



Silver Tech: AI's Golden Opportunity for Florida's Aging Population

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Executive Summary

Florida stands at a critical juncture in healthcare, facing unprecedented challenges as its elderly population surges. By 2045, the state is projected to have over 8 million residents aged 60 and above. As the state's elderly population grows, it will further strain an already burdened health-care system with increasingly costly and complex health needs. This demographic shift and existing shortages of physicians and nurses demand innovative solutions to ensure quality care for Florida's aging population.

Artificial Intelligence (AI) has emerged as a transformative tool to address these challenges, offering immense potential for all aspects of elderly care. AI applications allow providers to deliver better care, from early disease detection to combating loneliness. Despite the promise of AI to transform and improve elderly healthcare and wellness, regulators and legislators risk imposing burdensome regulations that could prevent the benefits of AI in elderly healthcare from being fully realized, reducing the quality of care and the quality of life for senior citizens.

Introduction

Most Americans' first formal interaction with Artificial Intelligence (AI) came in November 2022 when *Open AI* released ChatGPT, a generative AI program that could respond to prompts and generate text. Since then, most prominent technology companies have released their own programs, such as *X's Gork*, *Google's BARD*, and *Meta's LLaMa*. Before ChatGPT, Americans had unknowingly interacted almost daily with AI programs such as *Siri* or *Alexa*, which used a Deep Neural Network (DNN) "to convert the acoustic pattern of your voice at each instant into a probability distribution over speech sounds."¹ While these consumer-facing AI programs are new, the foundations of AI date back to 1956 when American mathematicians, led by John McCarthy, proposed a study to "find out how to make machines use language from abstractions and concepts, solve kinds of problems now reserved for humans and improve themselves."²

Since 1956, the capabilities of AI have grown beyond what the founding fathers of the technology could have imagined. Advancements in data availability and algorithmic processing power has led to significant improvements in predictive text and content recommendation technologies.³ These tools provide medical professionals with various applications to enhance patient care while reducing costs in an era of escalating healthcare expenses.⁴

What is AI?

AI represents a suite of advanced algorithms and computational techniques designed to simulate human intelligence and perform tasks that typically require cognitive functions such as learning, reasoning, problem-solving, and decision-making. At its core, AI is about creating systems capable of processing vast amounts of data, recognizing patterns, and making informed predictions or decisions based on that data.

AI can be achieved through different technologies such as Machine Learning (ML), Deep Learning, and Natural Language Processing (NLP). While used interchangeably, they each have unique characteristics that set them apart. Machine Learning (ML) is a commonly referenced subset of AI that encompasses algorithms

that improve themselves over time, often without human intervention. These algorithms can then identify patterns that can apply to similar situations in the future. Machine learning has improved dramatically into what is now known as Deep Learning (DL). Deep Learning utilizes artificial neural networks (ANN), simulating the human brain to process and interpret complex information.⁵

As AI has become more mainstream in society, the medical field has become excited about its potential to improve health outcomes for all Americans. When testifying before the U.S. Congress' Joint Economic Committee, Dr. Brian Miller of *Johns Hopkins University* and the *American Enterprise Institute* argued that AI "offers the most promise to transform care."⁶ According to Dr. Miller, AI can improve care delivery by automating administrative tasks, augmenting human-driven clinical practice, and automating elements of clinical practice.⁷ Thomas Davenport and Ravi Kalakota have been more forthright and stated that where doctors have deployed AI, it "can perform as well as or better than humans at key healthcare tasks, such as diagnosing disease."⁸ For patients, this means identifying potential diseases earlier, leading to improved health outcomes in the long term.

What is This Project?

The goal of this report is simple: Outline the current and potential uses of artificial intelligence in improving health outcomes for elderly Floridians. In doing so, we plan to provide policy principles to lawmakers to create a friendlier regulatory environment for the technology, facilitating widespread deployment in doctors' offices and hospitals across Florida and America.

Elderly care stands to benefit significantly from the utilization of AI. As individuals age, their health needs become increasingly complex, placing greater financial strain on providers and creating substantial "challenges for the U.S. healthcare system."⁹ *The Population Reference Bureau* estimates that the number of elderly Americans will grow from 58 million today to 82 million by 2050, amplifying the current strains on the U.S. healthcare system.¹⁰

Florida provides a unique case study for AI adoption in healthcare. According to the state's *Department of Elder Affairs*, Florida has more than 5.5 million residents over 60. Alarming, Florida's elderly population "outnumbers the...senior populations of 20 other states combined."¹¹ *Florida's Department of Elder Affairs* estimates that, by 2045, the state will have over 8 million residents over the age of 60.¹² Given Florida's substantial and growing elderly population, the state's healthcare system could significantly benefit from the growing use of AI to offset future strains from a population that will present more costly and complex healthcare needs.

As Florida's elderly population grows, so will questions about

how to fund the state's Medicaid program. For the financial year 2024-2025, lawmakers in Tallahassee allocated \$33.4 billion to the program.¹³ However, as more Floridians age into the program, lawmakers in Tallahassee will be forced to make difficult choices to ensure the program is correctly funded. This might involve raising taxes or further restricting eligibility or what services providers can be reimbursed for.

Roadblocks Ahead?

Artificial intelligence can only improve patient outcomes for elderly Americans willing to embrace the technologies use in healthcare. Elderly Americans have traditionally been more anxious about embracing new technologies and more resistant to them,¹⁴ and unfortunately, this trend is playing out with artificial intelligence and medical AI. A recent poll conducted by the Pew Research Center found that 64 percent of individuals over 65 were uncomfortable with AI being used by healthcare providers.¹⁵ While this skepticism is universal, it is less pronounced in the Sunshine State, where Floridians appear to be more receptive to AI technology in healthcare settings. A survey conducted by *The James Madison Institute* found that 53 percent of likely Florida voters over 65 believe that AI will positively impact the healthcare system, while just 25 percent fear the technology will harm healthcare.¹⁶ If elderly Americans are particularly reluctant to utilize technology in medical care, they will face unnecessarily poor health outcomes. More concerning is that anxieties around elderly people's adoption of AI technology could disincentivize providers from more overtly deploying the technology, hampering long-term innovation and using the technology where it is most useful.

Despite the promise of AI technology to improve healthcare for all Americans, particularly the elderly, the technology faces several challenges. The *Food and Drug Administration* (FDA) has been slow to approve the technology for medical use in comparison to the rate of innovation. As of August 7, 2024, the federal government had approved just 950 AI devices for use in the United States since 1995.¹⁷ While the FDA is right to study the use of high-risk technology given the "high-risk nature of these medical devices and the unknown consequences of using AI/ML for medical decision-making and data analysis,"¹⁸ such a slow rate of approval compared to innovation, approximately thirty per year, while the technology moves at such a rapid rate, means that American patients cannot currently receive the best care possible.

There are currently three pathways developers can take to get AI/ML devices onto the market. The first is through a 510(k) Pre-market Notification. Under a 510(k), a developer must demonstrate that their product or device is "substantially equivalent to a legally marketed device."¹⁹ The 510(k) process is generally reserved for low-risk devices, and the FDA hopes to consider 510(k)

applications within 90 days; however, it has been reported that applications can take much longer. The second is what the FDA terms a De Novo Classification Request, which is specifically for novel medical devices for which general controls alone, or general and special controls, provide reasonable assurance of safety and effectiveness for the intended use, but for which there is no legally marketed predicate device.²⁰ The FDA aims to process De Novo Classification Requests in 150 days. The final pathway is called the Premarket Approval and is "the FDA's most stringent approval pathway, intended for" high-risk devices.²¹ A Premarket Approval can typically take several years. While low-risk devices can get to market very quickly, more complex devices, and the ones that often yield greater benefit to patients, are significantly slower to receive approval. These slow approvals can sometimes mean that by the time a product has been approved for use, they are out of date, and newer products are nearing testing. Importantly, while products wait months or years for regulatory approval, they are not treating patients.

Artificial Intelligence and Machine Learning (AI/ML)-Enabled Medical Devices

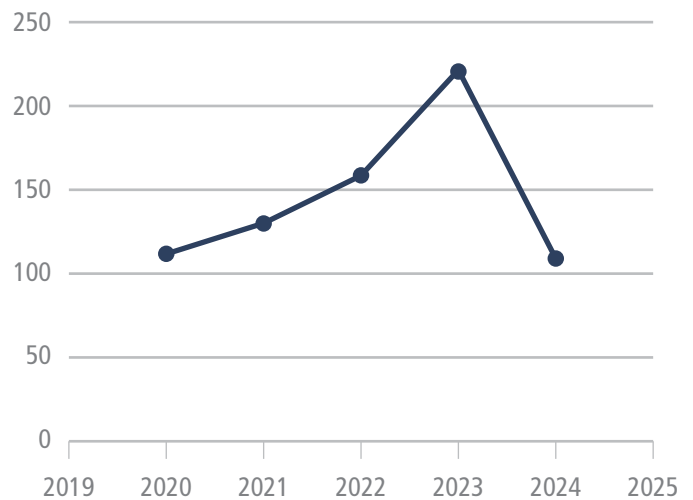


Figure 1: FDA approvals as of August 7, 2024

There is also the challenge of addressing bias and discrimination in how medical AI tools are programmed or algorithms are trained.²² While often not intentional, these biases may take the form of excluding specific populations or communities in data sets. This exclusion "can cause an algorithm to produce an output that differs from the true estimate,"²³ potentially causing a misdiagnosis, reduced effectiveness of the technology, and poorer outcomes for the patient. Such biases are also faced by elderly Americans, with "older adults... particularly under-represented in

datasets,” which risks leading to AI tools that are not designed for use by seniors.

While these biases may exist, they should not be a reason to limit the use of the technology. Firstly, knowing that data may exclude certain communities means those creating and training the data can intentionally create data sets that more accurately reflect underrepresented communities. Additionally, AI can use electronic health records to collect “health data from underrepresented populations who don’t regularly participate in clinical trials or don’t frequently see physicians compared to other populations.”²⁴ As such, it becomes possible for both humans and AI to remedy possible biases within the use of AI technology to build an even more inclusive and representative healthcare system.

Concern exists about how AI could influence the patient-provider relationship. As Soaad Q. Hossain of the *University of Toronto* has noted, there is a vast body of literature warning that while AI has the potential to transform how healthcare is delivered, greater reliance on the technology that takes humans out of the equation could result in “an increased feeling of objectification and the loss of control as well as deception and infantilization within patients, especially for the elderly.”²⁵ He warns that AI could fundamentally alter “the relationship between clinicians and patients by generating fear that data collected could be scrutinized and used for health care decisions” without human input.²⁶ Recognizing the potential risk to the patient-provider relationship is especially critical in elderly care as studies routinely show that, in senior care, “accurate and open communication can make a tremendous difference to the health of older patients,” and a positive patient-provider relationship can result in improved health outcomes.²⁷ Over-dependence on AI could, however, disrupt this relationship, potentially breaking down trust between patient and provider.

While critics have raised these concerns, advocates for increased use of AI in healthcare have suggested it could enhance the doctor-patient relationship. For example, if AI tools can transcribe visits and make notes, physicians and nurses are able to spend more time “listening to the patient and thinking about the patient’s problem.”²⁸ Eric Topol has suggested efficiencies generated by AI could bring “a new emphasis on the nurturing of the precious inter-human bond, based on trust, clinical presence, empathy, and communication.”²⁹ Rather than disrupting the patient-provider relationship, AI has the potential to enhance it.

The growing use of AI in the medical field is also raising significant concerns about data privacy. Because AI tools require “large quantities of patient data,” questions have emerged about what steps developers and deployers are taking to secure that data, who has access to that data, whether that data remains with providers, or if private companies can sell data.³⁰ Additionally, the large data sets used by AI tools could see providers and hospitals become targets of cyberattacks by criminal networks. One possible solu-

tion to the question of data privacy would be anonymizing patient data as much as is technologically possible and providing patients with the option to withdraw their data from AI models.³¹

State and Federal Regulation of AI

Legislators can take two approaches when regulating the use of AI in elderly care. They can regulate from a stance that undermines innovation by imposing burdensome regulatory requirements on developers and providers. Under this approach, lawmakers will deny patients access to cutting-edge treatments that could save or extend lives. After all, innovation that is delayed is innovation lost.

The alternative approach is for state and federal lawmakers to create a collaborative ecosystem where developers and healthcare providers can quickly develop, test, and deploy new technologies. While higher-risk technologies that directly interact with the patient or those used in treatment decisions require greater oversight, AI used to streamline medical billing or optimize bed allocation requires less oversight and should be free to enter the market relatively quickly.

Despite lawmakers filling a significant number of bills in Congress, slim majorities in both the House of Representatives and the U.S. Senate and divided control have meant that no bill has made it to the president’s desk at the time of writing. As such, AI regulation, especially in the medical field, has long fallen on executive agencies and state governments.

While Congress has largely been absent from regulating AI, the Biden Administration has actively imposed mandates on developers. In late 2023, Biden issued the *Safe, Secure, and Trustworthy AI* Executive Order that directed federal agencies “to look into implications of algorithmic systems and processes for a wide variety of issues including copyright, competitiveness, cybersecurity, education, health, housing, infrastructure, labor, and privacy.”³² Biden’s Executive Order followed the publication of a fact sheet in which his administration laid out key actions for the use of AI in healthcare that called on providers to protect patients from undefined algorithmic discrimination and bias as well as advance health equity.³³ While well-intentioned, these measures have been criticized as a “push for greater federal algorithmic control” without Congressional oversight, which risks bottling up “algorithmic innovations rather than helping to advance them” and also fails to consider AI technology’s profound benefits.³⁴

With Congress largely absent from AI regulation, state legislatures have filled the void left by federal lawmakers. This state-by-state approach, however, presents significant challenges for patients, providers, and developers. Under this patchwork, each state will have its own rules and regulations, meaning patients will have differing access to AI technology. Providers and developers must navigate a complex patchwork of regulations regarding using



and developing the technology. This patchwork risks creating confusion for all parties, and nobody has a uniform experience. Additionally, the patchwork of rules and regulations risks increasing care costs, forcing patients and providers to pay more, or negating any savings from AI technology.

Unfortunately, several states have proposed legislation that limits AI's use in the medical field, highlighting a desire among lawmakers to regulate use in this field. For instance, Illinois's SB 2795³⁵ and Georgia's HB 887³⁶ sought to significantly limit clinician's ability to use AI tools in their practice. Both bills failed to pass. Connecticut's SB 2, while also not enacted, proposed significant limits to AI in healthcare. Had that bill passed, the law would have mandated impact statements and risk assessments from even the most mundane tasks, including automating monotonous billing procedures, because those types of tasks would likely be classified as a health care service and would therefore be deemed to be high-risk.

Despite the promise of AI in elderly care and healthcare generally, state legislatures across the country have considered punitive legislation that will not only create a patchwork of state regulations but also deny patients the opportunity to access cutting-edge technology. This year, Colorado passed SB24-205, which, while not dealing directly with elderly healthcare, does require developers of "high-risk" AI systems to "use reasonable care to protect consumers from any known or reasonably foreseeable risks of algorithmic discrimination."³⁷ Additionally, developers must perform impact assessments and make them publicly available, "summarizing the types of high-risk systems that the developer has developed."³⁸ Those simply using the technology are not immune from burdensome regulations. Deployers must also implement a risk management policy and complete impact assessments for high-risk systems, as well as notify consumers how providers used the technology and annually review the deployment of the technology to ensure "the high-risk system is not causing algorithmic

discrimination."³⁹

Colorado law deviates from tradition and now assumes any AI system is guilty until proven innocent, regardless of whether any substantive harm has occurred. In doing so, SB24-205 creates an onerous compliance regime for both developers and deployers of AI technology, forcing startups to focus on paperwork rather than meaningful innovations.

If other states choose to follow Colorado, AI can expect an increasingly complex regulatory burden as they begin to comply with 50 different statutes with varying demands.

AI Caring for Florida's Elderly

Predicting Alzheimer's Early

Due to its large and growing effect on the elderly population, Alzheimer's disease has been described as a public health crisis in Florida.⁴⁰ The *Alzheimer's Association* has estimated that 580,000 Floridians over the age of 65 are currently living with the disease, and that number is projected to grow as the state's elderly population grows.⁴¹ Alzheimer's disease is also estimated to cost the state's Medicaid program \$3.4 billion each year.⁴²

Predicting the onset of Alzheimer's disease early is critical to improving health outcomes for patients suffering from the disease. As the Centers for Disease Control (CDC) noted, early detection "allows people living with dementia to have access to available symptomatic treatments and interventions, build a care team, participate in support services, and potentially enroll in clinical trials."⁴³

Given the importance of early diagnosis, AI could be a critical tool in predicting onset. Researchers at the *University of San Francisco* were able to use machine learning technology to predict the onset of Alzheimer's disease seven years before patients started displaying symptoms and the disease became irreversible.⁴⁴ Researchers based their models on "electronic health records" that provided "rich longitudinal data that can be leveraged to understand and predict complex diseases, particularly" Alzheimer's, including susceptibility due to genetics, health conditions, and sex.⁴⁵

While predicting the onset of Alzheimer's disease earlier won't necessarily improve a state's Medicaid budget, it will provide families more time with their loved ones and provide elderly Floridians with a better quality of life.

Sepsis Rapid Response

Sepsis is a life-threatening condition characterized by the body's extreme response to infection, causing widespread inflammation, organ failure, and even death. As the leading cause of death in hospitals,⁴⁶ sepsis affects at least 1.7 million adults annually in the United States, with a disproportionate impact on older adults, who account for over 60% of diagnoses.⁴⁷ Even patients who recover

face significant challenges, including steeper “cognitive and functional decline, an increased risk of hospital readmission, and a higher likelihood of discharge to long-term care facilities.”⁴⁸ Treating sepsis is also incredibly resource-intensive, given its common incidence and need for acute care.⁴⁹ While sepsis cases represent only 3.6% of hospital stays, they account for a staggering 13% of U.S. hospital costs.⁵⁰

Fortunately, early detection and timely intervention can save lives.⁵¹ However, subtle changes in a patient’s vital signs, such as increased body temperature or blood pressure, can easily go unnoticed in busy healthcare environments. While many of these changes are benign, they can be early indicators of sepsis. Machine learning and algorithms can combat sepsis by monitoring patients’ vital signs and alerting healthcare professionals to begin treatment. Unlike humans, AI can detect minute changes in body temperature or blood pressure that can indicate the onset of sepsis and alert hospital staff to start intervention early.

In Florida, *Tampa General Hospital* (TGH) has implemented an AI-powered Sepsis Rapid Response system, which analyzes real-time patient data to detect potential sepsis cases in patients, with the plan to begin treating cases within one hour -- a key goal of reducing mortality. Since implementing AI to detect potential sepsis cases, TGH has reduced sepsis-related mortality by 3%, saving approximately 200 lives.⁵²

Hospital at Home

AI also enables hospitals to reimagine where patients receive care. Traditionally, patients must receive care in a hospital, away from family and their homes for extended periods. By using Remote Patient Monitoring (RPM) devices that continually transmit patients’ vital signs to doctors based at a hospital, algorithms can classify the data provided by these devices and flag any concerning data for human review. Currently, there are 15 Hospital at Home (HaH) programs across Florida, allowing hospitals to free up beds and staff for critical care and patients requiring in-patient treatment.⁵³

Many programs, including those at *Tampa General Hospital* and *Orlando Health*, are utilizing AI to assist in identifying suitable candidates for HaH programs.⁵⁴

The integration of AI into Hospital at Home programs offers numerous benefits. Patients often recover more quickly and comfortably in familiar surroundings, improving overall outcomes and higher satisfaction rates.⁵⁵

Loneliness in Broward County

As seniors grow older and less mobile, they tend to experience feelings of loneliness and isolation. Approximately 50% of individuals over the age of 60 are at risk of social isolation, and one-third will experience some degree of loneliness in their lives.⁵⁶ While



loneliness is a psychological phenomenon, it can have profound physiological effects. In a report from the *American Journal of Geriatric Psychiatry*,⁵⁷ researchers found that social isolation or loneliness in older adults is associated with a 50% increased risk of developing dementia,⁵⁸ a 30% increased risk of incident coronary artery disease or stroke,⁵⁹ and a 26% increased risk of all-cause mortality.⁶⁰ There are various AI-enabled wellness products to help the loneliness epidemic for elderly Floridians. For example, the *Senior Research Alliance* distributes AI-enabled ElliQ devices to provide companionship and combat social isolation in elderly seniors.⁶¹ A similar pilot program in Broward County, Florida, delivers robotic animals that tell jokes, remind seniors to take their medication, and conduct regular checkups.⁶² Although these devices appear mundane, they provide critical engagement with seniors who would otherwise spend half their waking hours alone.⁶³

Addressing Labor Shortages in Hospitals

With just 62,202 physicians and 326,955 registered nurses for a population of 23 million, Florida needs more healthcare professionals. Such a shortage makes accessing healthcare difficult by making appointments harder to get, thus delaying healthcare – which, in turn, places “extra demand on already overburdened emergency rooms and risks worse health outcomes for the patients.”⁶⁴ As the state’s population grows, so will the demand for healthcare professionals.

Florida’s aging population presents several challenges to the labor shortage among healthcare workers. First, the state’s aging population creates additional pressure points on hospitals and other points of healthcare delivery. Second, 34 percent of the state’s registered physicians are over 60, meaning they will likely retire soon.⁶⁵ Losing over a quarter of the state’s physicians will only exacerbate the demand on the state’s healthcare system, as the system will quickly require care rather than be able to provide it.

The *Florida Medical Association* and the *Florida Hospital Association* have estimated that by 2035, the Sunshine State will be short 17,924 physicians and 5,974 traditional primary care specialists by 2035.⁶⁶

AI has several potential uses for addressing this shortage, from training healthcare providers more efficiently to get them in at the bedside to predicting hospital demand to ensure appropriate staffing. As researchers from the *University of South Florida* (USF) have noted, medical schools could use generative AI to “create fully immersive computer-based scenarios of medical content with interactive patients, rooms, and devices that are accurate enough for training.”⁶⁷ While the technology has clear limitations and is not ready for deployment at USF, these scenarios are replicable, allowing medical students to perfect their craft before interacting with patients. Additionally, medical schools can use generative AI to provide feedback to medical students. These prospective uses mean that more healthcare professionals will reach patients, mitigating the shortage and ensuring elderly Floridians can receive the care they need.

AI can also forecast demand, allowing administrators to allocate beds and staffing. Drawing from electronic health records (EHR), geographic data, and other variables, machine-learning technology can accurately predict demand for the following day, how long patients will likely need a hospital bed, and how many staff will be needed in each ward. At Tampa General, these predictions have been 95% accurate, allowing providers to deliver better patient care.

For rural communities currently facing shortages of medical professionals, AI can be an invaluable tool in delivering care. At the time of writing, Florida currently has 33 Medically Underserved Areas for Primary Care.⁶⁸ For elderly Floridians, AI chatbots could screen patients for routine health questions and offer potential diagnosis and treatment options.⁶⁹ In routine cases, doctors and patients would never need to interact. While this may seem dystopian and a nightmare scenario for AI’s critics, for those living in an area without a primary care provider, it could be the difference between receiving life-saving medical care and a minor health issue becoming a major one.

Fall Detection

The *CDC* reports that approximately one out of every four Floridians aged 65 and older falls each year, causing 3,861 deaths in 2021 in Florida alone.⁷⁰ Falls can lead to increased dependence, decreased quality of life, and reduced life expectancy among the elderly.⁷¹ The likelihood of falling increases for elderly patients with common chronic conditions such as vision problems⁷² and muscular weakness.⁷³

Beyond the physical consequences, the psychological impact of falls can be as debilitating as the falls themselves. Fear of falling af-

fects 30-50% of older adults living independently, even if they have not experienced a fall.⁷⁴ This fear can negatively impact a patient’s life by restricting their daily activities and frequency of social interaction, leading to depression.⁷⁵

Artificial Intelligence technology offers innovative ways to reduce the risk of falls among seniors by combining real-time monitoring of vitals or walking patterns, helping to predict if a patient is at risk of falling, and then personalizing interventions. AI can minimize the incidence of falls among the elderly by improving prediction and detection capabilities. Predictive interventions involve identifying potential risk factors that alert care providers to step in before a fall can occur. For example, the AI tool STRATIFY was integrated into a hospital’s EHR to generate prioritized intervention strategies based on the patient’s risk level.⁷⁶ *Baptist Health* in Jacksonville, Florida also utilizes an AI tool to automate fall risk assessments for nurses, freeing their time to focus on preventative care.⁷⁷

Unfortunately, elderly patients are not always around their designated care providers or lack one altogether. AI-enabled fall detection systems are critical to accurately detect when a fall occurred and promptly notify relevant caregivers to reduce the time needed to reach and rescue an elderly patient.⁷⁸ There are many ways to integrate AI systems to detect falls, including wearables, cameras, and sensors. In Florida, several nursing homes have begun integrating AI-enabled smart lamps to detect falls and alert caregivers 100% of the time.⁷⁹ A similar pilot using the same technology in the United Kingdom prevented 84% of falls and reduced the average response time from 57 minutes to under two minutes.⁸⁰

Policy Principles: Place Patients’ Needs First

Much like the First Amendment was placed by the founders to “protect all of the others,” the first recommendation for policymakers must be to ensure that every proposal provision is aligned with patient needs above all other needs. As discussed earlier in this study, despite the best attempts by lawmakers, Florida continues to face a critical shortage of care providers across nearly all healthcare occupational categories. Any specific policy proposals must ensure that patients are not shortchanged in their ability to access care. Artificial intelligence should undergird the notion that choice breeds competition, which breeds better outcomes and lower costs.

Reject a Heavy-Handed Regulatory Footprint

Like much of technology and innovation, the speed of change means that attempting to overregulate will have one of two results

– neither of which are good. Either the innovation will outpace the regulation and “move around” it, or the regulatory environment will push innovators into other states more conducive to innovation. Both of these outcomes should be avoided. While a complete hands-off regulatory state may be impractical or impossible, policymakers should limit their regulatory proposals to those that cultivate competition and provide a transparent market for consumers. In a traditional marketplace, this would be the most effective approach. In the healthcare arena, it is far more important.

Develop Clear Definitions for AI Subject to Regulation.

Consider the nebulous nature of AI and the overlap between things like apps on an Apple Watch and more rigorous systems. As AI scholar Kev Coleman stated in testimony before the Texas legislature, “...broad regulation intended for AI would bring chaos to simpler software systems whose functionality would trigger the same regulatory obligations.”⁸¹ Policymakers can avoid this dynamic by carefully and narrowly tailoring any regulations they consider and clearly defining the covered systems to ensure that extraneous tools, like smartwatches, are exempt from regulations.

Approach Transparency Regulations with an Opt-Out versus Opt-In Starting Point

Regulations dealing with disclosure and transparency are essential – they ensure that patients are fully aware of and approve of the course and treatment methods. Patients are often at either an information or timing disadvantage within healthcare provision. An individual may not be in a cognitive position to comprehend (or consent to) a procedure necessary to save his or her life. This is particularly the case in trauma and emergency care. Any regulations that hinder the delivery of care in such a setting could result in harm, including unnecessary death.

Avoid Overzealous Disclosure Requirements that Stifle the Adoption and Deployment of AI

It is laudable to want to make certain that the technologies underlying the infrastructure of AI are not unduly harming patients and consumers. Nevertheless, enacting disclosure requirements that violate intellectual property rights would almost certainly lead to an exodus of innovation from the state. In 2024, Colorado passed SB24-205, which purports to establish protections for consumers interacting with “high-risk” artificial intelligence systems. While arguably well-intentioned, the legislation’s provisions on disclosure and requirements for companies deploying AI (not

just in healthcare) will almost certainly place the state behind the curve. Policymakers can and should acknowledge the need for balance but not craft burdensome regulations that drive innovators to other states.

Keep Medicare and Medicaid Recipients at Home Whenever Practical

An important dimension of AI’s relevance to the Medicaid program is its potential to reduce long-term care (LTC) expenditures. According to data from the Florida Health Care Association, there are roughly 71,000 patients at any one time residing in a nursing home in the state – with a cost of between \$90,000 and \$100,000 per year. For residents on Medicare or Medicaid, taxpayers fund a portion of that cost. Kev Coleman, a Visiting Research Fellow with Paragon Health Institute, has been leading research efforts to align the deployment of artificial intelligence to both Medicare and Medicaid programs. According to Mr. Coleman, the *Congressional Research Service* estimated a few years ago that the Medicaid program would spend \$207 billion on long-term services and support for Americans in 2021.⁸² A major cost center within this spending was institutional care for the elderly. In the year already cited, the Medicaid program spent \$67 billion on institutional services for 1.5 million Medicaid recipients.⁸³ Unfortunately, the costs of private alternatives are staggering. According to the Cost of Care study by *Genworth Financial*, the annual expense of a nursing home (with only a semi-private room) was \$104,025 in 2023.⁸⁴ Even for seniors who own their home with no mortgage or spouse needing the residence, the outlay for a nursing home can quickly exhaust available home equity.

Thankfully, advances in AI may soon allow more seniors to remain in their homes for longer periods before institutional care, a preferable outcome for both patients and taxpayers. The present average cost of a nursing home in Florida - \$90,000 - \$100,000 per year – is paid in part by taxpayers when the patient is on Medicare or Medicaid. Every patient able to receive long-term treatment in their home as opposed to a facility saves the state money. At present, Medicaid comprises more than 31 percent of the Florida budget. Those funds (the portion coming directly from the state as opposed to the federal government) are funds that could be directed to other necessary efforts or initiatives (such as infrastructure, education, and public safety).

The technological advances in learning and reasoning are now being explored for remote patient monitoring. When coupled with wearable devices to capture vital signs such as cardiac rhythm and activity levels, AI can continuously monitor a patient at home and identify the early signs of deterioration.⁸⁵ When deterioration is detected, a system can notify the medical facility hosting the AI system and the patient’s caregiver. The advantages of this model go beyond the financial benefits to Medicaid attending delayed

institutional care. Since many seniors would prefer to live as long as possible at home,⁸⁶ remote patient monitoring may improve seniors' quality of life and happiness.

Align Energy Needs and Policy with AI Needs

Deploying artificial intelligence (not just in the healthcare area) will require far greater energy needs than at present.⁸⁷ With the use of AI in healthcare, an interruption in energy availability could result in death. The results can be catastrophic in states that champion so-called “green energy” at the expense of existing sources that are far more reliable and without the problems currently present within the arena of renewables. It is imperative that, before widespread use of AI in healthcare can be assured safe, energy needs in the state can ensure the utilization of AI without fear of blackout, brownout, or other interruptions. This will require the state to examine its energy mix and make any necessary adjustments to ensure that energy is reliable, safe, and affordable.

Protect Data, Both Technology, and Patient, from Bad Actors

It is incumbent upon policymakers to recognize that with innovation involving personal data, rogue nations and cybercriminals will seek to exploit vulnerabilities in AI for nefarious purposes. Regardless of how innocuous the data may seem, cybercrime is an ever-present and growing threat. Consider how valuable a trove of sensitive health-related data on millions of Americans would be to foreign agents or cybercriminals. Policymakers should incorporate provisions into any policy proposal to ensure that personal data is secure and properly protected.

Update Current Liability and Malpractice Statutes

Given the prevalence of litigation and the nature of how medical malpractice laws function, it will be necessary for the state to conduct a thorough review of existing malpractice and liability statutes to accommodate for the widespread adoption of AI in healthcare delivery. As scholars from Paragon Institute noted, “Where autonomous AI complicates the traditional malpractice investigation is the issue of standard of care. ‘The standard of care,’ noted by health care risk management expert Donna Vanderpool, is a legal term, not a medical one.”⁸⁸ There will inevitably be areas of liability and malpractice law that need to be adapted to deploy more autonomous AI systems to avoid costly litigation and a glut of cases clogging up the civil system.



Leverage Existing Stakeholder Resources to Guide Policy

In 2024, the Florida Legislature passed and Governor Ron DeSantis signed SB1680. The bill created the Government Technology Modernization Council. The goal for this group is to serve in an advisory capacity and offer specific recommendations to Florida policymakers and elected officials in several areas regarding technology. The legislation further articulates that the council members will include “five representatives with senior level experience or expertise in artificial intelligence, cloud computing, identity management, data science, machine learning, government procurement, financial technology, education technology, and constitutional law.”⁸⁹ This group can and should be charged with providing legislators with information and advice ahead of bill consideration, recommendations on proposed legislation, and regular reporting on the execution and impacts of any legislation enacted.

Examine Each Regulatory Approach by Asking a Specific Question

The most seasoned policymaking seeks to mitigate effects rather than approaches. If a regulatory proposal is put forth, lawmakers should examine it through the prism of a specific question: “Does an existing law or regulation currently address this issue?” If the answer to that question is yes, then there needs to be a compelling reason to add to that. For example, current laws and regulations exist to protect consumers from fraudulent claims made in the marketplace – adding a layer of regulation specifically for the provision of AI in healthcare would only make sense if there were some gap or loophole in the language of statutes that required addressing. This specific issue was a challenge throughout the 2024 effort by California to pass SB1047 – and ultimately resulted in a veto from California Governor Gavin Newsom.

Align State Policy on Medicaid to Ensure Efficient and Effective Deployment

With Medicaid taking up more than 30 percent of the state's budget, putting downward pressure on costs is essential. Florida's population demographics are such that this share can, if not addressed, balloon to crisis levels in the future. Working to deploy AI technologies within this patient population will help mitigate some of the risk of the program exploding beyond the state's ability to fund it (save increasing taxes). To that end, the state (via the Agency for Healthcare Administration or some other relevant entity) should review the state's Medicaid laws and regulations to confirm that no impediments exist to lowering program costs safely through AI-facilitated remote patient care. At a minimum, policymakers should require that Florida's Medicaid program follow Medicare's AI reimbursement policies, provided they are budget neutral, require waiver applications to the *Centers for Medicare & Medicaid Services*, and require AI in the state's managed care plans.

Looking Forward

Florida's elderly healthcare system stands at a critical juncture. With a growing population and providers leaving practice, strains on the system will only intensify, resulting in poorer overall care for the state's elderly population. Thankfully, using AI offers numerous ways in which providers can spot diseases earlier, mitigate the challenges of staff shortages, keep people in their homes for longer, and free up beds in emergency rooms and hospital wards.

However, as we embrace these technological advancements, we must also grapple with their challenges. Data privacy and security will undoubtedly become even more pressing as AI systems process increasingly vast amounts of sensitive health information. Striking the right balance between leveraging data for better health outcomes and protecting individual privacy will be an ongoing challenge, as will ensuring that AI models represent their communities.

Looking ahead, Florida stands at a crossroads. With its large and growing elderly population, the state has the potential to become a leader in AI-driven elderly care. By embracing innovation while carefully navigating the ethical and practical challenges, Florida could set a model for the rest of the nation and the world.

The future of AI in elderly healthcare in Florida is not just about technological advancement; it's about reimagining what it means to age with dignity, independence, and quality of life. As we move forward, the focus must remain on leveraging these powerful tools to create a future where every elderly Floridian can look forward to their golden years with optimism and confidence, supported by the best that human compassion and artificial intelligence offer.

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