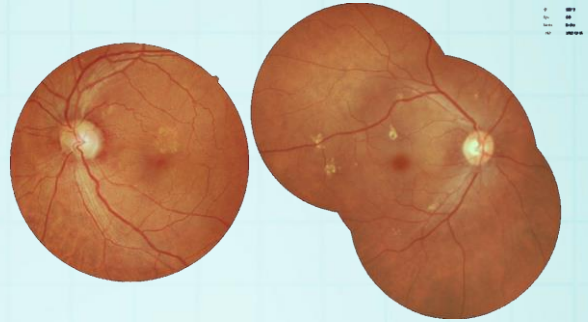


5G application for Detection of Diabetic Retinopathy

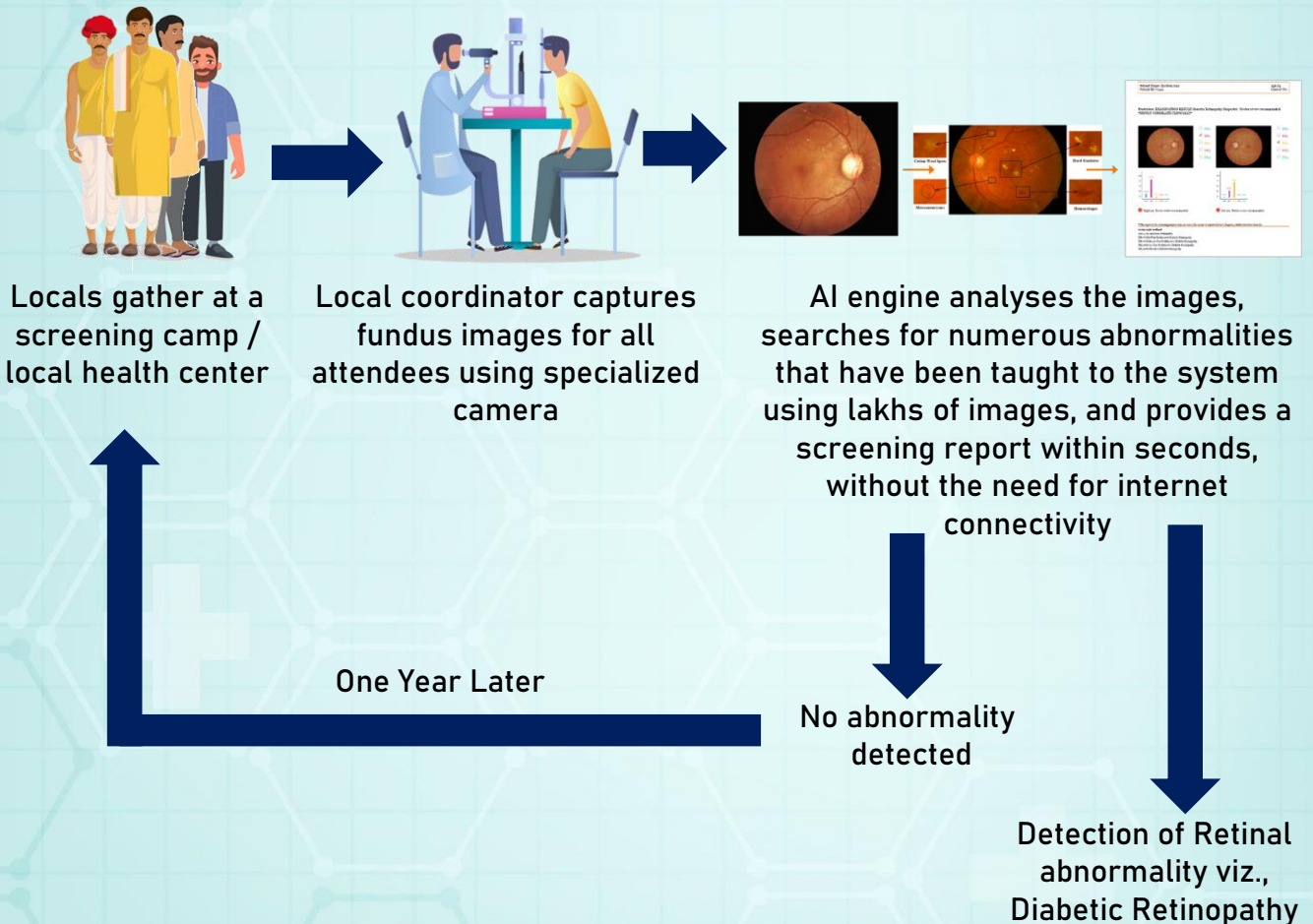
The Fundus camera:



Captured images:



Process Flow



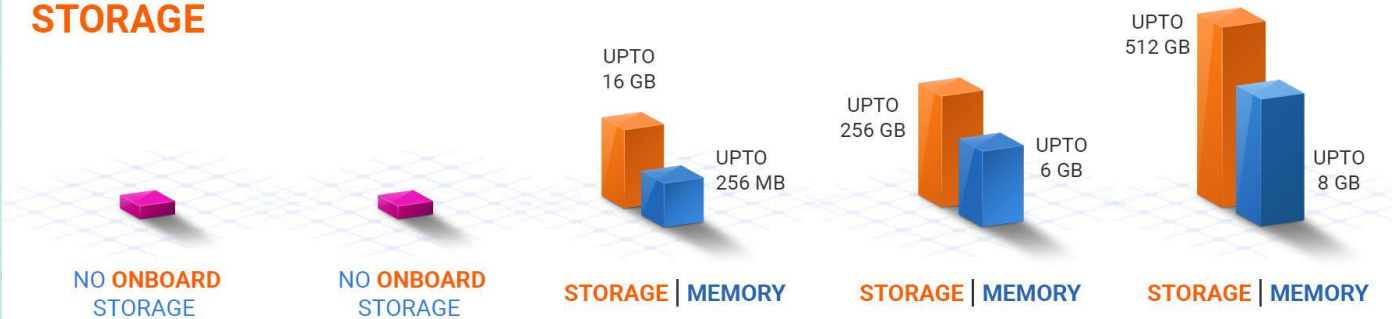
EVOLUTION FROM 1G TO 5G



DEPLOYMENT YEAR



STORAGE



OUTCOMES - NORTH EAST'S SDG 2030 GOALS

S. No.	Parameter	Impact
1.	SDG 3 - Good Health and Well Being	<ul style="list-style-type: none"> ✓ Reduce Cost of Treatment . ✓ Reduce Out of Pocket especially travel and accommodation costs for Diagnostics Tests in other cities / states. ✓ Improves Quality Of Community Health Screening In Remote Areas. ✓ At Home Long Term Care of Senior Citizens With Multiple Co Morbidities. ✓ Helps overcome treatment barriers on account of lack of availability / limited availability of Doctors / Medical Technicians / Expensive Machinery.
2.	SDG 4 - Quality Education	<ul style="list-style-type: none"> ✓ Train Youth From the Northeast In Next Generation Telecom Ecosystem for self-employment/job opportunities etc. ✓ Improved Quality of Teaching By Healthcare / Educational Institutions by enabling the use of immersive learning tools like AR/VR/MR etc. ✓ MOOC Courses to remove barriers to access to knowledge in an emerging knowledge economy.
3.	SDG 5 - Gender Equality	Open New Economic Opportunities for Women (Special focus community healthcare / agriculture / handloom & handicrafts). * Report of GSMA [Global System for Mobile Communications] says that there is a considerable gender gap in mobile ownership (14%) and mobile internet use (41%) wherein lack of awareness and digital skills are among the top barriers to <i>mobile internet adoption and usage among women</i> .
4.	SDG 9 - Industry, Innovation & Infrastructure	<ul style="list-style-type: none"> ✓ SME Ecosystem to Make, Repair, Recycle Next Generation Products Like IoT Devices. ✓ 5G Labs can be used for local youth for innovations.
5.	SDG 12 - Responsible Consumption & Production	<ul style="list-style-type: none"> ✓ Promote Recycling of E Components. ✓ Reduce GHG (Green House Gas Emissions) since 5G Equipment's consume less energy compared to earlier Generation of Equipment's.