编号：**YY005-20221219001**

标题：**Collab Aims to Improve Access to At-Home, Telemental Health Services**

简介：Superior HealthPlan is working with two organizations to close crucial care gaps and address non-medical drivers of health by providing access to telemedicine and at-home care as well as virtual behavioral health services.As virtual health services become increasingly prominent in healthcare, many organizations are working to improve patient outcomes through these types of services.

全文链接：https://mhealthintelligence.com/news/collab-aims-to-improve-access-to-at-home-telemental-health-services

编号：**YY005-20221219002**

标题：**Enhancing preclinical drug discovery with artificial intelligence**

简介：Artificial intelligence (AI) is becoming an integral part of drug discovery. It has the potential to deliver across the drug discovery and development value chain, starting from target identification and reaching through clinical development. In this review, we provide an overview of current AI technologies and a glimpse of how AI is reimagining preclinical drug discovery by highlighting examples where AI has made a real impact. Considering the excitement and hyperbole surrounding AI in drug discovery, we aim to present a realistic view by discussing both opportunities and challenges in adopting AI in drug discovery.

全文链接：https://pan.ckcest.cn/rcservice//doc?doc_id=108353

编号：**YY005-20221219003**

标题：**A scoping review of artificial intelligence applications in thoracic surgery.**

简介：OBJECTIVES: Machine learning (ML) has great potential, but there are few examples of its implementation improving outcomes. The thoracic surgeon must be aware of pertinent ML literature and how to evaluate this field for the safe translation to patient care. This scoping review provides an introduction to ML applications specific to the thoracic surgeon. We review current applications, limitations and future directions. METHODS: A search of the PubMed database was conducted with inclusion requirements being the use of an ML algorithm to analyse patient information relevant to a thoracic surgeon and contain sufficient details on the data used, ML methods and results. Twenty-two papers met the criteria and were reviewed using a methodological quality rubric. RESULTS: ML demonstrated enhanced preoperative test accuracy, earlier pathological diagnosis, therapies to maximize survival and predictions of adverse events and survival after surgery. However, only 4 performed external validation. One demonstrated improved patient outcomes, nearly all failed to perform model calibration and one addressed fairness and bias with most not generalizable to different populations. There was a considerable variation to allow for reproducibility. CONCLUSIONS: There is promise but also challenges for ML in thoracic surgery. The transparency of data and algorithm design and the systemic bias on which models are dependent remain issues to be addressed. Although there has yet to be widespread use in thoracic surgery, it is essential thoracic surgeons be at the forefront of the eventual safe introduction of ML to the clinic and operating room.

全文链接：https://pan.ckcest.cn/rcservice//doc?doc_id=108362

编号：**YY005-20221219004**

标题：New concept for colonoscopy including side optics and artificial intelligence

简介：Background and Aims: Adenoma detection rate is the crucial parameter for colorectal cancer screening. Increasing the field of view with additional side optics has been reported to detect flat adenomas hidden behind folds. Furthermore, artificial intelligence (AI) has also recently been introduced to detect more adenomas. We therefore aimed to combine both technologies in a new prototypic colonoscopy concept. Methods: A 3-dimensional-printed cap including 2 microcameras was attached to a conventional endoscope. The prototype was applied in 8 gene-targeted pigs with mutations in the adenomatous polyposis coli gene. The first 4 animals were used to train an AI system based on the images generated by microcameras. Thereafter, the conceptual prototype for detecting adenomas was tested in a further series of 4 pigs. Results: Using our prototype, we detected, with side optics, adenomas that might have been missed conventionally. Furthermore, the newly developed AI could detect, mark, and present adenomas visualized with side optics outside of the conventional field of view. Conclusions: Combining AI with side optics might help detect adenomas that otherwise might have been missed.

全文链接：https://pan.ckcest.cn/rcservice//doc?doc_id=108361

编号：YY005-20221219005
标题：Artificial intelligence and clinical deterioration

简介：To provide an overview of the systems being used to identify and predict clinical deterioration in hospitalised patients, with focus on the current and future role of artificial intelligence (AI). There are five leading AI driven systems in this field: the Advanced Alert Monitor (AAM), the electronic Cardiac Arrest Risk Triage (eCART) score, Hospital wide Alert Via Electronic Noticeboard, the Mayo Clinic Early Warning Score, and the Rothman Index (RI). Each uses Electronic Patient Record (EPR) data and machine learning to predict adverse events. Less mature but relevant evolutions are occurring in the fields of Natural Language Processing, Time and Motion Studies, AI Sepsis and COVID-19 algorithms. Research-based AI-driven systems to predict clinical deterioration are increasingly being developed, but few are being implemented into clinical workflows. Escobar et al. (AAM) provide the current gold standard for robust model development and implementation methodology. Multiple technologies show promise, however, the pathway to meaningfully affect patient outcomes remains challenging.

全文链接：https://pan.ckcest.cn/rcservice//doc?doc_id=108355

编号：YY005-20221219006
标题：A review of artificial intelligence in mammography

简介：Breast cancer is the most common cancer among women worldwide. Mammography is the most widely used modality to detect breast cancer. Over the past decade, computer aided detection (CAD) powered by artificial intelligence (AI)/deep learning has shown significant increase in accuracy compared to the traditional CAD. In this review, we aim to summarize the latest developments in the field of AI and mammography and discuss where future progress may lie.

全文链接：https://pan.ckcest.cn/rcservice//doc?doc_id=108354