

FORESIGHT Futures Scan: Short Summaries of Trends and Emerging Issues

Over the course of mid-to-late 2019, FORESIGHT's academically-trained futurists conducted a [Futures Scan](#), which incorporated a wide range of information sources, such as academic literature, news, and other media, to uncover trends and emerging issues that might impact the future for health and well-being.

Below, we've summarized the 22 trends and 50 emerging issues in a few sentences each. These descriptions offer just a taste of the nuance and depth available in the full report.

Trends

Trends are changes over time we can already measure. Many of these may seem familiar as they represent historical patterns of change shaping our system of health and well-being.

1. **Accelerating Biodiversity Loss:** Human activity around the world is pushing an increasing number of species toward extinction, with significant ramifications for human health, including undermining food security and clean water.
2. **Climate Change Costs Increasing:** The number and cost of climate-driven weather disasters is increasing, straining the US's ability to cope.
3. **Spreading Microbial Resistance:** Disease-causing bacteria and fungi are growing resistant to an ever-wider array of antibiotics and antifungals, threatening to undermine many gains of modern medicine even as research into new treatments is lagging.
4. **Americans Becoming Less Geographically Mobile:** Americans today are moving less frequently and over less distance than at any time since 1948. Barriers to mobility are making it harder for lower-income households to find better employment elsewhere, worsening inequality.
5. **America's Changing Cultural Values:** Americans are increasingly dissatisfied with key aspects of US society, have become, on average, more liberal in their views of what is morally acceptable (marriage equality, marijuana legalization, etc.), and are more concerned about health and the environment.
6. **Incarceration on the Decline:** The decades-long rise in incarcerations in the US is beginning to reverse due to changing sentencing laws and a long-term decrease in crime rates, but the current decline is not equally distributed along social or economic lines.
7. **Income and Wealth Gaps Continue to Widen:** Income and wealth inequality are continuing to worsen, particularly along race and ethnicity lines. The wealth gap poses a generational barrier to equity, as the amount of wealth a person can hand down to their children is greatly influenced by racial and ethnic inequities.
8. **Increasingly Vulnerable but Still Growing Coastal Populations:** Americans are continuing to move to coastline counties even as the threat from storms and sea level rise worsens.
9. **Life Milestones Coming Later and in Different Orders:** Americans are entering major "life stages" later in life, from getting married and starting a family, to entering and exiting the labor force. They are also increasingly less likely to follow a traditional path for these life stages.
10. **Rising Costs of Living are Gentrifying the Nation's Cities:** The costs of essential services are rising rapidly in many high-population urban centers, widening the affordability gaps between cities and surrounding areas.

11. **Deepening Battle Over Vaccines:** The number of unvaccinated children is increasing, weakening the “herd immunity” that prevents diseases from spreading to those who cannot be vaccinated. This increase is due both to the anti-vax movement and the growing cost in time and money of keeping children vaccinated.
12. **Americans Becoming Increasingly Diverse:** The US is undergoing a demographic transition from a majority white population to a population without a single majority group.
13. **America’s Shifting Faith Landscape:** America’s faith landscape is undergoing a significant generational shift from historically dominant traditional Christian denominations toward greater secularism and religious diversity.
14. **Ballooning Student Debt:** The ballooning burden of student loans increases inequity and means many borrowers must delay important life decisions.
15. **Runaway Healthcare Spending:** Healthcare spending is rising worldwide, but the US spends per capita almost double what other high-income countries spend to achieve health outcomes that lag behind the outcomes in those same countries.
16. **Falling Life Expectancy:** Rising rates of drug overdoses and suicides are causing US life expectancy to fall for the first time since WWI.
17. **Worsening Maternal Mortality in the US:** The US has the highest maternal mortality rate of any developed country, and is the only one where the rate is increasing. There are severe disparities along racial and ethnic lines and between states—some of which have rates equivalent to developing countries.
18. **Unequal Burden of Disease:** Inequitable access to things like food, health care, and economic opportunity have caused certain socioeconomic, racial, and ethnic groups to be disproportionately impacted by the increasing burden of diseases linked to “lifestyle,” such as diabetes and substance abuse.
19. **Growing Mental Health Crisis:** Anxiety, depression, and suicide rates are increasing across the US, suggesting that we are in the midst of a mental health crisis.
20. **Medical and Health Innovation Accelerating:** The pace of innovation in medicine and health continues to accelerate, but it’s uncertain how equitably these advances will be shared. Ethics and risk assessment of potential impacts may be unable to keep up with the pace of innovation.
21. **Health Care Becoming Increasingly Digital and Distributed:** One-stop-shopping health care apps are emerging alongside other new business models backed by major institutional investors and tech companies that are redistributing care from traditional settings to clinics and telemedicine services.
22. **Expanding Health Deserts and the Urban/Rural Divide:** The loss of rural health care providers is worsening existing disparities in health outcomes between rural and urban populations.

Emerging Issues

Emerging Issues are potential trends—they haven’t happened yet, but we can detect faint signs that they could be on the horizon and may shape our system of health and well-being in profound ways.

1. **The New Job Market:** The job market could become widely “gigified”—replacing most secure, salaried, or hourly employment to less secure, short-term independent contractor arrangements, with implications for the future of work.
2. **Communal Living:** A new kind of communal living could replace the nuclear family for many, as factors like high cost of living, high divorce rates, job insecurity, and growing loneliness leads them to seek living arrangements focused on shared recreational and working areas.
3. **Mainstream Health Foods with Consequences:** Mainstreaming of healthy and environmentally-conscious food (organic, locally sourced, etc.) invigorates alternative health movements (such as anti-vaccination) and encourages unregulated urban farming, both of which could lead to outbreaks of diseases thought to have been left in the past.
4. **Marijuana Freedom:** Legalization supported by effective policies could reduce societal inequity, especially in the criminal justice system.

5. **Menstrual Equity:** The current momentum of increased public awareness about “period poverty” (when the inability to afford menstrual products interferes with education or employment) offers an opportunity to improve support for people seeking government assistance.
6. **Automated Transport Networks:** Automated transport networks, such as self-driving cars and high-speed trains, could make transport safer and transform commuting.
7. **Climate Change Impacts Health of Most Vulnerable:** Health impacts of climate change could rapidly increase and challenge the preparedness of our health care system, disproportionately impacting people already vulnerable due to social, health, and economic inequities.
8. **US Economic Recession:** A growing number of observers and analysts are anticipating the (inevitable) turn in business and economic cycles that could lead to a period of recession.
9. **Sugar is the New Tobacco:** Significant scientific evidence on the health impacts of sugar could gain enough momentum to result in policies to limit its use, potentially modeled after tobacco restrictions.
10. **Digital Alienation:** Services (including health services) and financial transactions could increasingly move online and to digital-only forms, alienating from society those already isolated or facing economic inequities, such as elderly or homeless people.
11. **Male Birth Control Pill:** Changing attitudes could lead to widespread use of a male contraceptive pill.
12. **Increasingly Extreme US Political Swings:** Political dysfunction could worsen as the swing between Republican and Democratic administrations create ever-more-extreme polarization.
13. **Collapse of a Generation:** Millennials reeling from the missed opportunities they have been dealt could become a burden on society.
14. **Birthstrike:** Women, fearing political turmoil and the climate crisis, could delay having children, or not have children in larger numbers, which would precipitate demographic shifts.
15. **A New End of Life:** New intersections between palliative care (treatment focused on the comfort of people living with serious illnesses) and the death care industry (funeral homes and the like) could combine with the growing economic and environmental impacts of long hospital treatments, senior care, and burial traditions to change how people view their end-of-life experience.
16. **Techno-Holistic Health Care:** Wearable devices, environmental sensors, and artificial intelligence could combine to lead to all aspects of health care being tailored based on real-time data monitoring and analysis
17. **Automation Driving Macroeconomic Reform:** Job automation could combine with already-massive economic inequality to create a crisis that drives government to transform domestic economic policies, adopting a universal basic income and refocusing critical services around population well-being instead of profits.
18. **Diets as Medicine and Social/Ecological Justice:** Prompted by climate impacts and medical needs, a shift in the US diet towards more sustainable, healthy, and less expensive food could produce significantly improved well-being and health equity across society.
19. **Elder Exploitation:** A significant increase in employed elderly who are unable to retire or afford senior care could lead to new forms of elder abuse and worker exploitation.
20. **Solving Waste Inequity:** Pressure on waste management systems and environmental degradation could overwhelm structures, requiring significant innovation to escape disaster.
21. **Personalized Medicine:** From up-to-the second shareable health data, to medication designed for one’s genes, all aspects of health care could be tailored to each patient.
22. **End of Personal Privacy:** In a world where we share our private lives online, it may become impossible for people to keep their personal affairs secret.
23. **A Turn Back to One Another:** As the population ages and automation replaces many jobs, unemployment and lower household income may drive people to live in tighter quarters and take up unpaid care work for their own families—which could, in turn, lead to a cultural shift toward focusing on family and community while letting machines generate economic growth.
24. **Climate Refugees:** Climate change could lead to mass migration away from coastal urban areas, straining the housing, transit, food, and other supplies of inland cities and worsening inequality.

25. **An American Authoritarian State:** Erosion of the US democratic system could create a less free society.
26. **Digital Countries:** Communities, countries, and cultures could emerge that are no longer defined by geographical borders, instead based on online interest groups.
27. **Dynamic Pricing:** AI and big data analytics could allow for widespread dynamic pricing that sets the value for goods based on factors like location, demand, scarcity, interest, and need—with the potential to amplify inequities.
28. **End of Abortion Rights:** When abortion is no longer an option, women must rely on birth control, luck, and back-alley medical services. Eroding rights could put them in dangerous positions.
29. **End of Meat in Global Food Supply:** The evolution of sustainable global food supply chains away from meat production has the potential to improve health equity and make the human population as a whole more resilient to food supply disruption.
30. **Disparity of Climate Crisis Impacts on Food:** Potential climate crisis stress on food supply chains disproportionately affects people at the poorest and most vulnerable end of the spectrum.
31. **Data Sovereignty:** Individuals may soon exercise stricter control over the circulation and use of their own personal health information.
32. **Radical Transparency:** Opening up the data about everything to everyone could lead to better shared health and well-being—or it could amplify inequity.
33. **Ending Pain and Anxiety Through DNA:** Gene therapy could be used to treat post-operative pain, chronic pain, PTSD, wound healing, and anxiety.
34. **Zombie Viruses and Toxic Threats Emerging from Melting Permafrost:** Infectious microbes, long since frozen, and reservoirs of environmental toxins emerging from melting permafrost could put populations at risk.
35. **Digital Escapism:** Artificial intelligence as well as virtual and augmented reality could lead to a widespread increase in escapism (seeking to avoid reality through distraction or fantasy) in the face of looming crises alongside rising anxiety and depression.
36. **Health Innovation Outpacing Regulation:** If traditional scientific oversight is not updated, it could lead to both the continued proliferation of unproven medical technologies (as innovators try to bypass regulation entirely) and the loss of US competitiveness in health and biological advancement as nations with nimbler—or less scrupulous—oversight benefit from research and techniques that may be restricted, or even outlawed, in the US.
37. **Humans Training Machines to Train Humans:** Continual mechanical and artificial intelligence advancement means machines will do complex, sophisticated tasks better than humans, and could in turn teach humans better ways to perform those tasks and access knowledge.
38. **Biased Algorithms:** Humans embed bias in what they build. As social, health, and economic systems become more reliant on algorithms, it could embed biases and inequities that may have impact for generations.
39. **Extreme Longevity for the Few:** A confluence of medical advances could give rise to longevity treatments that vastly extend lifespans for those able to afford them. A new global elite of ultra-long-lived, ultra-healthy people could emerge.
40. **“Everywhere” Living Online:** A new, not-yet-imagined sort of social media could create an online world, based on immersive, fun, social, gaming experiences connected to daily life, which changes traditional prejudice and mindsets, reshaping society.
41. **Machine Charities:** Smart technologies could give rise to ‘machine charities’ where networks of AI-powered devices generate money and make donations to the most effective charities, or even make direct microloans.
42. **World Without Money:** Economies could emerge that eschew capitalism and private ownership to emphasize sharing common resources for individual and collective benefit.
43. **Living Medicine:** Living pills of genetically engineered or even synthetic bacteria could be used to deliver medicine precisely, alter the microbiome, perform immunotherapy, and even cure antibiotic resistant infections.

44. **Demographic Assumptions Overturned:** As factors that provide incentives to have large families disappear across the globe and new threats reduce lifespans, the assumption that the human population will continue to grow could prove false, transforming global culture and creating new reproductive rights issues. The resulting smaller populations may find themselves crammed into smaller environments due to climate breakdown, increasing epidemic and famine risks.
45. **Co-Ops Supplanting Capitalism:** Inequality, automation, and rising communalism could lead to widespread adoption of an economy based on shared ownership.
46. **Redefining Childbearing:** External wombs could change traditional structures and presumptions around childbearing.
47. **Diseases Jumping from Animals to Humans:** Diseases making the jump from animals to humans become more frequent, severe, and widespread as more human populations displaced by the climate crisis are exposed to different species.
48. **Runaway Synthetic Microbes:** Synthetic microbes introduced into the environment to eliminate human-made contaminants could prove too successful and escape control—with ecosystem-disrupting consequences.
49. **Do-It-Yourself Medicine and Gene Editing:** Advances in synthetic biology could lead to do-it-yourself medicine and even home gene editing, with the potential for disastrous public safety consequences—or, it could drive improvements to the traditional health care system.
50. **Editing Out Addiction:** Gene-editing tools could remove addictive substances from the environment (e.g. nicotine-free tobacco plants) and even reprogram or remove addiction pathways in the brain.

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