EXECUTIVE SUMMARY OF THE REPORT TO THE PRESIDENT

A Transformational Effort on Patient Safety

Executive Office of the President

President's Council of Advisors on Science and Technology

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EXECUTIVE OFFICE OF THE PRESIDENT
PRESIDENT'S COUNCIL OF ADVISORS ON SCIENCE AND TECHNOLOGY
WASHINGTON, D.C. 20502

President Joseph R. Biden, Jr.
The White House
Washington, D.C.

Dear Mr. President,

Doctors, nurses, and other healthcare staff are passionate, dedicated professionals who care deeply for the patients in their care. Nonetheless, dangerous and preventable events continue to occur at surprisingly high rates. According to recent data, in the United States, Medicare patients suffer an adverse event in one out of four hospitalizations. One third of those adverse events are serious, including catastrophic outcomes.[1] Consistent with observations noted in other areas of health care, adverse outcomes disproportionately impact people from groups historically experiencing social marginalization, widening gaps in healthcare disparities.[2]

Concern about errors is not new, yet progress in addressing our rates of adverse health outcomes has been unacceptably slow.[3] Not all harm is preventable; however, significant progress has been made in understanding and developing evidence-based practices to address the root causes of many categories of avoidable adverse outcomes. While there is great potential for near-term research and innovation to boost patient safety, widespread implementation of today's evidence-based solutions will significantly reduce harms.

Given your passion for patient safety and deep respect for healthcare professionals, we believe you can bring strong federal leadership to a nationwide transformational initiative to support all hospitals and practitioners with implementing evidence-based solutions and accelerating efforts to better understand and address broader challenges with patient safety, including the harnessing of advances in computing technologies to boost patient safety. The goal is to move our healthcare systems expeditiously towards zero preventable harms, so that every American receives dignified and safe care.

Per your request, the following report contains our recommendations aimed at dramatically improving patient safety in our country for all Americans.

Sincerely,
Your President's Council of Advisors on Science and Technology

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[1] Department of Health and Human Services (HHS). (2022 May 9). Adverse Events in Hospitals: A Quarter of Medicare Patients Experiences Harm in October 2018. *Office of Inspector General (OIG),* OEI-06-18-00400. https://oig.hhs.gov/oei/reports/OEI-06-18-00400.pdf

[2] Agency for Healthcare Research and Quality. (2022 October). 2022 National Healthcare Quality and Disparities Report. Rockville, MD. AHRQ Pub. No. 22(23)-0030. https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/2022qdr.pdf

[3] Bates, D. W., & Singh, H. (2018 November). Two Decades Since *To Err Is Human*: An Assessment Of Progress And Emerging Priorities In Patient Safety. *Health Affairs,* 37(11): 1736-1743. https://www.healthaffairs.org/doi/epdf/10.1377/hlthaff.2018.0738

Executive Summary

Patient safety is an urgent national public health issue. According to recent data, approximately one in four Medicare patients experience adverse events during their hospitalizations, with many resulting in catastrophic outcomes. More than 40 percent of these events are determined to be due to preventable errors.[4] Efforts to address this urgent problem are underway across federal agencies, but more must be done. This report seeks to empower existing and new efforts that will transform patient safety.

Harm from unsafe care occurs in all healthcare settings and affects all persons, from mothers and babies to seniors. Moreover, adverse outcomes of unsafe care disproportionately impact people experiencing social marginalization due to race, ethnicity, sexual orientation, gender identity, income, education, socioeconomic status, or physical and mental ability, resulting in health disparities.[5] Examples of harms include, but are not limited to, medication errors, hospital-associated infections, surgical injuries, diagnostic errors and delays, medical device malfunctions, and "failure to rescue," which is a failure to recognize and respond adequately to physiologic events that can cascade to death.

People enter the challenging and rewarding professions of healthcare because they are passionate about helping individuals to live healthy and fulfilling lives through delivering the best care possible. The organizations in which they work—hospitals, outpatient clinics, and small-practice offices, among others—are also committed to deliver lifesaving care every day. Despite commitments to quality care by practitioners and their organizations, alarmingly high rates of medical errors and patient injuries persist. There is much left to learn about how to make healthcare safer, but over the last two decades, progress has been made in understanding root causes of avoidable medical errors and evidence-based solutions have been developed to reduce many forms of injury. For example, evidence-based solutions have been developed for minimizing hospital-associated infections, pressure ulcers, medication errors, and surgical mishaps. Safety-enhancing protocols extend to "systems level" practices such as methods for boosting situational awareness that reduce errors due to discontinuities in care that occur during handoffs at changes of shifts of care teams[6] and also with transitions of patients between care organizations.[7]

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[4] Department of Health and Human Services (HHS). (2022 May 9). Adverse Events in Hospitals: A Quarter of Medicare Patients Experiences Harm in October 2018. *Office of Inspector General (OIG),* OEI-06-18-00400. https://oig.hhs.gov/oei/reports/OEI-06-18-00400.pdf

[5] Piccardi, C., Detollenaere, J., Vanden Bussche, P. & Willems S. (2018 August 7). Social disparities in patient safety in primary care: a systematic review. *International Journal for Equity in Health,* 17: No. 114. https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-018-0828-7

[6] Blazin, L.J., Sitthi-Amorn, J., Hoffman, J.M., & Burlison, J.D. (2020 July/August). Improving Patient Handoffs and Transitions through Adaptation and Implementation of I-PASS Across Multiple Handoff Settings. *Pediatric Quality and Safety,* 5(4): e323. https://journals.lww.com/pqs/Fulltext/2020/07000/Improving_Patient_Handoffs_and_Transitions_through.21.aspx

[7] Earl, T., Katapodis, N., Schneiderman, S., Care Transitions. In: Hall, K.K., Shoemaker-Hunt, S., Hoffman, L., et al. (2020 March). Making Healthcare Safer III: A Critical Analysis of Existing and Emerging Patient Safety Practices [Internet]. *Agency for Healthcare Research and Quality*, Report No.: 20-0029-EF. https://www.ncbi.nlm.nih.gov/books/NBK555516/

Despite significant efforts made by dedicated health professionals, agencies, and organizations, uniform, nationwide implementation of many of these known solutions has lagged.[8] The Biden-Harris administration has already taken key steps to improve the quality of healthcare for every American. Now is the right time to renew our nation's commitment to improving patient safety. Parallel to improvement of patient safety is the additional and closely linked aim of improving safety for the healthcare workforce. An additional benefit of widespread patient safety improvement will be substantial reductions in the total cost of healthcare in America.

All of this will become far more likely with strong and committed federal leadership to: (a) create a nationwide transformational initiative to support every hospital and practitioner in implementing known safety solutions for both patients and the workforce and sustaining them over time; and (b) create and maintain a robust national enterprise aimed at accelerating research, development, and deployment of technology and policies aimed at improving patient safety. The Biden-Harris administration can take bold action to advance health equity, improve the nation's health and well-being, and avert suffering and death for hundreds of thousands of Americans each year.

Recommendations

Recommendation 1: Establish and Maintain Federal Leadership for the Improvement of Patient Safety as a National Priority.

The President should bring immediate attention to the urgent need to improve patient safety and healthcare workforce safety as a national priority, by establishing a *White House-led Transformational Effort on Patient Safety.* The *initiative* should commit to taking significant and tangible steps forward to solve the critical challenges with patient safety in the public and private sectors, and direct the Department of Health and Human Services (HHS) Secretary to oversee coordination across HHS agencies including accountability for progress, with public reporting to the President at least annually.

1.A Appoint a Patient Safety Coordinator Reporting to the President on Efforts to Transform Patient Safety Among All Relevant Government Agencies.

1.B Establish a Multidisciplinary National Patient Safety Team (NPST) and Ensure Inclusion of Persons from Populations Most Affected.

Recommendation 2: Ensure That Patients Receive Evidence-Based Practices for Preventing Harm and Addressing Risks.

The President should direct the HHS Secretary, in collaboration with the Department of Defense (DoD), and Department of Veterans Affairs (VA), to require the appropriate federal agencies to develop a list of high-priority harms, evidence-based practices, and system-level mitigation strategies to eliminate preventable harms, including "never events" that should never occur in healthcare. As many measures as possible should be generated from real-time automated electronic health data.

[8] Bates, D. W., & Singh, H. (2018 November). Two Decades Since *To Err Is Human*: An Assessment Of Progress And Emerging Priorities In Patient Safety. *Health Affairs,* 37(11): 1736-1743. https://www.healthaffairs.org/doi/epdf/10.1377/hlthaff.2018.0738

2.A Identify and Address High-Priority Harms and Promote Patient Safety Though Incentivizing the Adoption of Evidence-Based Solutions and Requiring Annual Public Reporting Immediately and Quarterly Public Reporting Within 5 Years.

2.B Create a Learning Ecosystem and Shared Accountability System to Ensure That Evidence-Based Practices are Implemented and Goals for Reduced Harms and Risks of Harm for Every American are Realized.

2.C Advance Interoperability of Healthcare Data and Assure Access to the Tracking of Harms and Use of Evidence-Based Solutions.

2.D Improve Safety for All Healthcare Workers and Their Patients Through Supporting a Just Culture of Patient and Clinician Safety in Healthcare Systems.

Recommendation 3: Partner with Patients and Reduce Disparities in Medical Errors and Adverse Outcomes.

It is crucial to engage diverse stakeholders in the nation's efforts to reduce the risk of harm from unsafe care. This should include partnering and collaborating with patients, families, and communities disproportionately impacted by unsafe care. Implementing evidence-based solutions in healthcare settings should include patient-centered approaches and give special attention to long-standing disparities. To address disparities in patient safety, the President should direct the following activities:

3.A Implement a "Whole of Society Approach" in the Transformational Effort on Patient Safety.

3.B Improve Data and Transparency to Reduce Disparities.

Recommendation 4: Accelerate Research and Deployment of Practices, Technologies, and Exemplar Systems of Safe Care.

Beyond today's knowledge, it is critically important to accelerate the development and deployment of new technologies, processes, and evidentiary foundations for safe healthcare, so that errors and injuries are minimized. Promising directions include harnessing new practices and technologies for assisting with medication selection and management, improving accuracy of diagnosis, shortening time to diagnosis, monitoring, as well as predictions about treatment effectiveness based on individual characteristics.

4.A Develop a National Patient Safety Research Agenda.

4.B Harness Revolutionary Advances in Information Technologies.

4.C. Develop Federal Healthcare Delivery Systems' Capacities and Showcase Results as Exemplars for Safer Healthcare.

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