TECHNOLOGY SUMMIT SCOOP - OCT

⧉ WHO WE ARE & WHAT WE'RE DOING

The American Academy of Physical Medicine and Rehabilitation's (AAPM&R) Annual Assembly will be held at the San Diego Convention Center in San Diego, CA from November 6-10, 2024. The AAPM&R Annual Assembly is physiatry's premier educational and networking event with the largest gathering of physiatrists in the world! Attendees will experience innovative learning opportunities, valuable networking, a variety of educational sessions, hands-on Skills Labs, and cutting-edge research. The PM&R Pavilion hosts organization exhibits, non-CME education, Research Hub e-posters, the interactive Learning Center, and more! Learn more about Annual Assembly here.

✔ IN THE NEWS

The U.S. Senate Permanent Subcommittee on Investigations released a report, Refusal of Recovery: How Medicare Advantage Insurers Have Denied Patients Access to Post-Acute Care, publishing their findings from their investigation into Medicare Advantage insurers for their use of prior authorization and high rates of denials for post-acute care. This report reveals that UnitedHealthcare, Humana, and CVS are increasingly using automation and predictive technologies in the prior authorization process, leading to significantly higher denial rates for post-acute care services. These practices have raised concerns about the prioritization of financial gain over patient health, as AI-driven systems appear to focus on maximizing profits by limiting access to critical care for seniors. The Subcommittee's findings suggest a need for regulatory oversight to ensure that AI and predictive models do not undermine the clinical judgment of healthcare professionals in determining medical necessity.

Google Cloud has launched Vertex AI Search for Healthcare and new features for the Healthcare Data Engine to help reduce the administrative burdens faced by healthcare workers, who spend significant hours on tasks that detract from patient care. A recent report, by Google Cloud and Harris Poll, highlights that many healthcare professionals are experiencing burnout due to overwhelming administrative duties, impacting their ability to interact with patients effectively. These new tools aim to enhance data interoperability and improve the efficiency of healthcare systems, ultimately aiming to elevate patient care quality. Read more here.

📖 READING OF THE MONTH

Attached, please find a background document outlining the three categories of technology which will be explored at the Technology Summit: hospital at home, virtual musculoskeletal technologies, and augmented intelligence. This document introduces the various technologies of the industry vendors attending the Summit, we well as other vendors in each category.

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⚙ LOGISTICS

Academy staff are currently finalizing your hotel reservations. Kayla Martin will provide hotel confirmation details by the end of November. Additionally, please find the Summit agenda attached for your reference. Breakout topics and group assignments will be included in the November edition of the Technology Summit Scoop.

🏢 COMPANY CENTER STAGE

We are excited to welcome Summit attendee, Dr. Mary O'Connor, representing Vori Health:

"Vori Health, a pioneer in musculoskeletal care, is a nationwide virtual-first spine and orthopedic clinic created to help people experience life without pain. Founded by two surgeons from Yale and Mayo Clinic, Vori changes how back and joint pain is treated. Instead of bouncing around the system, patients at Vori connect directly with a team of board-certified PM&R and sports medicine physicians, physical therapists, registered dietitians, and health coaches. Patients receive holistic and personalized treatment plans—including home exercise programs with AI-powered motion-tracking—to help them overcome pain without inappropriate surgery. As the only nationwide MSK solution led by physicians, Vori delivers the most comprehensive suite of clinical services on the market. Vori is also the only nationwide hybrid solution, offering patients the ability to choose between in-person and online physical therapy appointments. By meeting patients where they are, Vori reduces unnecessary care, enables faster recoveries, and drives substantial savings of $3,200 annually per member. Vori's efforts have been recognized by the 2024 American Telemedicine Association's People's Choice Award, underscoring their impact in the field. As the fastest-growing MSK solution, live with over 6 million members, Vori is excited to continue driving innovation that moves people beyond pain and back to their lives."

American Academy of Physical Medicine and Rehabilitation (AAPM&R) Technology Summit

Introduction: Background and Making the Case for PM&R's Place in the Digital Space

Remote patient care has rapidly gained importance in physiatry, prompting discussions on its effective and efficient integration into clinical practice, both in the short and long term. Recognizing this as a key area of need among American Academy of Physical Medicine and Rehabilitation (AAPM&R) members, the Academy is conducting this summit to seek guidance for overcoming barriers to implementing virtual care.[11] The summit will consider three areas of priority for physical medicine and rehabilitation (PM&R) in the emerging world of technology enhanced care: hospital-at-home and the potential applications for rehabilitation at home, virtual musculoskeletal (MSK) care, and the use of augmented intelligence (AI).

Hospital-at-Home and Rehabilitation at Home
The COVID-19 pandemic drove hospitals and healthcare systems to rethink how and where they provide care to patients.[1] As a result, hospitals began exploring the hospital-at-home (H@H) model as a way to improve care delivery.[2] In November 2020, the Centers for Medicare & Medicaid Services (CMS) introduced the Acute Hospital Care At Home program, offering hospitals greater flexibility to provide acute-level care to patients in their homes while still being reimbursed.[2] This approach allows certain patients to receive acute-level care at home instead of being admitted to a hospital. It has been shown to reduce costs, improve patient outcomes, and enhance the overall patient experience.[2] The concept is popular with care-receivers as well; a recent survey found that regardless of age, gender, race, socioeconomic status, or medical conditions, nearly half of consumers are open to the hospital-at-home model, and over a third are neutral. Only 17% preferred care in a traditional hospital setting.[3]

H@H patients remain closely connected to healthcare providers through a combination of in-person visits, video consultations, and continuous biometric monitoring via technology and devices.[1] The hospital-at-home model relies heavily on technology, particularly telemedicine and reliable communication systems. To support this, many hospitals hire external vendors to provide the necessary infrastructure.[1]

Virtual Musculoskeletal Care
Musculoskeletal (MSK) disorders are a primary cause of disability.[4] Furthermore, people who have MSK disorders face a higher risk of mental health issues such as anxiety, depression, fatigue, and sleep disturbances.[5] Additionally, chronic pain from these disorders may lead to substance abuse, both illicit and prescription.[6] With the aging U.S. population, the incidence of MSK disorders is expected to rise.[7,8] Early assessment and physical therapy (PT) can enhance both health outcomes and economic impacts related to

MSK disorders.[9] Recent research indicates that people with MSK pain who are managed by physical therapists experience better outcomes, lower costs, and higher satisfaction compared with those who are treated by medical providers.[10]

Cost, limited access and availability, and patient time restrictions are significant barriers to in-person PT.[4] However, virtual solutions can provide clinically significant improvements similar to in-person PT in both pain and function for a variety of MSK conditions. Virtual MSK solutions employ computer vision, on-body sensors for home monitoring, live and recorded interactions with therapists, and AI-powered analysis of patient data and care plans.[4] As with H@H, virtual solutions have the potential to improve access to therapy, reduce healthcare costs, and offer more access and convenience compared with in-person PT.[4]

Augmented Intelligence (AI)

Cloud-based platforms are transforming the healthcare industry by offering innovative solutions that cater to the specific needs of healthcare providers and patients. These platforms provide comprehensive ecosystems that enhance patient engagement, facilitate team collaboration, and offer valuable data insights while ensuring compliance and security. By improving patient experiences, streamlining operations, and enabling data-driven decision-making, these technologies are revolutionizing healthcare delivery.[11,12]

The Technology That Makes Home-Based Care Possible

Hospital at Home
The H@H model is not new, with the first trials published in the United Kingdom in the late 1970s. The first U.S.-based study providing hospital-level care at home, involving in-person physician visits, was published in the late 1990s. Early U.S. H@H models relied heavily on the physical presence of clinicians in the patient's home. Even given the daily in-person visits, care was 40% cheaper and associated with higher patient satisfaction using this model than with inpatient hospitalization.[13,14]

The advent of telemedicine allowed for a shift from in-home provider visits to phone or video visits.[15] Remote patient monitoring (RPM) was the next step, using activity trackers with step count and heart rate metrics to transmit data either via cellular networks to the cloud or through Bluetooth to their respective apps the early 2000s.[16-18] The field of wearable RPMs increased substantially and has continued to do so, which has allowed for remote monitoring of many different health metrics.[15,19] Wearable biophysical sensors can monitor several different metrics, including activity, blood pressure, brain activity, gait, heart rate, hydration, muscle activity, pulse oximetry, respiratory rate, sleep, and temperature while biochemical sensors are capable of monitoring a range of biomarkers, including alcohol, cortisol, creatinine, electrolytes, glucose, lactic acid, levodopa, urea, vitamins, urea, and other substances. Two-way communication between healthcare consumers and healthcare providers has now become possible as well.[15]

As the number of sensors generating data grew, remote patient monitoring companies emerged to aggregate and harmonize this data for users and stakeholders. Device manufacturers with single or multiparameter capabilities developed their own care platforms, while major consumer wearable companies launched their own research kits.[20,21] While the concept of delivering care via a two-way virtual platform had already been gaining popularity prior to the onset of COVID-19, the quarantines and hospital bed shortages that resulted from the pandemic caused virtual care to go mainstream. Payors slowly but surely began to adapt, beginning to cover virtual visits.[15,22] Reimbursement became more widespread with the Emergency Use Authorization waiver.[15]

Studies showed that H@H programs helped increase hospital surge capacity, reduce the spread of infections within hospitals, and provide acute care at home for COVID-19 patients with outcomes comparable to in-hospital care.[23-25] However, the field remains in its early stages of development and the CMS Acute Hospital Care at Home (AHCaH) waiver, which spurred the development of many H@H programs, is scheduled to expire on December 31, 2024.[15,26,27]

Some health information technology infrastructure is still lacking. While electronic health records (EHRs) have gradually improved their internal interfaces for hospitals and clinics, the interfaces for patients and device manufacturers still need enhancement.[30] Some services can collect home-based digital sensor data and input it into EHRs via an application programming interface (API), typically as PDF files or spreadsheets, but this information is often overlooked during busy clinic visits.[31] Despite this, H@H models hold significant promise for care delivery due to innovations in digital sensors, large language models for data processing, and data pipelines developed for remote care during COVID-19.[15] Virtual physical therapy (PT) is also showing promise for improving outcomes while cutting costs.[4]

Some of the companies that have developed and are offering products in the H@H space are listed below.

Companies Providing Hospital-at-Home Products
Product descriptions were developed through website and press release review. Inclusion on this list or exclusion from this list does not reflect endorsement/support or lack thereof by AAPM&R.

Name of Company	Core Offerings	Important Links
Biofourmis[32]	• The Biofourmis digital platform enables both in-person and at-home virtual care.	**Press Releases:** • Community Health Network Selects Biofourmis to Help Drive Care-at-Home Outcomes Across the Continuum

	• Their telehealth services offer capabilities such as video visits and tools for patient engagement. • The platform includes remote monitoring features that utilize clinical-grade wearable devices for continuous and episodic data collection. • They have an FDA-cleared AI-guided algorithms analyze patient data in real time. • The platform offers EMR integration. • The platform also includes clinical trial support.	• [GE HealthCare and Biofourmis Collaborate to Extend Patient Monitoring Outside the Hospital with Virtual Care-at-Home Solutions](#) • [Biofourmis and WellSpan Health Collaborate to Deliver High-Quality Hospital-Level Acute and Post-Discharge Care to Patients at Home](#) **Website:** https://www.biofourmis.com/
Current Health[33]	• Current Health can provide at-home chronic care management solutions via remote monitoring and home-based patient engagement.	**Press Releases:** • [Best Buy shelled out $400M for Current Health as it ramps up health strategy](#) • [Best Buy Partners with Atrium On Hospital-at-Home Program](#)

	• They also offer transitional care services. • Telehealth video visits and patient engagement tools are available. • The platform includes FDA-cleared remote, continuous and intermittent vital sign monitoring. • AI-guided algorithms provide real-time data monitoring and early warning alerts. • The platform offers EMR integration. • This platform also includes clinical trial support. • Best Buy's Geek Squad, part of Best Buy Health, offers in-home tech support for their devices and solutions.	**Website:** https://www.currenthealth.com/
Inbound Health[34]	• The Inbound Health digital platform enables at-home skilled	**Press Releases:** • Inbound Health Releases New iPad App for Inbound In-Home Patient

	nursing as well as H@H. • Virtual care teams are available • The platform combines biometric monitoring, digital surveillance, in-home nursing and therapy, virtual specialist visits, and a comprehensive supply chain. • AI-based analytics and machine learning streamline decision processes. • This platform also offers EMR integration.	Management and Analytics Platform • SSM Health Partners with Inbound Health to Offer In-Home, Post-Hospital Care to Patients **Website:** https://inboundhealth.com/
Maribel Health[35]	• Maribel Health designs, builds, and operates in-home clinical care models. • They offer longitudinal care as well as post-acute care. • Their telehealth services provide capabilities such as video visits and	**Press Releases:** • House Calls: Mercy Patients Get Hospital Care at Home • BAYADA Teams Up with Maribel Health to Develop Hospital-at-Home Models for Health System • Maribel Health Raises $25M Series A to Create the Future of

	tools for patient engagement. • The platform includes remote monitoring features that utilize clinical-grade wearable devices for continuous and episodic data collection.	Advanced Care at Home **Website:** https://maribelhealth.com/
Masimo[36]	• Masimo develops, manufactures, and markets noninvasive patient monitoring technologies that include EEG, pulse-ox, capnography, and opioid monitoring. • Their telehealth services offer capabilities such as video visits and patient engagement tools. • They also have a smartwatch with monitoring capabilities. • They use AI-guided algorithms to analyze patient data, offer clinical decision support, improve patient safety, and	**Press Releases:** • Masimo Partners with Qualcomm to Develop Next-Generation Smartwatch Reference Platform for Original Equipment Manufacturers • Masimo Partners with Google to Develop a Reference Platform That Helps Device Manufacturers Bring High-performing Wear OS Smartwatches to Market • Saint-Denis Hospital Center in France Implements Masimo SafetyNet® Telemonitoring to Facilitate Early Discharge of Premature Newborns from the Hospital

	incorporate predictive algorithms.	**Website:** https://www.masimo.com/en-us/
Medically Home[37]	• Medically Home provides high-acuity care for patients with complex and serious illnesses. • They provide technology and logistics support for remote patient monitoring and care delivery. • They offer 24/7 medical command centers staffed by doctors and nurses to support patients receiving home-based care. • Services offered include IV antibiotics, infusions, medication management, laboratory services, physical, occupational, speech, and respiratory therapy, in-home imaging, and meals with nutritional consultations.	**Press Releases:** • Healthcare Pioneers Medically Home Group and Siemens Healthineers Forge a Collaboration to Enhance Capabilities for Providing Advanced Patient Care at Home • BrightStar Care® Chosen by Medically Home to Expand its Network of Service Providers Delivering Innovative Hospital-at-Home Model of Care • Medically Home Expands its Network Supporting the Delivery of High-Acuity Care in the Home **Website:** https://medicallyhome.com/

	• They provide a technology platform, clinical protocols, and reimbursement model. • They have partnered with several health systems.	
Samsung[38]	• Samsung offer bedside tablets to enhance patient access to information as well as smartphones to streamline clinician workflows and reduce IT costs. • They offer healthcare displays, including hospital room TVs designed for patient comfort and information delivery, as well as diagnostic displays for improved medical imaging. • They provide mobile devices specifically designed for remote patient monitoring. These devices integrate	**Press Releases:** • [Mobile healthcare technology improves care by enabling remote patient monitoring](#) • [Galaxy Watch's Advanced Sensor Tech Paves Way for Greater Preventive Healthcare Solutions](#) • [Samsung expands health program to enable more preventative care](#) • [care.ai, Samsung partner for AI-powered patient monitoring via displays](#)

	with Bluetooth-enabled health monitoring tools for at-home patient care. • They support remote patient and chronic disease monitoring via devices that integrate with various provider systems.	**Website:** https://www.samsung.com/us/apps/samsung-health-monitor/b2bapp/
Signify Health[39]	• Signify Health offers in-home health evaluations with a focus on preventive care and screenings. • They use technology to enhance the effectiveness of their clinicians' in-home visits as well as providing virtual visit options. • They offer a network of over 10,000 clinicians who dedicate significantly more time to patients during home visits than typical primary care visits.	**Press Releases:** • Signify Health Adds In-Home, Condition Focused Visits to Portfolio of Diagnostic and Preventive Service Offerings • Signify Health launches heart arrhythmia testing, expands in-home diagnostic and preventive services offering • CVS Health Completes Acquisition of Signify Health **Website:** https://www.signifyhealth.com/

Virtual MSK

Technological innovations in this field have concentrated on virtual solutions aimed at increasing access to therapies that alleviate pain and enhance function. Virtual MSK solutions utilize computer vision, on-body sensors for home use, live and recorded interactions with therapists, and AI-powered analysis of patient data and care plans.[4]

The Peterson Health Technology Institute (PHTI) recently released a report categorizing virtual MSK technology into three groups: app-based exercise therapy, physical therapist–guided virtual PT, and remote therapeutic monitoring (RTM)-augmented PT. App-based exercise therapy solutions offer self-directed therapy using care plans primarily designed and updated by algorithms, informed by computer vision analysis or on-body motion sensors. These solutions involve minimal physical therapist engagement after the initial exercise program is established. Physical therapist-guided virtual solutions provide PT with greater clinical involvement in onboarding participants, designing exercise regimens, and managing care. These programs typically include self-directed exercises with feedback from computer vision and/or on-body sensors, along with increased human interaction through video visits and asynchronous communication with coaches and physical therapists. RTM-augmented physical therapy solutions enhance in-person therapy with virtual care. They allow patients to perform self-directed exercises between sessions while enabling physical therapists to monitor progress remotely. The primary physical therapist continues to oversee care and can bill for these solutions using RTM billing codes. Virtual MSK solutions may not be suitable for all patients. Individuals with complex MSK disorders, those needing manual manipulation or hands-on therapies, and patients with high frailty or fall risk may still require in-person physical therapy or clinical care.[4]

Some of the companies that have developed and are offering products in the virtual MSK space are listed below.

Companies Providing Virtual MSK Products

Product descriptions were developed through website and press release review. Inclusion on this list or exclusion from this list does not reflect endorsement/support or lack thereof by AAPM&R.

Name of Company	Products	Important Links
Capreolos GmBH	• Capreolos is developing a digital prehabilitation product, Prep4Surg. The Prep4Surg app is designed to assist patients and doctors in effectively preparing for surgeries through a digital program.	

	• Key features of Prep4Surg include patient registration and data capture, risk score calculation, personalized training programs with monitoring, data analysis and transmission, and physician oversight via a smartwatch and app.	
Dario Health[40]	• Dario Health offers an app-based digital therapeutics platform that addresses multiple chronic conditions, including diabetes, hypertension, weight management, musculoskeletal pain, and behavioral health. • They also provide advanced devices, smart apps, and health coaching to support continuous health management. • They deliver personalized care by utilizing real-time clinical, behavioral, and engagement data as well as offering continuous support through an intelligent engagement model that anticipates users' needs. • Additionally, Dario provides real-time monitoring tools featuring devices that connect to smartphones. The data is analyzed by AI.	**Press Releases:** • Dario and Twill Join Forces to Shape the Future of Digital Health • Dario Publishes New Research Revealing How Physical Activity Mediates the Impact of Depression on Blood Glucose Levels in Individuals with Diabetes or Prediabetes **Website:** https://www.dariohealth.com/
Hinge Health[41]	• Hinge Health provides virtual physical therapy, MSK care services, and also offer behavioral care support.	**Press Releases:** • Hinge Health Reduces Spinal Fusion Surgeries by 56%, New Study Shows

	• Users receive personalized exercise therapy plans created by physical therapists, tailored to their conditions and goals. Patients also have access to a virtual care team, including physical therapists and health coaches, through text, email, phone, or video chat. • Hinge Health integrates AI technology to track patient movements during exercises, providing real-time feedback. • They offer wearable devices, such as Enso, an FDA-cleared pain relief technology. • The program is accessible from home via a mobile phone. • They partner with employers and health plans to provide services as part of employee benefits packages.	• Hinge Health and Midi Health Partner to Enable Holistic Menopause Care • Hinge Health creates Strategic Solutions Alliance to address MSK care fragmentation • Study Finds Hinge Health Reduces Opioid Prescription Initiation by 42% **Website:** https://www.hingehealth.com/
Kaia Health[42]	• Kaia Health provides app-based, digital MSK care. • They use AI-powered technology and motion analysis to give real-time feedback on exercise form. • Kaia offers personalized care plans, including physical exercises, relaxation techniques, and educational resources, tailored to each user as well as access to licensed physical therapists and certified coaches for support.	**Press Releases:** • Kaia Health's Digital Therapy Shows Sustained Impact on Pain Reduction, Functional Ability, Mental Health, and Cost-Effectiveness in 12-Month Study • Kaia Health Expands Digital MSK Therapy Offering with Evidence-Based Balance Program Targeted at 65+ Population

	• Kaia Health combines physical therapy, behavioral health support, and pain education using a team of licensed PTs and certified coaches. • They partner with employers and health plans to offer their services as part of employee benefits packages.	• [Kaia Health Announces Clinically-Validated, Pelvic Floor Support, Enhancing Women's Healthcare Access Nationwide](#) **Website:** https://kaiahealth.com/
Kemtai[43]	• Kemtai provides an AI-guided exercise and assessment platform using computer vision to offer real-time feedback and corrective guidance for physical therapy and rehabilitation exercises in the home. • The platform does not require sensors or wearables. • They enhance patient engagement and adherence while offering detailed performance data for healthcare providers via their CARE app, which enables clinicians to register patients, prescribe exercises, and track progress. • The platform can also be integrated into existing health systems via API.	**Press Releases:** • [EXI Selects Kemtai to Enhance Its Exercise Intelligence Solution with Computer Vision AI](#) • [Clever Health Selects Kemtai to Bring AI-Guided Exercising to Its Virtual Care Management Solution](#) • [Kemtai Partners with RecoveryOne to Offer Sensor-Free Virtual Physical Therapy Solution](#) **Website:** https://kemtai.com/
Limber Health[44]	• Limber Health offers an RTM-augmented digital platform for physical therapy. Their model combines in-person care with at-home support. • Their mobile app provides at-home exercises, videos, and	**Press Releases:** • [Limber Health and WebPT Announce New MSK Measure Set to Equally Compare Clinician Outcomes](#)

	physical therapist-led voice instructions. It also allows for progress tracking, education, and integration with Apple HealthKit. • In-person therapists design personalized programs for users, and navigators provide encouragement and regular check-ins. • Their service is covered by some insurances, including Medicare. • They are private, secure, and HIPAA-compliant.	• Limber Announces Expansion of Home Exercise Platform • Limber Named Winner of 2022 UCSF Digital Health Award **Website:** https://www.limberhealth.com/
Luna Physical Therapy[45]	• Luna offers in-person, at-home, on-demand PT via an app. • They have a large pool of available physical therapists. • They have an AI division focused on improving healthcare delivery efficiency and patient care. • They are covered by most major insurance plans. • They are the exclusive provider of PT to AARP members.	**Press Releases:** • Luna Partners with ACOs to Provide In-Home PT • Benefit Innovation: Exploring a New Care Model with In-Home, In-Person Outpatient Physical Therapy for Care Optimization • Medicare Study: Health Plans Save between $4,000 and $8,000 per Member with Increased Physical Therapy Utilization **Website:** https://www.getluna.com/
RecoveryOne[46]	• RecoveryOne offers personalized, on-demand, virtual physical therapy and rehabilitation services via a mobile app.	**Press releases:** • PHTI Evaluates Virtual MSK Solutions, Including RecoveryOne

	• Health coaches provide accountability, motivation, and support for behavioral changes. • They have an AI-based, remote motion tracking technology that provides real-time feedback without the need for external sensors. • They offer integration with health systems, health plans, and employers.	• WHITE PAPER: RecoveryOne improves pain and function for individuals with low back pain. • Meet the New RecoveryOne: A Fresh Take on Empowered MSK Care **Website:** https://recoveryone.com/
Sword Health[47]	• Sword Health offers MSK care enhanced by AI on a digital platform. • They have an in-app library covering many topics such as nutrition, pain prevention, and sleep.	**Press Releases:** • First of Its Kind Study on Artificial Intelligence and Clinical Care Confirms Efficacy of Sword Health's AI Care Model • Sword Health Launches Foundation to Further its Mission by Providing High-Quality Care to Underserved Communities and Advancing Pain Research **Website:** https://swordhealth.com/
Vori Health[48]	• Vori Health offers both hybrid and virtual MSK care. • They have a comprehensive, holistic care team including medical doctors, physical therapists, nutritionists, and health coaches. • They offer medical diagnosis and treatment planning, virtual PT, prescription, non-opioid pain management, labs and imaging,	**Press Releases:** • Vori Health and Contigo Health Partner to Pioneer Industry-Changing, Integrated Surgical and Non-Surgical Orthopedic Care Solution • Ophelia, Vori Health Team Up To Support Patients with Opioid Addiction, MSK Pain

	nutritional guidance, health coaching, and both pre- and post-surgical support.	
	• They work with several major insurances including Medicare and Medicaid.	**Website:** https://www.vorihealth.com/

Augmented Intelligence

Cloud-based platforms are revolutionizing the healthcare industry through innovative solutions. Such platforms can offer comprehensive ecosystems tailored for healthcare providers, patient relationship management, enhanced patient engagement, team collaboration, and data insights while also ensuring security and compliance. This technology aims to transform healthcare delivery by improving patient experiences, streamlining operations, and enabling data-driven decision-making, all while adhering to strict industry regulations like HIPAA.[11,12] As the healthcare landscape continues to evolve, these cloud solutions are at the forefront of driving digital transformation and improving patient outcomes across the care continuum.

With more widespread adoption of digital sensors, a vast amount of multimodal, episodic, and continuous data is available to enhance clinical insight.[28] However, effectively ingesting, harmonizing, sharing, analyzing, and converting this data into actionable clinical insights poses significant data quality challenges. Today, advancements in computing and processing power enable automation in healthcare, as demonstrated by the emergence of general medical artificial intelligence (GMAI).[29] At this time, AI is aimed at enhancing the efficiency of repetitive tasks. However, with ongoing efforts to collect, adjudicate, and harmonize multimodal data, along with inclusive pre-training, it is reasonable to anticipate the future development of AI tools that will support remote medical decision-making, predict and detect adverse events, and educate patients, ultimately fostering trust in new care delivery models.[15]

Some of the companies that have developed and are offering products in the AI space are listed below.

Companies Providing AI-Based Products

Product descriptions were developed through website and press release review. Inclusion on this list or exclusion from this list does not reflect endorsement/support or lack thereof by AAPM&R.

Name of Company	*Products*	*Important Links*
Cherish Health[49]	• Cherish Home Health Care Agency offers home care services for children with special	**Press Releases:** • Cherish Health partners with Alarm.com to launch Cherish

	needs, adults, and seniors, focusing on helping older adults live independently and comfortably in their homes.	Serenity, radar and AI-based solution to monitor health, safety
		• Radar-powered AI technology helps seniors age at home
	• They have developed radar-based sensor platforms that provide health and safety monitoring in various settings. The system detects emergencies and health risks, delivering timely assistance to enhance independence, safety, and peace of mind.	• Cherish and AT&T Create Solution to Help Independent Living
	• Cherish focuses on providing specialized in-home care services tailored to individual needs, with the goal of empowering clients to maximize their independence and maintain their health.	**Website:** https://www.cherishhealth.com/
Microsoft Corporation[11]	• Microsoft Cloud for Healthcare is a comprehensive cloud platform designed for the healthcare industry, integrating features from various Microsoft products to support healthcare-specific needs. • Microsoft Cloud for Healthcare enhances patient engagement,	**Press Releases:** • Microsoft expands AI capabilities to shape a healthier future • Enhancing healthcare with data and responsible AI: New innovations from Microsoft Cloud for Healthcare • Microsoft to help rural hospitals defend against rising cybersecurity attacks

empowers collaboration among healthcare teams, improves clinical and operational data insights, and ensures end-to-end security and compliance of health data.

- The Microsoft Cloud for Healthcare includes capabilities for personalized care to engage patients in decisions, providing a comprehensive view of patients for better treatment coordination, facilitating high-quality virtual visits, enabling remote patient monitoring, improving patient care through clinical analytics, and enhancing operational efficiency across healthcare institutions.

- Microsoft Fabric and Azure data platform services provide robust data management foundations in healthcare, offering advanced analytics and generative AI tools. Azure Health Data Services facilitates the creation of longitudinal patient records using FHIR (Fast Healthcare Interoperability Resources).

Website:
https://www.microsoft.com/en-us/industry/health/microsoft-cloud-for-healthcare

| Salesforce[12] | • Salesforce offers Health Cloud, a CRM platform tailored for healthcare organizations, and Life Sciences Cloud, designed specifically for pharmaceutical and medical device companies.

• Key capabilities of Salesforce's Health Cloud include patient engagement and relationship management, care management and coordination, provider network management, clinical data integration and analytics, personalized patient experiences, virtual health and remote patient monitoring, and compliance with healthcare regulations like HIPAA.

• The platform offers integration capabilities with EHRs and other clinical systems, and it can be customized to meet the specific needs of healthcare organizations.

• The platform provides a comprehensive 360-degree view of patients by aggregating both clinical and non-clinical | **Press Releases:**

• [Salesforce Launches Einstein Copilot: Health Actions to Drive Efficient, Personalized Healthcare](#)

• [Salesforce Announces Life Sciences Cloud, Bringing the World's #1 AI CRM to Pharma and MedTech Organizations](#)

• [Salesforce rolls out new healthcare software tools with a focus on home health, AI and automation](#) |

	data. It also incorporates AI capabilities, specifically Einstein AI, for predictive analytics and automation in healthcare. • Some key features include utilization management, provider relationship management, clinical trial management for pharmaceutical companies, and medication adherence tracking. It is also designed to meet data protection standards and industry regulations.	**Website:** https://www.salesforce.com/healthcare-life-sciences/healthcare-artificial-intelligence/

Summary

Overall, H@H, virtual PT models, and AI show significant potential for improving healthcare delivery through innovations in digital technology. Many companies are currently developing and offering promising products and services that focus on leveraging technology – including computer vision, home-based sensors, live and recorded healthcare personnel interactions, and AI-driven patient data analysis – to improve access to services and enhance functional outcomes. The healthcare technology space presents significant opportunity for physiatrists seeking to offer the best care for their patients.

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Technology Summit

December 5, 2024
6:30 pm Dinner – Carmine's, 9850 Berwyn Ave, Rosemont, IL 60018

December 6, 2024

Time CDT	Agenda Item	Speaker/Presenters
7:15 am	**Meet in the Rose Hotel lobby for shuttle to AAPM&R Office**	
7:30-8:00 am	**CONTINENTAL BREAKFAST**	**All**
8:00-8:05 am	**WELCOME**	**Scott Laker, MD** AAPM&R President **Thiru Annaswamy, MD, MA** Technology Summit Co-Chair **Robert Rinaldi, MD** Technology Summit Co-Chair
8:05-8:20 am	**Summit Attendee Introductions**	**All**
8:20-9:05 am	**Overview of the Technology Landscape** Regulatory and reimbursement hurdles Innovative patient care opportunities	**Krista Drobac** Technology Summit Facilitator
9:05-9:50 am	**Virtual Musculoskeletal Technologies – Real World Outcomes and Future Opportunities** Peterson Health Technology Institute's Health Technology Assessment Opportunities for Virtual Solutions in MSK Treatment Plans	**Caroline Pearson** Executive Director, Peterson Health Technology Institute

9:50-10:00 am	**BREAK**	
10:00-10:10 am	**Breakout Session #1 Overview** Theme: Clinical Barriers and Relevant Technology Solutions	**Krista Drobac**
10:10-11:30 am	**Breakout Session #1***	**All**
11:30 am-12:00 pm	**Breakout Session #1 – Group Reports**	**All**
12:00-1:00 pm	**LUNCH**	
1:00-1:10 pm	**Breakout Session #2 Overview** Theme: Administrative Burden Barriers and Relevant Technology Solutions	**Krista Drobac**
1:10-2:30 pm	**Breakout Session #2***	**All**
2:30-3:00 pm	**Breakout Session #2 – Group Reports**	**All**
3:00-3:10 pm	**BREAK**	
3:10-3:40 pm	**Full Group Discussion: Recommendations for Academy and PM&R Actions**	**All**
3:40-4:00 pm	**Reflections & Next Steps**	**Krista Drobac** **Thiru Annaswamy, MD, MA** **Robert Rinaldi, MD**

*Breakout Session topics and group assignments will be provided in a separate attachment.