

PRINT-Top 10 Digital Health and Innovation stories of 2023

As we begin a new year at OSF HealthCare, we're reflecting on 2023 and the major strides achieved in embracing digital transformation for the betterment of patients, providers and the communities we serve. This past year, OSF continued leveraging technology and the emerging power of artificial intelligence to support our providers and patients but never replacing expertise, training and experience along with the personal, empathetic approach that is part of the OSF Mission to serve with the greatest care and love.

The efforts are highlighted here in our Top 10 Digital Health and Innovation stories of 2023 in no particular order.

1. **[OSF HealthCare celebrating 10 years of Jump Simulation](#)**-As part of the 10-year anniversary, OSF HealthCare released a study by Bradley University showing over the 10-year period from 2013-2022, the activities of [Jump Trading Simulation & Education Center](#) enhanced economic activity by more than \$103 million and created more than 600 full-time jobs. As part of the celebration, OSF HealthCare launched the first of what will be an annual [Innovator of the Year Award](#).
2. **[OSF named one of Most Innovative Companies by Fortune](#)**-Fortune and Statista, the world-leading statistics portal and industry ranking provider, selected the inaugural group of America's Most Innovative Companies 2023 based on product innovation, process innovation and innovation culture, which includes the introduction of a corporate culture that promotes creativity and entrepreneurial spirit. OSF HealthCare was among 300 companies and the only health system in Illinois to make this first-time list.
3. **[Medicaid Innovation Collaborative hits first-year milestones to improve health and wellness in underserved populations](#)**-The [Medicaid Innovation Collaborative \(MIC\)](#) – a partnership between Peoria-based OSF HealthCare and four Federally Qualified Health Centers (FQHCs), celebrated its one-year anniversary by highlighting milestones achieved. Some highlights include launching a pregnancy and postpartum digital support program, initiating remote patient monitoring for individuals with chronic conditions, training digital health navigators to promote education and understanding of digital care options, expanding breast cancer and social drivers of health screenings among other accomplishments.
4. **[OSF HealthCare pilots virtual nursing to reduce burnout and improve patient experience](#)**-OSF launched a virtual nursing pilot on three medical surgical floors, covering about 75 patients at OSF HealthCare Saint Francis Medical Center in Peoria in an effort to reduce the workload of bedside nurses and offer patients more streamlined care. The main focus is using virtual nurses for admissions and discharges, but the pilot is also exploring other duties that can transfer to remote nurses.
5. **[New AI developed at OSF HealthCare to help those who help cancer patients](#)**-AI-related news was everywhere in the second half of 2023, and OSF added to the mix with several novel uses created by [OSF Innovation](#) leaders and academic partners. Dr. Jonathan Handler led the way and created an artificial intelligence-based algorithm to better balance workloads by predicting upcoming work burdens for each cancer patient nurse navigator's existing patients and for new patients needing navigation. The models use data from electronic health records such as demographics, cancer type and prior health care visits. That work also likely prompted [selection of Dr. Handler to serve on President Biden's cancer panel](#) advisory group regarding cancer caregiving.

6. **[AI model prompts end of life care discussions for some hospitalized patients-OSF Innovation](#)** researchers developed and tested a new AI model to predict death after a hospital admission to identify patients who need to discuss and document their end-of-life care wishes. When tested, the model held up over time and identified more than half of those who died within five to 90 days after their inpatient admission.
7. **[OSF OnCall empowers patients and improves outcomes with 24/7 connection-](#)** Supplementing in-person care with digital support from [OSF OnCall digital health](#) is helping improve health outcomes for patients enrolled in new programs, designed to keep them engaged in between medical appointments. For example, OSF saw a 10% or greater reduction in hospital readmissions for those patients who are enrolled in a hospital discharge program. [A new OSF OnCall Connect on the Go van](#) in the Rockford region will also help individuals get digitally connected to additional support programs.
8. **[OSF HealthCare and Illinois State University launch Connected Communities Initiative to expand research and development-](#)**The Connected Communities Initiative (CCI) program was announced in March to bring together clinicians, university faculty researchers, and students to focus on innovation in clinical and patient education, health care engineering, data science, and cybersecurity. Among the first round of jointly funded research projects is an effort to create new [curriculum for future nurses and family medicine providers using a telehealth platform](#) with attachable devices that allow for more robust exams in pop-up rural clinics using an off-site physician or advanced practice provider.
9. **[Beating hearts pump up virtual reality for pre-surgery planning-](#)**Research involving academic collaborator Bradley University will advance the process of translating CT and MRIs into a format for viewing in virtual reality to help heart surgeons better prepare for complex surgeries. Dr. Mathew Bramlet and co-lead researcher Sam Hawkins of Bradley are using AI and machine learning to help automate a process to create a 4D image and advance an effort that once took months to possibly taking only a few hours to complete.
10. **[Emergency Department crowding; Can AI, predictive modeling and simulation fix it?-](#)** Academic partner, the University of Illinois Urbana-Champaign, and [OSF Innovation](#) are using a \$100,000 Jump ARCHES grant to use de-identified electronic medical records and other historical data to predict emergency demand and then test interventions and optimization techniques to reduce emergency department wait times. Dr. William Bond of OSF says the effort could identify ways to increase efficiencies and reduce provider burnout and patient dissatisfaction.