



UNIVERSITÄT
BERN



PERIVISION – REIMAGING VISION CARE FOR THE 21ST CENTURY

Problem – Challenge

Eye conditions are on the rise. Currently 2.2 billion people suffer from vision impairments of which 50% could be prevented or cured according to the World Health Organization. This number is growing due to our ageing populations and modern lifestyles.

There are 100M people suffering from glaucoma (and many more who don't even know it yet), 196M people suffering from AMD, and 300M people who are colour blind. The global population over 65 years old will double by 2050, which will increase these numbers drastically. It is estimated that the demand for eye exams will increase by 15M / 25% in the US by 2030.

Current testing standards are not fit for the 21st century. They require stationary and resource-intense workflows and often produce limited insights.

This leads to bottlenecks in clinics and limited patient access to eye testing & adequate treatment. In the US there are between 5 to 10k ophthalmologists missing and in the UK, the NHS has a backlog of appointments for 633 thousand patients.

Solution

Perivision combines artificial intelligence, virtual reality, and cloud computing to reimagine how doctors test and understand vision. Eye doctors easily configure eye tests on portable VR headsets and subsequently analyze the results on a cloud platform. In the backend, AI algorithms optimize the tests, automate assistance, control quality and provide valuable insights for clinical decisions.

Our first product is a VR visual field for ophthalmologists and optometrists specialized in glaucoma, VisionOne™ is the VR visual field platform with industry-leading speed and accuracy. We combine patented AI, Swiss engineering, and international clinical validation to deliver highly reliable results and strong correlation to the gold standard.

We develop our solutions with leading clinics and in collaboration with eye doctors, technicians and patients. Our technology has been validated in clinical studies and we publish our research in peer-reviewed publications.

