understand the risk it poses to the sector’s long-term health. Our analysis compares manufacturing employment from the U.S. Bureau of Economic Analysis (BEA) and drug overdose deaths from the Centers for Disease Control and Prevention (CDC) to identify the U.S. counties with the highest share of manufacturing employment and most drug overdose deaths. Our findings illustrate the velocity with which the drug crisis has grown in manufacturing-centric counties, what it means for the industry today and in the future, and why manufacturers need to be vigilant and proactive. Counties Seeing the Highest Drug-Related Deaths Intersect in an Alarming Way with Manufacturing Conversations about the current drug crisis with manufacturing executives usually follow one of three paths – “I’m not worried,” “not a problem yet, but I’m monitoring the situation,” or “it’s really bad, can you help?”. The exasperation in the voice of an executive talking about how drug use is complicating hiring or how prescription opioids can lead to functioning addicts in the workplace is palpable. Stories range from as many as **40% of new hires failing their pre-employment drug test to knowing about prescription abuse in the workforce** (sometimes enabled by pill mill doctors). Some manufacturing companies have a feel for how much the drug crisis affects their operations, but few fully understand the scale of the problem or can quantify the impact. The executives who know that drugs are affecting their business operate in counties plagued by high drug overdose rates. In 2001, the intersection of drug overdose deaths and manufacturing was an annoyance but not a crisis. The drug crisis made only a small impact on counties with the highest share of manufacturing employment from 2001 to 2009. During this time, less than 1% of these counties also saw the highest rates of drug overdose deaths. The acceleration began in earnest in 2009. As the crisis festered from 2011-2016, an average of 44% more manufacturing-centric counties joined the list each year. By the end of 2016, 70 counties that rely the most on manufacturing employment, located in 20 states, were grappling with deadly addiction. Individual counties started to see big jumps in year-over-year overdose deaths in 2009, but many were isolated enough from each other to remain under the state-level radar until 2014. In 2016, 25 states saw statistically significant increases in drug overdose deaths. Eleven of these states are reflected in our analysis; including Illinois, Indiana, Kentucky, Michigan, North Carolina, Ohio, Oklahoma, Tennessee, Texas, Virginia, and West Virginia. In 2015, only 19 states saw statistically significant increases in drug overdose deaths. Each year that this number creeps up it illustrates that policy interventions have yet to stem the tide of this public health crisis. You can also see first-hand what the rapid increase in drug use, specifically opioids, have done to the city of Huntington in Cabell County, West Virginia in the Netflix documentary Heroin(e). Cabell County is “the overdose capital of the country” with ten times the national average of opioid overdoses. The annual costs of the drug crisis are on pace to bankrupt the county according to Huntington Fire Chief Jan Rader, a central character in the documentary. Manufacturing employment is still strong in Cabell County. Manufacturers employ nearly 10% of the workforce, despite a 10% reduction of manufacturing jobs since 2008. A recent search of jobs posted on employment search engines returned open positions with manufacturers in both Cabell County and adjacent counties. The Drug Crisis Puts Manufacturing GDP at Risk In 2016, the 11 states in our analysis with troubling increases in drug overdose deaths generated 41% of manufacturing GDP. Take Ohio as an example. The state had 687,400 manufacturing workers and generated $108 billion in total manufacturing output that year. Ohio’s total manufacturing output represents 4.9% of total U.S. manufacturing output. The state ranks third after California and Texas. Ohio is also home to four of the counties with the highest drug overdose deaths and the highest share of manufacturing employment where well-known manufacturers like General Mills and General Motors operate. We should not ignore the risk the drug crisis in Ohio poses to total manufacturing output. Other states have more manufacturing-centric counties in crisis than Ohio, but they generate far less manufacturing output. The crisis in Tennessee spans 19 manufacturing-centric counties representing 20% of its administrative divisions. But Tennessee contributes half the amount of manufacturing output to the U.S. total as Ohio. It may be tempting to dismiss 70 counties as a small number in crisis. Another 201 counties that have the highest share of manufacturing employment are seeing more than the national median of drug overdose deaths as well. Put another way, 40% of the country’s manufacturing-centric counties are experiencing the worst of the drug crisis. Based on the historical trends, it is safe to say that in the next few years, a number of these 201 counties will find themselves deeper in crisis. The acceleration and penetration of this crisis have followed a consistent path across the country, and each year it has gotten worse. There’s no evidence of it slowing down yet. U.S. Manufacturing’s Future Is at Stake; the Drug Crisis Is on Track to Erode Future Growth The crack crisis of the 1980s was an inner-city scourge experienced largely by communities of color. A different demographic group experiences today's drug crisis and many have been quick to link the national outcry to racial disparities that stubbornly persist in our society. The typical drug user is now more often than not male, white, and in their working prime. The profile of the typical drug user and the typical manufacturing worker is eerily similar. In 2016, manufacturing was 71% male and 81% white, and drug overdose deaths were 67% male and 79% white. Returning to the Ohio example, an important state for manufacturing, drug overdose deaths were 68% male and 89% white. Much has been written about the “deaths of despair,” but drug overdose deaths have bifurcated into two age-related groups – those in their middle age and those in their 20s to 30s. **Any loss of life is tragic, but the increasing trend of younger drug users dying from illicit opioids has an irreversible impact on local economies. The lost future productivity from the premature death of prime working age adults compounds year-over-year.** In an industry where the workforce closely resembles the demographics of drug overdose deaths, the consequences are painful today, and the effects will persist into the future as well. A number of experts are predicting U.S. manufacturing’s return to its position as the global leader in the near future. This optimism should be tempered with realism about some of the on the ground challenges the industry is facing. Manufacturing’s workforce has been aging for some years. In 2016, the median age of the U.S. manufacturing worker was 44.5. It’s no secret that manufacturing has an employment branding problem. Many parents have discouraged their children from pursuing careers in manufacturing, and today’s college graduate is more interested in Silicon Valley than the Rust Belt. **The Great Recession had a disastrous effect on many industries, and since 2009, manufacturers have been battling back from low share prices, falling commodity prices, low capacity utilization, and labor turnover.** Enter **the drug crisis.** While drugs aren’t a uniquely American issue, the problem **is acuter within the U.S. labor force than other top manufacturing countries.** In 2014, the World Health Organization reported the U.S. drug-related death rate was 6.96 per 100,000. It was five times higher than Germany, sixteen times higher than Japan, nineteen times higher than China, and twenty-nine times higher than South Korea. **It’s undeniable that drugs are more of a drag on the U.S. economy than they are in the other top manufacturing countries.** Every country has its own economic and workforce challenges, but our analysis has found that in the U.S. the drug crisis is accelerating in communities with large manufacturing workforces. If this trend continues unchecked, it will have profound effects on manufacturing in the future. Even though the national prescription opioid rate has declined in recent years reflecting new policies curtailing prescriptions, county-level prescription rates vary drastically across the country. As a result, some counties suffer a risk of addiction and overdose death higher than the national average.

#### Slow growth deteriorates the international order and causes extinction

Haas 17 [Richard Haas, President of the Council on Foreign Relations, previously served as Director of Policy Planning for the US State Department (2001-2003), and was President George W. Bush's special envoy to Northern Ireland and Coordinator for the Future of Afghanistan.] “A World in Disarray: American Foreign Policy and the Crisis of the Old Order” published January 10, 2017, (Print) – Mzhu

A large portion of the burden of creating and maintaining order at the regional or global level will fall on the United States. This is inevitable for several reasons, only one of which is that the United States is and will likely remain the most powerful country in the world for decades to come. The corollary to this point is that no other country or group of countries has either the capacity or the mind-set to build a global order. Nor can order ever be expected to emerge automatically; there is no invisible hand in the geopolitical marketplace. Again, a large part of the burden (or, more positively, opportunity) falls on the principal power of the day. There is more than a little self-interest at stake. The United States cannot remain aloof, much less unaffected by a world in disarray. Globalization is more reality than choice. At the regional level, the United States actually faces the opposite problem, namely, that certain actors do have the mind-set and means to shape an order. The problem is that their views of order are in part or in whole incompatible with U.S. interests. Examples would include Iran and ISIS in the Middle East, China in Asia, and Russia in Europe. It will not be an easy time for the United States. The sheer number and range of challenges is daunting. There are a large number of actors and forces to contend with. Alliances, normally created in opposition to some country or countries, may not be as useful a vehicle in a world in which not all foes are always foes and not all friends are always friendly. Diplomacy will count for a great deal; there will be a premium on dexterity. Consultations that aim to affect the actions of other governments and their leaders are likely to matter more than negotiations that aim to solve problems. Another reality is that the United States for all its power cannot impose order. Partially this reflects what might be called structural realities, namely, that no country can contend with global challenges on its own given the very nature of these challenges. The United States could reduce its carbon footprint dramatically, but the effect on global climate would be modest if India and China failed to follow suit. Similarly, on its own the United States cannot maintain a world trading system or successfully combat terrorism or disease. Adding to these realities are resource limits. The United States cannot provide all the troops or dollars to maintain order in the Middle East and Europe and Asia and South Asia. There is simply too much capability in too many hands. Unilateralism is rarely a serious foreign policy option. Partners are essential. That is one of the reasons why sovereign obligation is a desirable compass for U.S. foreign policy. Earlier I made the case that it represents realism for an era of globalization. It also is a natural successor to containment, the doctrine that guided the United States for the four decades of the Cold War. There are basic differences, however. Containment was about holding back more than bringing in and was designed for an era when rivals were almost always adversaries and in which the challenges were mostly related to classical geopolitical competition.1 Sovereign obligation, by contrast, is designed for a world in which sometime rivals are sometime partners and in which collective efforts are required to meet common challenges. Up to this point, we have focused on what the United States needs to do in the world to promote order. That is what one would expect from a book about international relations and American foreign policy. But a focus on foreign policy is not enough. National security is a coin with two sides, and what the United States does at home, what is normally thought of as belonging to the domestic realm, is every bit as much a part of national security as foreign policy. It is best to understand the issue as guns and butter rather than guns versus butter. When it comes to the domestic side, the argument is straightforward. In order to lead and compete and act effectively in the world, the United States needs to put its house in order. I have written on what this entails in a book titled Foreign Policy Begins at Home.2 This was sometimes interpreted as suggesting a turn away from foreign policy. It was nothing of the sort. Foreign policy begins at home, but it ends there only at the country’s peril.3 Earlier I mentioned that the United States has few unilateral options, that there are few if any things it can do better alone than with others. The counterpart to this claim is that the world cannot come up with the elements of a working order absent the United States. The United States is not sufficient, but it is necessary. It is also true that the United States cannot lead or act effectively in the world if it does not have a strong domestic foundation. National security inevitably requires significant amounts of human, physical, and financial resources to draw on. The better the United States is doing economically, the more it will have available in the way of resources to devote to what it wants and needs to do abroad without igniting a divisive and distracting domestic debate as to priorities. An additional benefit is that respect for the United States and for the American political, social, and economic model (along with a desire to emulate it) will increase only if it is seen as successful. The most basic test of the success of the model will be economic growth. U.S. growth levels may appear all right when compared with what a good many other countries are experiencing, but they are below what is needed and fall short of what is possible. There is no reason why the United States is not growing in the range of 3 percent or even higher other than what it is doing and, more important, not doing.4

#### Yes transition wars---both sides miscalculate.

Min-hyung Kim 20. Department of Political Science and International Relations, Kyung Hee University, Seoul, South Korea. “A real driver of US–China trade conflict: The Sino–US competition for global hegemony and its implications for the future” Emerald Insight. 02-04-2019. <https://www.emerald.com/insight/content/doi/10.1108/ITPD-02-2019-003/full/html> // Re-Cut Justin

Underlying these arguments for an inevitable war between the two superpowers is PTT. PTT originally formulated by Organski (1958) posits that **war is likely** when the power of the dominant state in the international system (i.e. hegemon) is **declining** and that a dissatisfied rising challenger **substantially reduces the power gap between the hegemon and itself**. Unlike balance of power theory, PTT argues that the war is most likely when there is near power parity between a dominant state and a rising and dissatisfied challenger (Organski and Kugler, 1980, pp. 19-20)[5]. A rising power here is generally dissatisfied with the existing international order and **initiates war against a declining hegemon in order to impose orders that are more favorable to itself** (Organski 1958, pp. 364-367). Layne (2018, p. 110) put these power transition dynamics quite succinctly as follows: “Over time, however, the relative power of states changes, and eventually the international order no longer reflects the actual distribution of power between or among the leading Great Powers. When that happens, the legitimacy of the prevailing order is called into question, and it will be challenged by the rising power(s).” And when the balance of power between a dominant state and a rising challenger changes sufficiently, a new order replaces an old one typically **by a hegemonic war** (2018, p. 104). Paying close attention to the **growing Sino–US competition** over hegemony in the twenty-first century, therefore, Shirk (2007, p. 4), China specialist, argues that “History teaches us that rising powers are likely to provoke war.” On the other hand, scholars like Gilpin (1981) contend that the power transition war between great powers is likely to occur when a hegemonic state whose power is declining due to imperial overstretch[6] views “**preventive war as the most attractive means of eliminating the threat** posed by challengers” (Ned Lebow and Valentino, 2009, p. 391), although they do acknowledge that there might be some “ways to prolong the period of its power preponderance vis-à-vis the rising challenger, so that the rapidly rising power will not dare to challenge the hegemonic leadership” (Kim and Gates, 2015, p. 221). In this case, the initiator of war is a declining hegemon, rather than a rising challenger. The declining hegemon who fears a rising challenger’s overtaking its power in the near future **sees war as a better option** than other options of maintaining its hegemony such as reducing its commitments abroad and appeasing a rising challenger.

#### US military influence solves every threat---satellite and tech leadership sustain military overmatch, but decline emboldens rivals and causes miscalc and arms races that escalate.

Hal Brands 18. Henry A. Kissinger Distinguished Professor of Global Affairs at the Johns Hopkins University School of Advanced International Studies, Senior Fellow at the Center for Strategic and Budgetary Assessments and the Foreign Policy Research Institute, Ph.D. in history from Yale University. “Chapter 6: Does America Have Enough Hard Power?” American Grand Strategy in the Age of Trump; pp. 129-133.

Much contemporary commentary favors the first option—reducing commitments—and denounces the third as financially ruinous and perhaps impossible.5 Yet significantly expanding American capabilities would not be nearly as economically onerous as it may seem. Compared to the alternatives, in fact, this approach represents the best option for sustaining American primacy and preventing a slide into strategic bankruptcy that will eventually be punished. Since World War II, the United States has had a military second to none. Since the Cold War, America has committed to having overwhelming military primacy. The idea, as George W. Bush declared in 2002, that America must possess “strengths beyond challenge” has featured in every major U.S. strategy document for a quarter century; it has also been reflected in concrete terms.6 From the early 1990s, for example, the United States consistently accounted for around 35 to 45 percent of world defense spending and maintained peerless global power-projection capabilities.7 Perhaps more important, U.S. primacy was also unrivaled in key overseas strategic regions—Europe, East Asia, the Middle East. From thrashing Saddam Hussein’s million-man Iraqi military during Operation Desert Storm, to deploying—with impunity—two carrier strike groups off Taiwan during the China-Taiwan crisis of 1995– 96, Washington has been able to project military power superior to anything a regional rival could employ even on its own geopolitical doorstep. This military dominance has constituted the hard-power backbone of an ambitious global strategy. After the Cold War, U.S. policymakers committed to averting a return to the unstable multipolarity of earlier eras, and to perpetuating the more favorable unipolar order. They committed to building on the successes of the postwar era by further advancing liberal political values and an open international economy, and to suppressing international scourges such as rogue states, nuclear proliferation, and catastrophic terrorism. And because they recognized that military force remained the ultima ratio regum, they understood the centrality of military preponderance. Washington would need the military power necessary to underwrite worldwide alliance commitments. It would have to preserve substantial overmatch versus any potential great-power rival. It must be able to answer the sharpest challenges to the international system, such as Saddam’s invasion of Kuwait in 1990 or jihadist extremism after 9/11. Finally, because prevailing global norms generally reflect hard-power realities, America would need the superiority to assure that its own values remained ascendant. It was impolitic to say that U.S. strategy and the international order required “strengths beyond challenge,” but it was not at all inaccurate. American primacy, moreover, was eminently affordable. At the height of the Cold War, the United States spent over 12 percent of GDP on defense. Since the mid-1990s, the number has usually been between 3 and 4 percent.8 In a historically favorable international environment, Washington could enjoy primacy—and its geopolitical fruits—on the cheap. Yet U.S. strategy also heeded, at least until recently, the fact that there was a limit to how cheaply that primacy could be had. The American military did shrink significantly during the 1990s, but U.S. officials understood that if Washington cut back too far, its primacy would erode to a point where it ceased to deliver its geopolitical benefits. Alliances would lose credibility; the stability of key regions would be eroded; rivals would be emboldened; international crises would go unaddressed. American primacy was thus like a reasonably priced insurance policy. It required nontrivial expenditures, but protected against far costlier outcomes.9 Washington paid its insurance premiums for two decades after the Cold War. But more recently American primacy and strategic solvency have been imperiled. THE DARKENING HORIZON For most of the post–Cold War era, the international system was— by historical standards—remarkably benign. Dangers existed, and as the terrorist attacks of September 11, 2001, demonstrated, they could manifest with horrific effect. But for two decades after the Soviet collapse, the world was characterized by remarkably low levels of great-power competition, high levels of security in key theaters such as Europe and East Asia, and the comparative weakness of those “rogue” actors—Iran, Iraq, North Korea, al-Qaeda—who most aggressively challenged American power. During the 1990s, some observers even spoke of a “strategic pause,” the idea being that the end of the Cold War had afforded the United States a respite from normal levels of geopolitical danger and competition. Now, however, the strategic horizon is darkening, due to four factors. First, great-power military competition is back. The world’s two leading authoritarian powers—China and Russia—are seeking regional hegemony, contesting global norms such as nonaggression and freedom of navigation, and developing the military punch to underwrite these ambitions. Notwithstanding severe economic and demographic problems, Russia has conducted a major military modernization emphasizing nuclear weapons, high-end conventional capabilities, and rapid-deployment and special operations forces— and utilized many of these capabilities in conflicts in Ukraine and Syria.10 China, meanwhile, has carried out a buildup of historic proportions, with constant-dollar defense outlays rising from US$26 billion in 1995 to US$226 billion in 2016.11 Ominously, these expenditures have funded development of power-projection and antiaccess/area denial (A2/AD) tools necessary to threaten China’s neighbors and complicate U.S. intervention on their behalf. Washington has grown accustomed to having a generational military lead; Russian and Chinese modernization efforts are now creating a far more competitive environment. Second, the international outlaws are no longer so weak. North Korea’s conventional forces have atrophied, but it has amassed a growing nuclear arsenal and is developing an intercontinental delivery capability that will soon allow it to threaten not just America’s regional allies but also the continental United States.12 Iran remains a nuclear threshold state, one that continues to develop ballistic missiles and A2/AD capabilities while employing sectarian and proxy forces across the Middle East. The Islamic State, for its part, is headed for defeat, but has displayed military capabilities unprecedented for any terrorist group, and shown that counterterrorism will continue to place significant operational demands on U.S. forces whether in this context or in others. Rogue actors have long preoccupied American planners, but the rogues are now more capable than at any time in decades. Third, the democratization of technology has allowed more actors to contest American superiority in dangerous ways. The spread of antisatellite and cyberwarfare capabilities; the proliferation of man-portable air defense systems and ballistic missiles; the increasing availability of key elements of the precision-strike complex— these phenomena have had a military leveling effect by giving weaker actors capabilities which were formerly unique to technologically advanced states. As such technologies “proliferate worldwide,” Air Force Chief of Staff General David Goldfein commented in 2016, “the technology and capability gaps between America and our adversaries are closing dangerously fast.”13 Indeed, as these capabilities spread, fourth-generation systems (such as F-15s and F-16s) may provide decreasing utility against even non-great-power competitors, and far more fifth-generation capabilities may be needed to perpetuate American overmatch. Finally, the number of challenges has multiplied. During the 1990s and early 2000s, Washington faced rogue states and jihadist extremism—but not intense great-power rivalry. America faced conflicts in the Middle East—but East Asia and Europe were comparatively secure. Now, the old threats still exist—but the more permissive conditions have vanished. The United States confronts rogue states, lethal jihadist organizations, and great-power competition; there are severe challenges in all three Eurasian theaters. “I don’t recall a time when we have been confronted with a more diverse array of threats, whether it’s the nation state threats posed by Russia and China and particularly their substantial nuclear capabilities, or non-nation states of the likes of ISIL, Al Qaida, etc.,” Director of National Intelligence James Clapper commented in 2016. Trends in the strategic landscape constituted a veritable “litany of doom.”14 The United States thus faces not just more significant, but also more numerous, challenges to its military dominance than it has for at least a quarter century.

### ADV – Black Market

#### **The opioid epidemic is causing other drug prices to skyrocket.**

**Levitt 21**- “Access to safe, affordable medication is a casualty of the war on opioids” BY GABRIEL LEVITT, OPINION CONTRIBUTOR — 08/31/21 11:01 AM EDT [https://thehill.com/opinion/healthcare/570124-access-to-safe-affordable-medication-is-a-casualty-of-the-war-on-opioids] // ahs emi

**Access to safe, affordable medication is a casualty of the war on opioids Importing opioids for the purpose of drug abuse is not the same thing as importing lifesaving medication,** and it is critical that regulators treat them differently — and the law strongly encourages them to do so. Since 2018, **taxpayer funding** for Food and Drug Administration activities **has increased substantially for the purpose of stopping illegal opioids** from coming into the country through international mail facilities. With that convenient window dressing, those taxpayer dollars and **new** federal **laws are** now **being used to take away prescription drug orders at those same international mail facilities, which are often placed by patients who cannot afford them domestically.** This **misuse of the opioid crisis** is the product of lobbying and public relations campaigns funded by the pharmaceutical industry and its big pharmacy allies: Companies which bear the most responsibility for the approximately 500,000 opioid deaths in America. In contrast, the government has never reported a single death or even serious adverse reaction due to a person with a valid prescription importing their prescribed medicine. **Americans continue to buy medications internationally because**, as reported by the RAND corporation last year, **brand name drugs are**, on average, **75 percent cheaper outside the U.S**. I hope to see drug prices lowered here in the U.S. this Congress, but it’s imperative that safe personal importation remains a viable lifeline for those slipping through the cracks of our broken healthcare system. I know this subject matter inside out because my company, PharmacyChecker, verifies the legitimacy of international online pharmacies for the safety of patients who choose to fill their prescription orders internationally. Properly credentialed international online pharmacies require valid prescriptions and don’t sell opioids or any controlled drugs internationally. People who find legitimate online pharmacies may find a lifeline of affordability for their non-controlled prescribed medications. Those seeking opioid drugs from foreign countries with or without a prescription will be highly disappointed. It’s well known that cost-related prescription non-adherence (people skipping or rationing medication because of a daunting price tag) leads to thousands of hospitalizations and deaths each year. Annually, about 2.3 million people in the U.S., with a prescription from their providers, import medicine to treat chronic conditions such as asthma, cancer, diabetes, heart disease, and HIV. Under most circumstances, drug importation is technically prohibited, except where the manufacturer authorizes it. However, the law states that the FDA “should” use enforcement discretion to permit importation by individuals for their own use as long as the import does not pose “unreasonable risk” to them. Recent history shows that the FDA may be going in the opposite direction by intentionally not allowing international prescription orders to reach the patients waiting for them. That’s why I was concerned to read about even more proposed **funding for stopping “opioids**.” Last month, a report voted out of a U.S. Senate Appropriations subcommittee stated that “[the] Committee remains concerned about the opioid epidemic that has taken the lives of thousands of Americans. The Committee provides an additional $10,000,000 and continues to support FDA’s investments in International Mail Facilities and Ports of Entry to **prevent** illicit drugs, including **unapproved and counterfeit pharmaceuticals,** from entering the United States.” Stopping opioids and counterfeit drugs is obviously something we can all get behind. It’s the word “unapproved” that poses a problem. **To the FDA, an “unapproved” drug can include a medicine that is FDA-approved but not labeled in accordance with U.S. rules for the simple reason that it was packaged for sale in another country.** For example, many drugs sold in Canadian pharmacies are considered “unapproved” if imported for personal use. Let’s take a step back. The prescription opioid epidemic was initially caused by aggressive marketing by pharmaceutical companies, most notoriously (but by no means the only) Purdue Pharma, which led people to believe that the risk of addiction among patients prescribed oxycodone was very low. People who were treated for low-level pain were prescribed oxycodone and millions got hooked on it. Subsequently, all companies in the so-called legitimate supply chain — **the big three wholesalers** McKesson, AmerisourceBergen and Cardinal Health, and CVS and Walgreens, the largest national chain pharmacies — are paying billions to settle cases against them for their roles in opioid addiction, overdose and death. Those same industries, often through funding of nonprofit organizations, have simultaneously **lobbied for increasing enforcement against personal prescription drug imports** — especially where orders are placed over the internet — **and against** federal and state **legislation that would create new regulations to expand safe drug importation to help lower drug prices.** One bill the industry favored was the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act, or the SUPPORT Act, which became law in 2018. As the bill’s title indicates, its stated goal is to combat the opioid crisis. Yet the law is leading to the confiscation of non-opioid, medically necessary prescription drugs.

#### **Inflated opioid drug prices lead patients to turn to the black market for affordable medication.**

#### Counterfeit Drugs cause Anti-Biotic Resistance.

Jahnke 19 Art Jahnke 1-14-2019 "How Bad Drugs Turn Treatable Diseases Deadly" <https://www.bu.edu/articles/2019/how-bad-drugs-turn-treatable-diseases-deadly/> (Senior editor Art Jahnke began his career at the Real Paper, a Boston area alternative weekly. He has worked as a writer and editor at Boston Magazine, web editorial director at CXO Media, and executive editor in Marketing & Communications at Boston University, where his work was honored with many awards. Art has served on the editorial board of the Boston Review and has taught at Harvard University summer school and Emerson College.)//Elmer

Four decades later as a Boston University professor of biomedical engineering and materials science and engineering, Zaman was reminded of the dangers of low-quality drugs in his native country when he learned that **more than 200 people in the city of Lahore died after being treated with an adulterated version of a hypertension drug.** That event, in 2012, altered the course of Zaman’s research. Now, he focuses on the global problem of “**substandard drugs**,” poorly made medicines containing ingredients that are either ineffective or toxic. His most recent discovery has startling implications for our understanding of drug resistance: a low-quality version of rifampin, a broad spectrum antibiotic typically used as the first line of defense to treat tuberculosis, **can** greatly **contribute to the development of drug-resistant infections**. The findings, published in Antimicrobial Agents and Chemotherapy, are particularly pressing because **drug-resistant TB** is **an increasing** **problem worldwide**. Of the **10 million new cases** of tuberculosis in 2016, about 600,000 were rifampin resistant, requiring second-line treatments which come with increased toxicity. “**There had not been a definitive study** showing that lack of [antibiotic] quality leads to resistance,” says Zaman, who is also a Howard Hughes Medical Institute Professor of Biomedical Engineering and International Health. “**Now we are sure that it does**, and it does with TB, **a** global **problem that has become stubbornly hard to resolve**.” “We had always thought of this a scientific issue, but now it is also an ethical issue.”Muhammad Zaman Zaman says substandard drugs, as well as drugs that are **deliberate counterfeits**, are all too common in developing nations. A recent survey by the World Health Organization found that in low- and middle-income countries, **one in ten medicines is substandard or falsified**. One contributing factor could be that government enforcement of safe manufacturing practices is feeble or nonexistent. In Pakistan, for example, a country of nearly 200 million people, only a handful of federal inspectors monitor the quality of drug manufacturing.

#### Extinction - generic defense doesn’t apply.

Srivatsa 17 Kadiyali Srivatsa 1-12-2017 “Superbug Pandemics and How to Prevent Them” <https://www.the-american-interest.com/2017/01/12/superbug-pandemics-and-how-to-prevent-them/> (doctor, inventor, and publisher. He worked in acute and intensive pediatric care in British hospitals)//Elmer

It is by now no secret that the human species is locked in a race of its own making with “superbugs.” Indeed, if popular science fiction is a measure of awareness, the theme has pervaded English-language literature from Michael Crichton’s 1969 Andromeda Strain all the way to Emily St. John Mandel’s 2014 Station Eleven and beyond. By a combination of massive inadvertence and what can only be called stupidity, we must now invent new and effective antibiotics faster than deadly bacteria evolve—and regrettably, they are rapidly doing so with our help. I do not exclude the possibility that bad actors might deliberately engineer deadly superbugs.1 But even if that does not happen, humanity faces an existential threat largely of its own making in the absence of malign intentions. As threats go, this one is entirely predictable. The concept of a “black swan,” Nassim Nicholas Taleb’s term for low-probability but high-impact events, has become widely known in recent years. Taleb did not invent the concept; he only gave it a catchy name to help mainly business executives who know little of statistics or probability. Many have embraced the “black swan” label the way children embrace holiday gifts, which are often bobbles of little value, except to them. But the threat of inadvertent pandemics is not a “black swan” because its probability is not low. If one likes catchy labels, it better fits the term “gray rhino,” which, explains Michele Wucker, is a high-probability, high-impact event that people manage to ignore anyway for a raft of social-psychological reasons.2 A pandemic is a quintessential gray rhino, for it is no longer a matter of if but of when it will challenge us—and of how prepared we are to deal with it when it happens. We have certainly been warned. The curse we have created was understood as a possibility from the very outset, when seventy years ago Sir Alexander Fleming, the discoverer of penicillin, predicted antibiotic resistance. When interviewed for a 2015 article, “The Most Predictable Disaster in the History of the Human Race, ” Bill Gates pointed out that one of the costliest disasters of the 20th century, worse even than World War I, was the Spanish Flu pandemic of 1918-19. As the author of the article, Ezra Klein, put it: “No one can say we weren’t warned. And warned. And warned. A pandemic disease is the most predictable catastrophe in the history of the human race, if only because it has happened to the human race so many, many times before.”3 Even with effective new medicines, if we can devise them, we must contain outbreaks of bacterial disease fast, lest they get out of control. In other words, we have a social-organizational challenge before us as well as a strictly medical one. That means getting sufficient amounts of medicine into the right hands and in the right places, but it also means educating people and enabling them to communicate with each other to prevent any outbreak from spreading widely. Responsible governments and cooperative organizations have options in that regard, but even individuals can contribute something. To that end, as a medical doctor I have created a computer app that promises to be useful in that regard—of which more in a moment. But first let us review the situation, for while it has become well known to many people, there is a general resistance to acknowledging the severity and imminence of the danger. What Are the Problems? Bacteria are among the oldest living things on the planet. They are masters of survival and can be found everywhere. Billions of them live on and in every one of us, many of them helping our bodies to run smoothly and stay healthy. Most bacteria that are not helpful to us are at least harmless, but some are not. They invade our cells, spread quickly, and cause havoc that we refer to generically as disease. Millions of people used to die every year as a result of bacterial infections, until we developed antibiotics. These wonder drugs revolutionized medicine, but one can have too much of a good thing. Doctors have used antibiotics recklessly, prescribing them for just about everything, and in the process helped to create strains of bacteria that are resistant to the medicines we have. We even give antibiotics to cattle that are not sick and use them to fatten chickens. Companies large and small still mindlessly market antimicrobial products for hands and home, claiming that they kill bacteria and viruses. They do more harm than good because the low concentrations of antimicrobials that these products contain tend to kill friendly bacteria (not viruses at all), and so clear the way for the mass multiplication of surviving unfriendly bacteria. Perhaps even worse, hospitals have deployed antimicrobial products on an industrial scale for a long time now, the result being a sharp rise in iatrogenic bacterial illnesses. Overuse of antibiotics and commercial products containing them has helped superbugs to evolve. We now increasingly face microorganisms that cannot be killed by antibiotics, antifungals, antivirals, or any other chemical weapon we throw at them. Pandemics are the major risk we run as a result, but it is not the only one. Overuse of antibiotics by doctors, homemakers, and hospital managers could mean that, in the not-too-distant future, something as simple as a minor cut could again become life-threatening if it becomes infected. Few non-medical professionals are aware that antibiotics are the foundation on which nearly all of modern medicine rests. Cancer therapy, organ transplants, surgeries minor and major, and even childbirth all rely on antibiotics to prevent infections. If infections become untreatable we stand to lose most of the medical advances we have made over the past fifty years. And the problem is already here. In the summer of 2011, a 43-year-old woman with complications from a lung transplant was transferred from a New York City hospital to the Clinical Center at the National Institutes of Health (NIH), in Bethesda, Maryland. She had a highly resistant superbug known as Klebsiella pneumoniae carbapenemase (KPC). The patient was treated and eventually discharged after doctors concluded that they had contained the infection. A few weeks later, a 34-year-old man with a tumor and no known link to the woman contracted KPC while at the hospital. During the course of the next few months, several more NIH patients presented with KPC. Doctors attacked the outbreak with combinations of antibiotics, including a supposedly powerful experimental drug. A separate intensive care unit for KPC patients was set up and robots disinfected empty rooms, but the infection still spread beyond the intensive care area. Several patients died and then suddenly all was silent on the KPC front, with doctors convinced they had seen the last of the dangerous bacterium. They couldn’t have been more mistaken. A year later, a young man with complications from a bone marrow transplant arrived at NIH. He became infected with KPC and died. This superbug is now present in hospitals in most, if not all U.S. states. This is not good. This past year an outbreak of CRE (carbapenem-resistant enterobacteriaceae) linked to contaminated medical equipment infected 11 patients and killed two in Los Angeles area hospitals. This family of bacteria has evolved resistance to all antibiotics, including the powerful carbapenem antibiotics that are often used as a last resort against serious infections. They are now so resilient that it is virtually impossible to remove them from medical tools such as catheters and breathing tubes placed into the body, even after cleaning. Then we have gonorrhea, chlamydia, and other sexually transmitted diseases that we cannot treat and that are spreading all over the world. Anyone who has sex can catch these infections, and because most people may not exhibit any symptoms they spread infections without anyone knowing about it. Sexually transmitted diseases used to be treatable with antibiotics, but in recent years we have witnessed the rise of multi-drug resistant STDs. Untreated gonorrhea can lead to infertility in men and women and blindness and other congenital defect in babies. As is well known, too, we have witnessed many cases of drug-resistant pneumonia. These problems have arisen in part because of simple mistakes healthcare professionals repeatedly make. Let me explain. Neither superbugs nor common bacterial infections produce any special symptoms indicative of their cause. Rashes, fevers, sneezing, runny noses, ear pain, diarrhea, vomiting, coughing, fatigue, and weakness are signs of common and minor illnesses as well as uncommonly deadly ones. Therefore, the major problem for clinicians is to identify a common symptom that may potentially be an early sign of a major infection that could result in an epidemic. We know that dangerous infections in any given geographical area do not start at the same time. They start with one victim and gradually spread. But that victim is only one among hundreds of patients a doctor will typically see, so many doctors will miss patients presenting with infections that are serious. They will probably identify diseases that kill fast, but slow-spreading infections such as skin infections that can lead to septicemia are rarely diagnosed early. In addition, I have seen doctors treating eczema with antibiotic cream, even though they know that bacteria are resistant to the majority of these drugs. This sort of action encourages simple infections to spread locally, because patients are therefore not instructed to take other, more useful precautions. On top of that, some people are frivolous about infections and assume doctors are exaggerating the threat. And some people are selfish. Once I was called to see a passenger during a flight who had symptoms consistent with infection. He boarded the plane with these symptoms, but began to feel much worse during the flight. I was scared, knowing how infections such as Ebola can spread. This made me think about a way to screen passengers before they board a flight. Airlines could refund a traveler’s ticket, or issue a replacement, in case of sickness—which is not the policy now. We currently have no method to block infectious travelers from boarding flights, and there are no changes in the incentive system to enable conscientious passengers to avoid losing their money if they responsibly miss a flight because of illness. Speaking of selfishness, I once saw a mother drop her daughter off at school with a serious bout of impetigo on her face. When I asked her why she had brought her daughter to school with a contagious infection, she said she could not spare the time to keep her at home or take her to the doctor. By allowing this child to contact other children, a simple infection can become a major threat. Fortunately, I could see the rash on the girl’s face, but other kids in schools may have rashes we cannot see. Incorrect diagnosis of skin problems and mistaken use of antibiotics to treat them is common all over the world, and so we are continually creating superbugs in our communities. Similarly, chest infections, sore throats, and illnesses diagnosed as colds that unnecessarily treated with antibiotics are also a major threat. By prescribing antibiotics for viral infections, we are not only helping bacteria develop resistance, but we are also polluting the environment when these drugs are passed in urine and feces. All of this helps resistant bacteria to spread in the community and become an epidemic. Ebola is very difficult to transmit because people who are contagious have visible and unusual symptoms. However, the emerging infections and pandemics of the future may not have visible symptoms, and they could break out in highly populous countries such as India and China that send thousands of travelers all over the world every day. When a person is infected with a contagious disease, he or she can expect to pass the illness on to an average of two people. This is called the “reproduction number.” Two is not that high a number as these things go; some diseases have far greater rates of infection. The SARS virus had a reproduction number of four. Measles has a reproduction number of 18. One person traveling as an airplane passenger and carrying an infection similar to Ebola can infect three to five people sitting nearby, ten if he or she walks to the toilet. The study that highlighted this was published in a medical journal a few years ago, but the airline industry has not implemented any changes or introduced screening to prevent the spread of infections by air travel passengers, a major vehicle for the rapid spread of disease. It is scary to think that nobody knows what will happen when the world faces a lethal disease we’re not used to, perhaps with a reproduction number of five or eight or even ten. What if it starts in a megacity? What if, unlike Ebola, it’s contagious before patients show obvious symptoms? Past experience isn’t comforting. In 2009, H1N1 flu spread around the world before we even knew it existed. The Questions Remains Why do seemingly intelligent people repeatedly do such collectively stupid things? How did we allow this to happen? The answer is disarmingly simple. It is because people are incentivized to prioritize short-term benefits over long-term considerations. It is what social scientists have called a “logic of collective action” problem. Everyone has his or her specialized niche interest: doctors their patients’ approval, business and airline executives their shareholders’ earnings, hospitals their reputations for best-practice hygienics, homemakers their obligation to keep their own families from illness. But no one owns the longer-term consequences for hundreds of millions of people who are irrelevant to satisfying these short-term concerns. Here is an example. At a recent Superbug Super Drug conference in London that I attended, scientists, health agencies, and pharmaceutical companies were vastly more concerned with investing millions of dollars in efforts to invent another antibiotic, claiming that this has to be the way forward. Money was the most pressing issue because, as everyone at the conference knew, for many years pharmaceutical companies have been pulling back from antibiotics research because they can’t see a profit in it. Development costs run into billions of dollars, yet there is no guarantee that any new drug will successfully fight infections. At the same conference Dr. Lloyd Czaplewski spoke about alternatives to antibiotics, in case we cannot come up with new ones fast enough to outrun superbug evolution. But he omitted mention of preventive strategies that use the internet or communication software to help reduce the spread of infections among families, communities, and countries. It is madness that we don’t have a concrete second-best alternative to new antibiotics, because we need them and we need them quickly. Of course, this is why we have governments, which have been known occasionally in the past as commonwealths. Governments are supposed to look out for the wider, common interests of society that niche-interested professionals take no responsibility for, and that includes public health. It is why nearly every nation’s government has an official who is analogous to the U.S. Surgeon General, and nearly every one has a public health service of some kind. Alas, national governments do not always function as they should. Several years ago physician and former Republican Senator Bill Frist submitted a proposal to the Senate for a U.S. Medical Expeditionary Corps. This would have been a specialized organization that could coordinate and execute rapid responses to global health emergencies such as Ebola. Nothing came of it, because Dr. Frist’s fellow politicians were either too shortsighted or too dimwitted to understand why it was a good idea. Or perhaps they simply realized that they could not benefit politically from supporting it. Plenty of mistakes continue to be made. In 2015, a particularly infectious form of bird flu ripped through 14 U.S. states, leading farmers to preventively slaughter nearly 40 million birds. The result of such callous and unnecessary acts is that, instead of exhausting themselves in the host population of birds, the viruses quickly find alternative hosts in which to survive, and could therefore easily mutate into a form that can infect humans. Earlier, during the 1980s, AIDS garnered more public attention because a handful of rich and famous people were infected, and because the campaign to eradicate it dovetailed with and boosted the political campaign on behalf of homosexual rights. Methicillin resistant Staphylococcus aureus (MRSA) in hospitals, by far the bigger threat at the time, was virtually ignored. Some doctors knew that MRSA would bring us to our knees and kill millions of people worldwide, but pharmaceutical companies and device and equipment manufacturers ignored these doctors and the thousands of patients dying in hospitals as a result of MRSA. They prioritized the wrong thing, and government did not correct the error. And that is partly how antibiotic-resistant infection went from an obscure hospital problem to an incipient global pandemic. Politics well outside the United States plays several other roles in the budding problem that we are confronting. Countries often will not admit they have a problem and request help because of the possible financial implications in terms of investment and travel. Guinea did not declare the Ebola epidemic early on and Chinese leaders, worried about trade and tourism, lied for months in 2002 about the presence of the SARS virus. In 2004, when avian influenza first surfaced in Thailand, officials there displayed a similar reluctance to release information. Hospitals in some countries, including India, are managed and often owned by doctors. They refuse to share information about existing infections and often categorically deny they have a problem. Reporting infections to public health authorities is not mandatory, and so hospitals that fail to say anything are not penalized. Even now, the WHO and the CDC do not have accurate and up-to-date information about the spread of E. coli or other infections, and part of the reason is that for-profit hospitals are reluctant to do anything to diminish their bottom line. Syria and Yemen are among those countries that are so weak and fragmented that they cannot effectively coordinate public healthcare. But their governments are also hostile to external organizations that offer relief. Part of the reason is xenophobia, but part is that this makes the government look bad. Relatedly, most poor-nation governments do not trust the efficacy of international institutions, and think that cooperating with them amounts to a re-importation of imperialism. They would rather their own people suffer and die than ask for needed help. That brings us to the level of international public health governance. Alas, sometimes poor-country governments estimate the efficacy of international institutions accurately. The WHO’s Ebola response in 2014-15 was a disaster. The organization was slow to declare a public health emergency even after public warnings from Médecins Sans Frontières, some of whose doctors had already died on the front line. The outbreak killed more than 28,000 people, far more than would have been the case had it been quickly identified. This isn’t just an issue of bureaucratic incompetence. The WHO is under-resourced for the problems it is meant to solve. Funding comes from voluntary donations, and there is no mechanism by which it can quickly scale up its efforts during an emergency. The result is that its response to the next major disease outbreak is likely to be as inadequate as were its responses to Ebola, H1N1, and SARS. Stakeholders admit that we need another mechanism, and most experts agree that the world needs some kind of emergency response team for dangerous diseases. But no one knows how to set one up amid the dysfunctional global governance structures that presently exist. Maybe they should turn to Bill Frist, whose basic concept was sound; if the U.S. government will not act, perhaps some other governments will, and use the UN system to do so. But as things stand, we lack a health equivalent of the military reserve. Neither government leaders nor doctors can mobilize a team of experts to contain infections. People who want to volunteer, whether for government or NGO efforts, are not paid and the rules, if any, are sketchy about what we do with them when they return from a mission. Are employers going to take them back? What are the quarantine rules? It is all completely ad hoc, meaning that humanity lacks the tools it needs to protect itself. And note, by the way, the contrast between how governments prepare for facing pandemics and how they prepare for making war. War is not more deadly to the human race than pandemics, but national defense against armed aggression is much better planned for than defense against threats to public health. There is a wealth of rules regarding it, too. Human beings study and plan for war, which kills people both deliberately and accidentally, but they do not invest comparable effort planning for pandemics, which are liable to kill orders of magnitude more people. To the mind of a medical doctor, this is strange. Creating Conditions for Infections to Spread Superbug infections spread for several interlocking reasons. Some are medical-epidemiological. Most of the infections of the past thirty years have started in one place and in one family. As already noted, they spread because many infectious diseases are highly contagious before the onset of symptoms, and because it is difficult to prevent patients who know they are sick from going to hospitals, work, and school, or from traveling further afield. But again, one reason for the problem is political, not medical. Many governments have no strategies in place to prevent pandemics because they are unwilling to tell their people how infections spread. They don’t want to worry people with such talk; it will make them, they fear, unpopular. So governments may have mountains of bureaucracy with great heaps of rules and regulations concerning public health, but they are generally unwilling to trust their own citizens to use common sense on their own behalf. This, too, seems very strange. Until now, no one has come forward to help us develop strategies to educate people how to identify and prevent the spread of infection to their families and communities. The majority of stakeholders have also been oblivious to the use of new technologies to help reduce the spread of these infections. There are some exceptions. In a fun blog post called Preparedness 101: Zombie Apocalypse, the CDC uses the threat of a zombie outbreak as a metaphor to encourage people to prepare for emergencies, including pandemics. It is well meaning and insightful, yet when my colleagues and I try to discuss ways of scaling up the CDC’s example with doctors and nurses, they shut down. Nobody plans for an actual crisis partly because it is too scary and hence paralyzing to think about. But it is also because it is not most health professionals’ job; it is not what they are trained and paid to do. It is always someone else’s job, except that it has turned out to be nobody’s job. Worse, the situation is not static. While we sit paralyzed, superbugs are evolving. Epidemiological models now predict how an algorithmic process of disease spread will move through the modern world. All urban centers around the entire globe can become infected within sixty days because we move around and cross borders much more than our ancestors did, thanks to air travel. A new pandemic could start crossing borders before we even know it exists. A flu-like disease could kill more than 33 million people in 250 days.3