

UPMC ENTERPRISES

2020

YEAR IN REVIEW

A comprehensive look at
UPMC Enterprises over the past year
including portfolio company
news and updates

UPMC Enterprises



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Overview

This year, UPMC Enterprises continued to create health care innovations that impact the lives of patients in meaningful, lasting ways. Our portfolio companies and employees worked tirelessly on this goal during what can only be described as an unprecedented year and strived to make health care more efficient, affordable, and personalized. We supported UPMC's connection to consumers with enhanced digital health tools and through our two focus areas, Translational Sciences and Digital Solutions, we made product advancements and biotech investments to deliver on this promise.

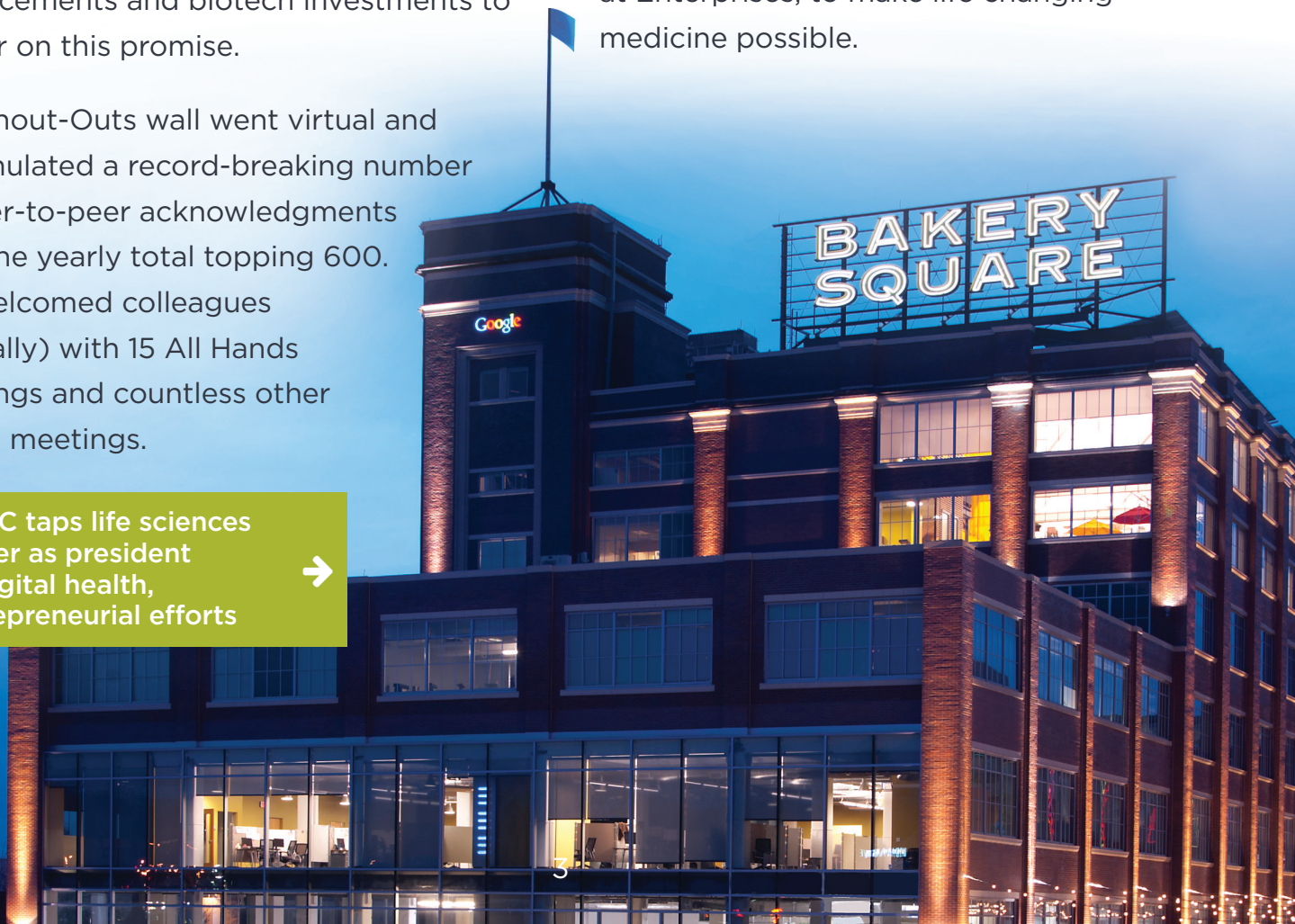
Our Shout-Outs wall went virtual and accumulated a record-breaking number of peer-to-peer acknowledgments with the yearly total topping 600. We welcomed colleagues (virtually) with 15 All Hands meetings and countless other virtual meetings.

UPMC taps life sciences leader as president of digital health, entrepreneurial efforts



2021 promises to be another productive year. We have a new leader and congratulate Jeanne Cunicelli on being named President of UPMC Enterprises succeeding Tal Heppenstall who retired from UPMC after 17 years. Jeanne, who has led Enterprises' Translational Sciences focus area since 2017, took over on January 1, 2021.

The following pages, summarize highlights from a truly unique year. It's our first Year in Review publication and gives us an opportunity to recognize some of the many projects that are allowing us, at Enterprises, to make life changing medicine possible.



UPMC'S DIGITAL FRONT DOOR



UPMC Enterprises helps to create health care innovations that impact the lives of patients in meaningful, lasting ways. As part of our digital modernization efforts, we have led the development of MyUPMC, UPMC's digital patient portal.

Highlights

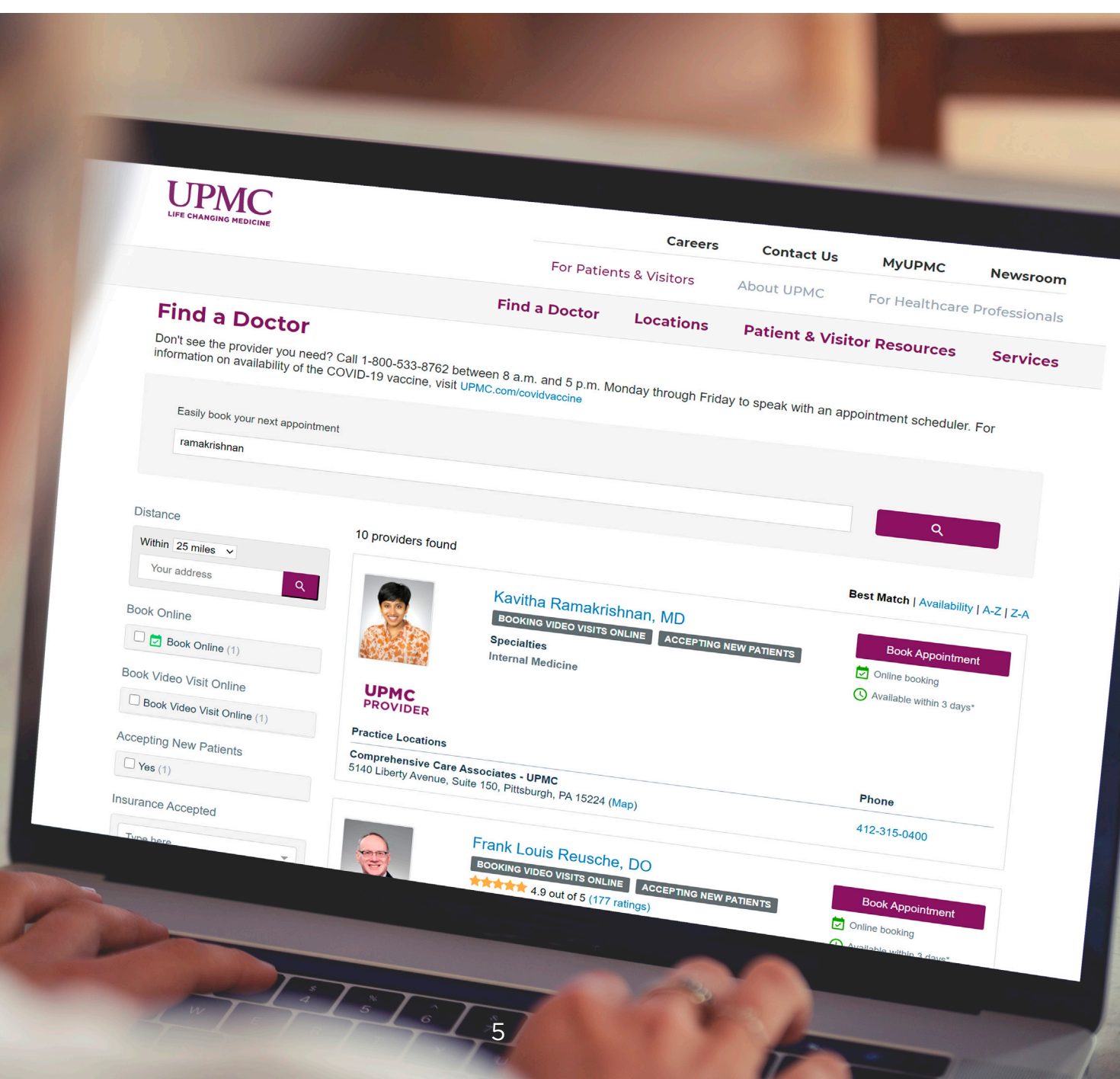
- In 2020, MyUPMC's features became even more critical as the global pandemic hit. MyUPMC pivoted toward video visit access for patients to see their doctor from the safety and comfort of their own home.
- MyUPMC increased activation and engagement by launching digital appointments scheduling and expanded telemedicine capabilities across service lines and specialty areas. New features such as virtual check-in and a COVID-symptom chatbot are expected to make a large impact in 2021.



ENHANCING CONSUMERS' ACCESS TO CARE

In 2020, MyUPMC also led the implementation of UPMC's upgraded provider search and scheduling tool used to connect patients with doctors. Searching by name, office, condition, or specialty, patients can find a provider, read their biography, see what type of insurance

they take, and even see what languages they speak. Once a provider is chosen, patients can book an appointment online or over the phone for an in-person or video visit - enabling patients to schedule 4x the number of appointments than the previous version.



UPMC
LIFE CHANGING MEDICINE

Careers

Contact Us

MyUPMC

Newsroom

For Patients & Visitors

About UPMC

For Healthcare Professionals

Find a Doctor

Find a Doctor

Locations

Patient & Visitor Resources

Services

Don't see the provider you need? Call 1-800-533-8762 between 8 a.m. and 5 p.m. Monday through Friday to speak with an appointment scheduler. For information on availability of the COVID-19 vaccine, visit [UPMC.com/covidvaccine](https://www.upmc.com/covidvaccine)

Easily book your next appointment

ramakrishnan



Distance

Within 25 miles

Your address



Book Online

Book Online (1)

Book Video Visit Online

Book Video Visit Online (1)

Accepting New Patients

Yes (1)

Insurance Accepted

Type here

10 providers found



Kavitha Ramakrishnan, MD

BOOKING VIDEO VISITS ONLINE

ACCEPTING NEW PATIENTS

Specialties
Internal Medicine

**UPMC
PROVIDER**

Practice Locations

Comprehensive Care Associates - UPMC

5140 Liberty Avenue, Suite 150, Pittsburgh, PA 15224 (Map)

Best Match | Availability | A-Z | Z-A

Book Appointment

Online booking

Available within 3 days*

Phone

412-315-0400



Frank Louis Reusche, DO

BOOKING VIDEO VISITS ONLINE

ACCEPTING NEW PATIENTS

★★★★★ 4.9 out of 5 (177 ratings)

Book Appointment

Online booking

Available within 3 days*



Ilum and Infectious Disease Connect merge

- Infectious Disease Connect launched in 2019 as a provider of telemedicine-based infectious disease solutions for hospitals. The company's services increase access to ID experts and support providers by improving outcomes and lowering costs by reducing transfers and treating patients in their own communities.
- In 2020, Infectious Disease Connect combined with Merck's Ilum Health Solutions. The addition of Ilum's decision-support platform, Ilum Insight, increases ID Connect's capabilities and proficiency in the infectious disease management market. To support the merger, UPMC and Merck have both invested \$5 million into the development and growth of the newly combined entity.



Curavi Health joins Arkos Health

- Established in 2016, Curavi Health is a telemedicine services provider that promotes treatment in place of post-acute and long-term care residents. Curavi enhances care and reduces unneeded transfers through its clinical provider network and hardware and software offerings tailored to fit a variety of care settings.
- In July 2020, Curavi Health merged with fellow health care innovators CarePointe and U.S. Health Systems (USHS) to form Arkos Health. The combined company integrates Curavi's telemedicine technology, CarePointe's clinical tools and analytics, and USHS's population health management capabilities to improve care at lower costs for payers, providers, and patients.



Links of interest:

[UPMC Enterprises startup merges with Merck firm](#) →

[UPMC infectious disease spinout acquires Merck assets](#) →

[Arkos Health, created by merger of 3 companies, sets sights on senior-focused telehealth](#) →

[Care coordination, telehealth startups merge to support vulnerable senior populations](#) →

[For Pittsburgh-based Curavi Health, a crisis that's right in its wheelhouse](#) →

Realyze Intelligence founded

- Realyze Intelligence was founded in January 2020 focuses on combining AI technology with clinical expertise to provide better insights, improve health care workflows, and drive better outcomes.
- Realyze uses a combination of Natural Language Understanding (NLU) and AI-based inference to understand the meaning and intent in patient documentation.
- Realyze is currently in use at UPMC for a variety of applications including revenue optimization, improving patient care, and clinical research.



Xealth - Cerner investment and CB Insights Digital Health 150

- Xealth enables digital health by allowing providers to prescribe and track the use of educational health content, apps for disease management, and devices to monitor care all from the electronic medical record interface.
- In 2020, Xealth received an investment from Cerner and will integrate the Xealth platform into Cerner's electronic health record and patient portal to better manage patients with chronic conditions.
- Also, Xealth was named to CB Insights' second annual Digital Health 150 ranking, which showcases the 150 most promising, private digital health companies in the world.



Astrata founded

- Astrata was formed in 2020 through a collaboration across multiple divisions of UPMC. As a digital health care company focused on transforming quality in value-based care through advanced analytics, Astrata's cloud-based tool suite uses NLP (natural language processing) to provide strategic insights and efficient, tactical workflows for payers and value driven providers using HEDIS and other quality measures.



CarepathRX partnership announced

- In December 2020, UPMC announced a strategic partnership between CarepathRx and Chartwell, UPMC's specialty pharmacy and home infusion service. UPMC Enterprises has worked with pharmacy experts across UPMC, and the industry, to support the development and implementation of innovative pharmacy solutions like RxAnte, Mosaic Pharmacy, and UPMC RxExpress.






UPMC commits \$1 billion to life sciences investments

- In January 2020, UPMC announced a \$1 billion investment in life-sciences by 2024.
- The Translational Sciences team has expanded its focus to include retinal and respiratory disease, autoimmune diseases, neuroinflammation, and others therapeutic areas. We expect to invest in five to 10 companies a year, across all stages of development.
- In 2020, the Translational Sciences team continued its work with several Pitt/UPMC based companies including AboundBio, BlueSphere Bio, Generian Pharmaceuticals, and Novasenta. UPMC Enterprises also committed to investments that complement our Pitt/UPMC foundation such as Werewolf Therapeutics, Cerevance, SparingVision, and Butterfly Network.



Links of interest:

[The Billion Dollar Reason UPMC Enterprises Will Change Healthcare](#)



[JPM20: UPMC venture arm announces \\$1B life sciences commitment](#)



[UPMC joins investment round for Werewolf Therapeutics](#)



[Cerevance becomes latest investment from UPMC Enterprises' Translational Sciences team](#)



[Paris eye disease company with Pittsburgh ties raises \\$50 million](#)



[Hand-held ultrasound developer Butterfly Network to go public through \\$1.5B acquisition deal](#)



AboundBio

- Founded in 2019, John Mellors, MD, and Dimiter Dimitrov, PhD, ScD, created AboundBio a company focused on generating novel human antibodies including antibody domains for more effective therapeutic targeting of infectious diseases and cancer.
- In 2020, AboundBio participated in the effort to create a SARS-CoV-2 therapeutic by discovering an antibody component that was highly effective in preventing and treating the infection in animal models.
- In September 2020, AboundBio signed a multi-year agreement with Yufan Biotechnologies to develop the next generation of CAR T-cell therapies for cancer.



BlueSphere Bio investment

- Founded in 2019, BlueSphere Bio brings a rapid and efficient solution to the challenge of T-cell receptor (TCR) identification. The company's platform makes it possible to identify and clone patient-specific TCRs that recognize a patient's own tumor-specific neoantigens which are faster and more cost effective than conventional techniques.
- In 2020, BlueSphere Bio named immune oncology pioneers to its Scientific Advisory Board, most notably, Carl June. Additionally, the company continued to recruit talent and ended the year with 25 employees.



Links of interest:

New company in Pittsburgh says its goal is to cure cancer



SparingVision investment

- SparingVision is a biotechnology company based in Paris, France founded in 2016. Its focus is on discovering and developing innovative, therapeutic approaches to treat inherited retinal diseases such as retinitis pigmentosa.
- SparingVision's founder, Jose-Alain Sahel, MD, is Professor and Chairman of the Department of Ophthalmology at UPMC easily aligning with research initiatives, specifically in retinal disorders.
- In 2020, we participated in SparingVision's Series B round.

SPARINGVISION

Cerevance investment

- Founded in 2016, Cerevance uses its proprietary NETSseq (Nuclear Enriched Transcript Sort sequencing) platform to develop the newest treatments for brain diseases.
- In 2020, we joined in Cerevance's \$65 million Series B round to enter into the neuroscience drug discovery landscape.

cerevance



PITTSBURGH HEALTH DATA ALLIANCE (PHDA) CONTINUES PROGRESS

Pittsburgh Health Data Alliance

Carnegie Mellon University University of Pittsburgh UPMC

The Pittsburgh Health Data Alliance (PHDA) is an unprecedented collaboration between Carnegie Mellon University, The University of Pittsburgh, and UPMC created to turn data into solutions that seamlessly reach patients. The University of Pittsburgh brings expertise in medical research, Carnegie Mellon University brings world-class computer science and machine learning, and UPMC brings deep data, the clinical setting, and a track record of successful commercialization.

- In 2020, the PHDA continued to move projects toward commercial outcomes (various licensing and startup movement).
- The PHDA also continued to work with AWS to provide additional support to teams through access and training.
- Additionally, the PHDA worked to attract new faculty members to propose innovative, cross-institutional projects.



Links of interest:

AWS and PHDA collaborate to produce more accurate machine learning models for breast cancer screening and depression →

Pittsburgh Health Data Alliance, Amazon Web Services creating AI models to detect breast cancer, depression more quickly →

AWS, PHDA Collaborate to Develop Breast Cancer Screening and Depression Machine Learning Models →

COVID-19 RESPONSE

We supported our portfolio companies and their response to the pandemic as we:

- Worked across clinical partners to establish MyUPMC as the digital front door for UPMC patients. The effort included expanding secure messaging between patients and providers, enabling broad and targeted distribution of key COVID messages, and meeting the increasing demand for safe, virtual visits during the crisis.
- Helped Infectious Disease Connect utilize their network of providers to help UPMC facilities monitor, treat, and study infectious diseases.
- Implemented and trained Curavi Health's clients to onboard and utilize telemedicine services for 28 facilities in 28 days. By utilizing Curavi's telemedicine technology and provider services, nursing facilities are able to care for their at-risk residents virtually to maintain safety and decrease the spread of COVID-19.
- Integrated Abridge within UPMC facilities to allow patients to record their conversations with providers in order to improve care coordination and increase health outcomes and literacy with patients. As telehealth

and virtual care became critical, the Abridge software helped ensure clear communications between patients and providers.

- Supported internal efforts to manage the health of our teams, through employee-facing virtual assistants that address staff questions conveniently and contact tracing applications that help infection preventionists track exposures and reduce risks at our facilities.
- Facilitated internal efforts to manage the health of our employees via virtual assistants that address staff questions 24/7, and tools that empower infection prevention teams to better track and reduce risks at our facilities.

Born out of the COVID-19 pandemic, SAFAR TeleCare facilitates critical care expertise anywhere, at any time. Created in-house at UPMC Enterprises, the initiative, which began in March of 2020, has eliminated the need for full-time intensivists at more remote locations.

This work prompted a full-page ad in the local newspaper from colleagues in New York.



Links of interest:

[Curavi Health Adapts to Meet Telemedicine Needs in the Age of COVID](#)



[Infectious Disease Connect steps up telemedicine consultations amid COVID-19 outbreak](#)



[MyUPMC experiences major jump in video visits as patients move to online care](#)



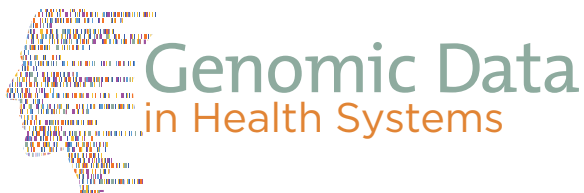
[Abridge applies its patient-friendly technology to some telehealth visits at UPMC](#)



As part of UPMC Enterprises, the Center for Connected Medicine (CCM) connects and inspires leaders and innovators who want to advance health care. Collaborating with a network of experts, the CCM serves as a resource for information and events focused on the future of digital health.



The Future of the Digital Patient Experience



Links of interest:

Survey: Apps, other digital tools a critical or high priority for half of health systems →

Webinar: Digital Health Tools and the New Normal →

MD Anderson Cancer Center cutting wait times to boost patient experience →

Indiana children's hospital is meeting patient expectations for digital tools →

Digital wayfinding becomes popular way to boost patient experience at health systems →

The CCM completed three research-backed resource and event campaigns during 2020 to drive engagement with executives and others at health systems on key digital health and innovation topics including:

Digital Health Tools

- Published research report, “The Future of the Digital Patient Experience”
- Hosted webinar, “Digital Health Tools and the New Normal,” featuring leaders from Providence, UPMC Enterprises, Xealth, and Abridge
- Produced video series featuring leaders from MD Anderson Cancer Center, Indiana University Health, and Brigham and Women’s Hospital

Genomic Data Management

- Published research report, “Genomic Data in Health Systems”

Top of Mind

- Pivoting to a virtual format, the CCM produced a robust program of events that focused on key themes that were deemed “Top of Mind” by health system leaders.
- The Top of Mind program was underpinned by an extensive research report that was conducted and produced in collaboration with KLAS and focused on the themes of telehealth, artificial intelligence, and revenue cycle management.
- To share key expert opinion to the research, the CCM hosted a webinar featuring leaders from KLAS, UPMC, Brigham and Women’s Hospital, and Indiana University Health.
- Offering an opportunity for leaders in their respective fields to engage directly and candidly with their peers, the CCM convened two Top of Mind Exchanges, closed roundtable discussions. The Telehealth Exchange was moderated by Senator Bill Frist and featured leaders from the American Telemedicine Association, National Committee for Quality Assurance, Alliance of

Community Health Plans, amongst other key stakeholder organizations. The AI Exchange was moderated by Dr. Rob Califf, Head of Clinical Policy & Strategy at Verily and AI experts from MIT, Duke Forge, Harvard Medical School, UPMC, and Emory University.

- Concluding the year of programming, the CCM produced a half day summit, Top of Mind Online, which featured experts such as Ian Morrison discussing the ‘Future of the Health Care Marketplace’, with Diane Holder, CEO, UPMC Health Plan; Telehealth leaders from Providence, Mass General Brigham Health System, Memorial Sloan Kettering Cancer Center reflecting on long-term sustainability of telehealth programs at health systems; and hospital leaders from UPMC Children’s Hospital of Pittsburgh, Dartmouth-Hitchcock Health, and IU Health on lessons learned from leading through crisis.



Links of interest:

Report: Genomic data management is vital to precision medicine efforts at health systems →

Research Report: COVID-19 Pandemic Shifts Innovation Priorities at Health Systems →

The Top of Mind Online virtual summit →

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