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"Modernized Health Care in Practice: Empowering Americans to Live Healthier Lives"

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Introduction: My Reckoning with Modern Medicine

Chairman, Ranking Member, and distinguished Members of the Committee, thank you for the privilege of providing this written testimony regarding a topic that has been near and dear to me for the last ten years—empowering Americans to live healthier lives. My name is Dr. Christopher Davis. I am a board-certified cardiologist and the founder of Reveal Vitality & Longevity Institute, a forward-thinking functional medicine and health optimization clinic in Sarasota, Florida.

When I was seven years old, I suffered a life-threatening appendix rupture. For nearly two months I laid in a hospital bed with tubes running through every part of my body, fighting to survive. In that room, I made a promise to myself: one day I would become a doctor and dedicate my life to helping others with health challenges. I would be forever grateful to those physicians who saved my life. That promise carried me through medical school, residency, and into a career as an interventional cardiologist. I have spent many years on the front lines of cardiovascular medicine, performing complex interventional procedures, managing critically ill patients, and navigating the full machinery of our modern health care system. But over time, a harder truth emerged. What we call healthcare in America is, in practice, something else entirely. My testimony is not intended to condemn the system—its physicians, nurses, and dedicated professionals save lives every day—but to offer an honest assessment of its most consequential structural failure: our collective inability to address the root causes of the chronic disease epidemic that is diminishing American lives and consuming our national resources. Among those root causes, one has received far too little clinical and policy attention: the pervasive burden of environmental toxins—heavy metals, synthetic chemicals, microplastics, pesticides, and herbicides—that saturate the modern environment and quietly erode human biology from within.

The premise of my testimony is straightforward: our health care system is exquisitely engineered to manage illness, yet nearly entirely unprepared to prevent it. That imbalance is not accidental. It is the product of decades of reimbursement policy, medical education, and institutional incentive structures that reward intervention over prevention, treatment over education, and sick care over health care. Compounding this failure is a near-total clinical blind spot toward environmental toxin exposure—a

documented, biologically plausible, and modifiable driver of chronic disease that our system routinely fails to measure, address, or even acknowledge. Until we realign those incentives and broaden our diagnostic lens to include the chemical environment in which our patients live, we will continue to spend more, accomplish less, and lose more Americans prematurely to diseases that are, in the vast majority of cases, preventable.

The Structural Failure of Conventional Medicine: Treating Symptoms, Ignoring Causes

Cardiovascular disease remains the leading cause of death in the United States, claiming more than 700,000 lives per year. Type 2 diabetes affects more than 37 million Americans. Metabolic syndrome—the constellation of high blood pressure, elevated blood sugar, abnormal cholesterol, and excess abdominal fat—afflicts nearly one in three American adults. Neurocognitive diseases, including Alzheimer's and dementia, are rising at rates that cannot be explained by aging demographics alone. Autoimmune diseases and certain cancers follow similar trajectories. These are not mysteries of biology. They are largely the products of modifiable factors whose biological mechanisms are well characterized: chronic inflammation, mitochondrial dysfunction, oxidative stress, poor metabolic flexibility, nutritional deficiency, and inadequate physical conditioning. But we must go one level deeper. What is driving those mechanisms? Increasingly, the evidence points to environmental toxins as a primary upstream trigger. Lead, mercury, arsenic, and cadmium disrupt mitochondrial electron transport, impair endothelial function, and amplify systemic inflammation. Glyphosate and organophosphate pesticides alter the gut microbiome, compromise intestinal barrier integrity, and generate oxidative stress. Endocrine-disrupting chemicals—BPA, phthalates, and PFAS, the so-called forever chemicals—interfere with metabolic signaling, promote insulin resistance, and drive inflammatory cascades. Microplastics, now detected in human blood, cardiac tissue, and arterial plaques, carry a toxic payload that compounds oxidative injury at the cellular level. These are not theoretical concerns; they are documented biological mechanisms operating in real patients every day. Yet when a patient walks into a conventional cardiology office with early-stage hypertension, insulin resistance, or dyslipidemia, what typically follows is a brief encounter—often a ten to fifteen minute encounter that concludes with a prescription—a medication that lowers cholesterol, blood pressure, or blood sugar. These agents are not without value; in appropriate clinical contexts, they save lives. But they do not restore mitochondrial efficiency. They do not repair damaged cell membranes. They do not resolve the inflammatory burden that drove the disease in the first place, and they certainly do not remove the environmental toxins that ignited that burden INITIALLY to begin with. They manage downstream manifestations while the upstream driver continues unopposed.

I practiced conventional interventional cardiology for years. I placed stents. I managed acute coronary syndromes. I followed the guidelines; however, I grew increasingly troubled by the revolving door of chronic illness. Why was it that the same patients routinely returned with the same problems in spite of all of my efforts to improve their health? I came to understand that I had been treating consequences rather than causes, and the system had been designed to reward me for doing exactly that. A significant part of what I was missing—what the entire conventional framework was missing—was the

cumulative toxic burden those patients carried: decades of low-level heavy metal accumulation, persistent exposure to agricultural chemicals, and the slow bioaccumulation of endocrine disruptors that conventional labs never measured and conventional practice never discussed.

The architecture of fee-for-service medicine creates a powerful disincentive against root-cause care. A physician billing a standard office visit code has, on average, seven to twelve minutes of productive face time with a patient. In that window, it is nearly impossible to conduct a meaningful conversation about nutrition, sleep physiology, stress biochemistry, exercise programming, or environmental exposures—all of which are foundational determinants of cardiometabolic health. The reimbursement structure does not compensate for the time required to practice medicine at the depth necessary to produce durable outcomes. The result is a system that dispenses prescriptions with considerable efficiency but struggles to deliver the one intervention that changes lives more reliably than any pharmaceutical: education. An informed patient who understands why their body is malfunctioning, what biological processes are driving their disease, and precisely what they can do to interrupt those processes is the most powerful therapeutic asset in medicine. We have systematically underinvested in creating such patients.

Why I Transitioned to a Root-Cause, Precision Medicine Practice

Several years ago, I made a decision that felt professionally risky but was medically necessary. I restructured my practice around the principles of precision, personalized, root-cause medicine. I established Reveal Vitality & Longevity Institute with a clinical philosophy grounded in systems biology—the recognition that the human body is not a collection of organ systems to be managed in isolation, but an integrated biological network whose dysfunction must be understood at its source. In my practice, a comprehensive cardiometabolic evaluation includes readily available laboratories and diagnostics that are rarely utilized in conventional cardiology offices. For example, most patients perform cardiopulmonary exercise testing (CPET) with VO_2 max measurement—the single most powerful predictor of cardiovascular mortality. This diagnostic test offers a snapshot of current health status by evaluating cardiovascular, pulmonary, and cellular(mitochondrial) function. It thus provides a precise, individualized roadmap for exercise prescription, nutrition and supplement recommendations, and further testing if needed. Equally important, every patient at Reveal Vitality & Longevity Institute receives a comprehensive environmental toxin panel as a standard component of their initial evaluation. This includes testing for heavy metals—lead, mercury, arsenic, and cadmium—as well as organic pollutants such as glyphosate, organophosphates, and persistent endocrine disruptors including BPA, phthalates, PFAS, and, where clinically indicated, microplastic burden assessment. In my experience, the results are rarely unremarkable. Elevated toxic burdens are common, clinically significant, and, critically, actionable. Identifying and addressing those burdens is not ancillary to the cardiometabolic evaluation—it is central to it.

Patient Education as the Core Therapeutic Intervention

If I were to identify the single most important component of the care I now provide, it would be education. Not education in the passive sense—a pamphlet handed to a

patient on the way out the door—but rigorous, engaged, individualized education that empowers patients to understand their own biology and to become active architects of their own health.

When patients understand that their fatigue, brain fog, and weight gain are not character failures but represent the downstream consequences of mitochondrial dysfunction driven by nutritional deficiency, chronic inflammation, and—as we now regularly demonstrate with objective laboratory data—environmental toxin accumulation, something fundamental shifts. Showing a patient their mercury level, their PFAS burden, or their glyphosate exposure—and then explaining precisely how those compounds are disrupting their mitochondrial function, suppressing their immune regulation, or accelerating their arterial aging—transforms them from passive recipients of medication to active participants in their own recovery. They become motivated. They ask better questions. They make different decisions—not because they have been told to, but because they understand why. That understanding is durable in a way that a prescription is not.

The concierge practice model, while imperfect and inaccessible to many Americans - is a problem I will address directly, creates the time and relational continuity necessary for this educational work to occur. Extended appointments, longitudinal follow-up and proactive biomarker monitoring are not luxuries, they are clinical requirements for the practice of preventive medicine at any meaningful depth.

Reimbursement Reform: Aligning Incentives with Outcomes

The most urgent systemic reform needed in American health care is a fundamental realignment of the reimbursement architecture—one that rewards physicians for keeping patients healthy rather than compensating them primarily for managing patients who are already sick.

The current system is not merely suboptimal; it is structurally perverse. A cardiologist is reimbursed substantially for placing a coronary stent. The same cardiologist is reimbursed a fraction of that amount for a comprehensive preventive cardiology consultation that, if successful, makes the stent unnecessary. The interventional procedure that addresses the consequence of preventable disease is valued; the cognitive and educational work that prevents the disease is not. This is not a critique of interventional cardiology—I practiced it, and it saves lives in acute settings—but it is a structural absurdity that no rational health policy should perpetuate.

Specific Recommendations for Reimbursement Reform

I respectfully urge this Committee to consider the following policy directions:

- Establish dedicated reimbursement codes for comprehensive root-cause cardiometabolic evaluations, including advanced biomarker panels, lifestyle medicine counseling, and therapeutic patient education programs. The current CPT code structure does not adequately capture or compensate for this work.
- Create outcomes-linked payment models that reward physicians for measurable improvements in patients' cardiometabolic biomarkers. Paying for outcomes rather

than procedures redirects clinical attention toward the interventions that produce them.

- Expand coverage for evidence-based preventive diagnostics, including cardiopulmonary exercise testing, advanced lipid panels, body composition analysis, metabolomic profiling, and comprehensive environmental toxin testing panels—specifically heavy metal screens (lead, mercury, arsenic, cadmium), organic pollutant panels (glyphosate, organophosphates), and persistent endocrine-disrupting chemical assays (BPA, phthalates, PFAS). These tools are not experimental; they are the clinical infrastructure of precision preventive medicine, and their limited insurance coverage constitutes a structural barrier to preventive care. The evidence linking toxic burden to cardiovascular disease, metabolic dysfunction, neurocognitive decline, and cancer is robust and growing. Failing to test for these exposures is a clinical and policy omission we can no longer afford.
- Adequately reimburse extended preventive care visits—thirty to sixty minutes—that allow physicians the time necessary to conduct meaningful root-cause assessments and deliver substantive patient education. The seven-minute encounter cannot produce the outcomes we seek.
- Support and fund the development of integrative cardiometabolic care models that bring together cardiology, nutrition, exercise physiology, behavioral medicine, and precision diagnostics within a coordinated clinical framework. Siloed specialty care is incompatible with root-cause medicine.

The economic case for this reorientation is straightforward. Preventing a myocardial infarction is substantially less expensive than treating one. Reversing insulin resistance costs a fraction of managing end-stage diabetic complications. Investing upstream in prevention is not a concession to idealism—it is the most fiscally responsible policy available to this Congress.

The Health Equity Crisis: When Precision Medicine Is a Luxury

I must address what I consider the most morally urgent dimension of this discussion. The model of care I have described—comprehensive, personalized, root-cause medicine delivered over extended clinical encounters—is currently accessible primarily to Americans who can afford to pay for it out of pocket. That is a profound injustice, and it is a public health catastrophe.

The patients who most need this level of care are disproportionately those who cannot afford it: low-income communities, communities of color, rural populations, and the uninsured and underinsured who represent millions of Americans carrying the greatest burden of preventable chronic disease. These are the communities where hypertension prevalence is highest, where diabetes rates are most elevated, where cardiovascular mortality is most catastrophic, and where access to preventive care is most limited. And they are, by every measure of environmental epidemiology, the communities bearing the heaviest toxic burden. Proximity to industrial facilities, agricultural operations that rely on organophosphate pesticides and glyphosate-based herbicides, aging water infrastructure with lead and arsenic contamination, food systems reliant on packaging laden with BPA and phthalates, and residential environments saturated with PFAS from industrial discharge—these are not randomly distributed across the American

population. They cluster, with devastating precision, in the very communities that can least afford the resulting disease. Environmental toxin exposure is not a peripheral consideration in health equity; it is one of its primary engines.

The health equity crisis in American medicine extends beyond a matter of social justice—while it undeniably remains one. It is a driver of enormous and entirely avoidable healthcare expenditure. The total economic burden of cardiovascular disease in the United States exceeds $350 billion annually. Diabetes costs the American economy more than $400 billion per year in direct medical costs and lost productivity. A substantial portion of that burden falls on Medicare, Medicaid, and other public programs—borne ultimately by American taxpayers.

The Reveal Community Health Foundation Initiative

In response to this inequity, I am developing the Reveal Community Health Foundation—a nonprofit initiative designed to extend precision cardiometabolic education and root-cause medicine to underserved communities. The premise is that the educational and behavioral components of root-cause medicine can be delivered at scale, at low cost, and with measurable impact, if we design the right infrastructure and commit the necessary resources.

In partnership with Federally Qualified Health Centers such as MCR Health in our region, we are exploring group cardiometabolic education programs that deliver the core principles of precision preventive medicine—mitochondrial health, metabolic flexibility, anti-inflammatory nutrition, exercise as medicine—to patients who would never have access to the individualized concierge model I offer privately. The evidence base for community-based preventive health education is compelling. Studies consistently demonstrate that structured lifestyle medicine programs, when properly designed and implemented, produce significant reductions in cardiovascular risk factors, improvements in glycemic control, and reductions in medication burden—at a fraction of the cost of managing the advanced disease that results from their absence.

A Call to Action on Health Equity

I urge this Committee to pursue the following in service of health equity:

- Direct funding toward community-based precision preventive medicine programs that bring root-cause education and cardiometabolic assessment to underserved populations, particularly through the existing infrastructure of Federally Qualified Health Centers.
- Fund training programs to build a workforce of preventive medicine educators—physicians, nurses, health coaches, and community health workers—who can deliver root-cause medicine at the community level in the languages and cultural contexts of the populations they serve.
- Invest in community-level social determinants of health interventions—food access, stress exposure, and environmental toxin remediation—that are themselves root

causes of the cardiometabolic disease burden in underserved communities. This includes infrastructure investment to eliminate lead and arsenic contamination in water systems, regulatory action to reduce pesticide and herbicide exposure in agricultural communities, and targeted environmental toxin screening and treatment programs for populations with documented high-exposure risk. Precision medicine cannot fully succeed in an environment that systematically produces disease.

I want to be direct about something: the care I provide at Reveal Vitality is excellent, and it is available only to those who can pay for it. That troubles me deeply. The mission of the Reveal Community Health Foundation is rooted in the conviction that the principles of root-cause, precision medicine belong not to the privileged but to every American, regardless of zip code or income. Extending this model is not charity—it is the most cost-effective investment our health system can make.

The Economic Case for Prevention: A Long-Term Investment Thesis

I have spent considerable time in my career translating complex medical concepts into language that is meaningful to patients, and I often use the analogy of financial planning. We understand intuitively that investing early produces compounding returns, that deferred maintenance on a valuable asset generates far greater cost than preventive upkeep, and that the time horizon of investment decisions determines their wisdom. The same logic applies with equal force to health.

A dollar invested in preventing cardiovascular disease at age forty-five returns multiples in reduced acute care expenditure, reduced disability, sustained workforce productivity, and extended quality-adjusted life years. A dollar spent treating a third myocardial infarction in a sixty-five-year-old with unaddressed metabolic syndrome is a dollar spent on a preventable consequence of decades of inadequate upstream investment. Our health care system has been operating with the time horizon of the quarterly earnings report when it needs the time horizon of the endowment fund.

The Congressional Budget Office, the Centers for Medicare and Medicaid Services, and independent health economics researchers have consistently demonstrated that prevention-oriented health care models reduce total cost of care. The evidence is not ambiguous. What has been ambiguous is the political will to restructure a system that, in its current form, generates enormous revenue for stakeholders who benefit from the perpetuation of chronic disease management.

This hearing represents an opportunity to begin correcting that. The committee’s focus on modernized health care and empowering Americans to live healthier lives is precisely aligned with the direction our system must move. I urge you to follow the evidence, resist the gravitational pull of the status quo, and legislate with the long-term health of the American people as the governing priority.

Conclusion: A Prescription for American Health

I present this testimony as a cardiologist who has practiced at both ends of the disease continuum—who has opened occluded arteries in the cath lab and spent hours at a whiteboard with a patient explaining why their mitochondria are failing and what to do

about it. Both forms of care have their place. But the balance is profoundly wrong, and the consequences are measured in American lives.

The path forward requires three parallel commitments. First, a reimbursement reform that rewards physicians for the time, expertise, and outcomes of preventive root-cause care. Second, a structural investment in health equity that ensures the benefits of precision preventive medicine are not confined to those with the financial means to purchase them privately. Third, a cultural shift within medicine itself—toward education, toward longitudinal relationships, toward the conviction that the most powerful intervention we can offer a patient is the understanding of their own biology.

Americans are not passive recipients of health care. They are capable, when properly educated and empowered, of making decisions that profoundly alter their disease trajectories. I have seen it in my practice. I have seen patients reverse years of metabolic dysfunction through targeted nutritional interventions, optimized exercise programming, evidence-based supplementation, and structured environmental detoxification protocols—not because I prescribed those changes, but because they understood why those changes mattered and took ownership of their own health. I have seen inflammatory markers normalize, insulin sensitivity improve, and cognitive function get better in patients who were never screened for the heavy metal and chemical exposures they had been carrying for years. The data was always there—we just weren't looking

That is what modernized health care looks like: not more sophisticated technologies deployed upon passive patients, but an educated, empowered American public equipped with the knowledge and the clinical support to make choices that keep them well.

I am grateful for the Committee's attention and welcome any questions you may have.

Respectfully submitted,

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