



# Digital Training Leveraging Virtual Reality PBMA's H. V. Desai Eye Hospital, Pune



## About the Organization

- Hospital Name: PBMA'S H.V.Desai Eye Hospital
- NABH Accreditation/Certification Number: ECO -2022 - 0258
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## Problem Statement / Digital Challenge

- Annually 150-200 doctors are trained in H.V. Desai eye Hospital for various eye surgeries.
- With rising need of training facility every year, surgeons and trainers were facing difficulties such as balancing busy clinical duties with availability for training, Quality of surgical outcomes, Ensuring patient safety, Trainee satisfaction
- We faced need of more structured digital curriculum with dedicated space

## Digital Tool / Solution Implemented

- Digital Component was incorporated into our surgical training program, and fully equipped inhouse wetlab with dedicated staff was established in 2018.

## Key Features

- Virtual Reality Simulator for cataract surgery practice before live procedures
- Cyber sight Platform for online modules and video-based theoretical learning
- Audiovisual Recording System for reviewing trainee surgeries
- Phacoemulsification Machine, Microscope & TV Setup with integrated recording for hands-on training

## Digital Implementation Highlight

- Timelines - Started in december 2018 & still ongoing
- Wetlab incharge and staff nurse appointed to manage daily affairs.
- Newly joined fellows & residents undergo structured training programme in wetlab before starting surgery

## Digital Impact

- Improved post operative outcome in surgery performed by trainee.WHO visual acuity benchmark of vision more than 6/12 is improved from 86% to 93% in our hospital.
- Group using full digital tools had lower complication rate (9.14% vs 20.3%) and better OSCAR scores (4.03 vs. 3.43)
- More structured and systematic training programme with increased trainee satisfaction

## Key Enablers

- Dedicated HR and space
- Procurement of equipments specially virtual reality simulator for surgery

## Challenges

- Difficulty in Surgery Video Recording in OT
- Need of dedicated staff for Virtual reality simulator machine
- Shortage of fulltime trainers
- Finding short term trainee for wetlab

## Lessons Learned / Replicability

- Structured curriculum helps in systematic running of programme
- Dedicated staff is essential for proper functioning of programme
- Dedicated space and equipments are essential for proper running of programme
- Marketing for publicity of facility