VERTEX LABORATORIES

HEALTHCARE
SOLUTIONS

Healthcare is projected to have a compound annual growth rate of **40 percent** in just the next five years from A.I. Integration. Adding **6.6 billion** in growth.

▽ With academic and professional experience with deep learning in life sciences, our researchers at **Vertex Labs** are able to provide clients with the technology needed to increase physician outreach, improve quality of care, provide patients with a personalized healthcare experience, and save medical personnel valuable time and resources.

▽ Our solutions
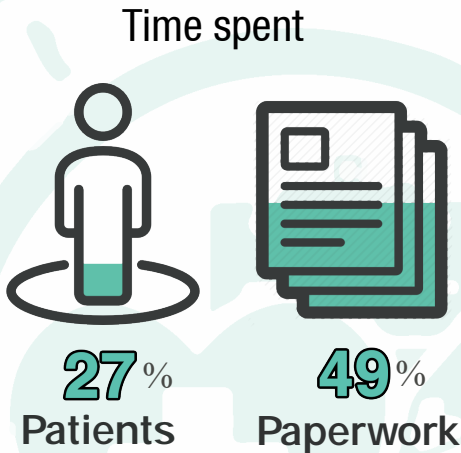
Distance Assistance

Distance is no longer a drawback. Implementing machine learning in the healthcare space enhances the performance of telehealth networks & medical wearables, bridging the gap between patients and hospitals and creating smarter technologies that can:

▽ Detect potentially dangerous fluctuations in patient vitals and other biometrics.

▽ Identify abnormalities in patient photos for dermatological, ophthalmological, and other illness detection applications without the need for a doctor's office or face-to-face appointment.

▽ Utilize Natural Language Processing to pinpoint red flags in patients' written journal entries, symptom logs, evaluations, etc.

▽ Alert medical personnel in real time and recommend potential diagnoses and treatments for physician review.

Patients in rural areas receive

34% worse care

Operations Assistance

Overbearing clerical work is jeopardizing patients' safety, overworking staff, and incurring unnecessary costs. A.I. tools are allowing healthcare organizations to increase meaningful patient care time with physicians and nurses; decreasing the unnecessary tasks and optimizing resource allocation. These use cases include:

▽ Utilizing NLP to create easily transferable patient documents to be securely sent across multiple medical channels.

▽ Machine learning optimizes resource allocation, such as staff, inventory, and patient care delivery in real time, reducing costs and enhancing workflow.

▽ Providing medical centers with 24/7 accesses to medical care and support.

Time spent

27% Patients   **49**% Paperwork
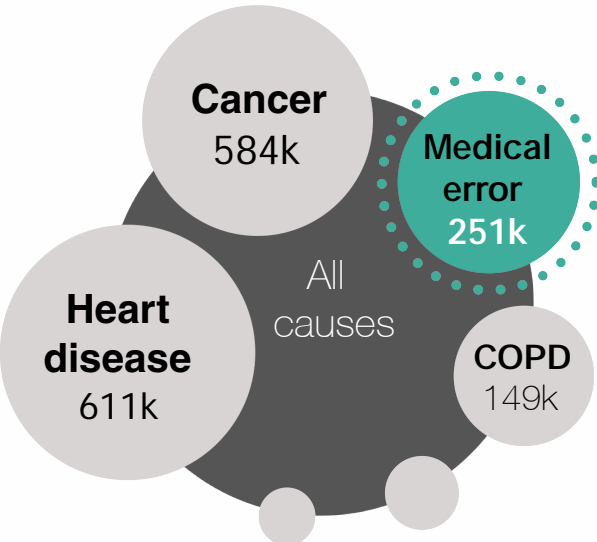
Clinical Assistance

Utilizing deep learning, we have the ability to significantly support clinical procedures' efficiency and reliability:

▽ Lab Test Assistance helps filter diseased/non-diseased patients with quick classification support of biopsies and other tests including: radiological, pathological, and dermatological. This increases clinical and ER environment's efficiency significantly.

▽ Decision Support Systems utilize Lab Test Assistance results to cut the time needed to analyze patient biometric data and health records to provide more efficient care and reduce the costs associated with recurring problems such as sepsis and others.

Cancer 584k
Medical error 251k
All causes
Heart disease 611k
COPD 149k

Causes of death in U.S