

The use of basic available technologies to enable healthcare: Diabetic Retinopathy

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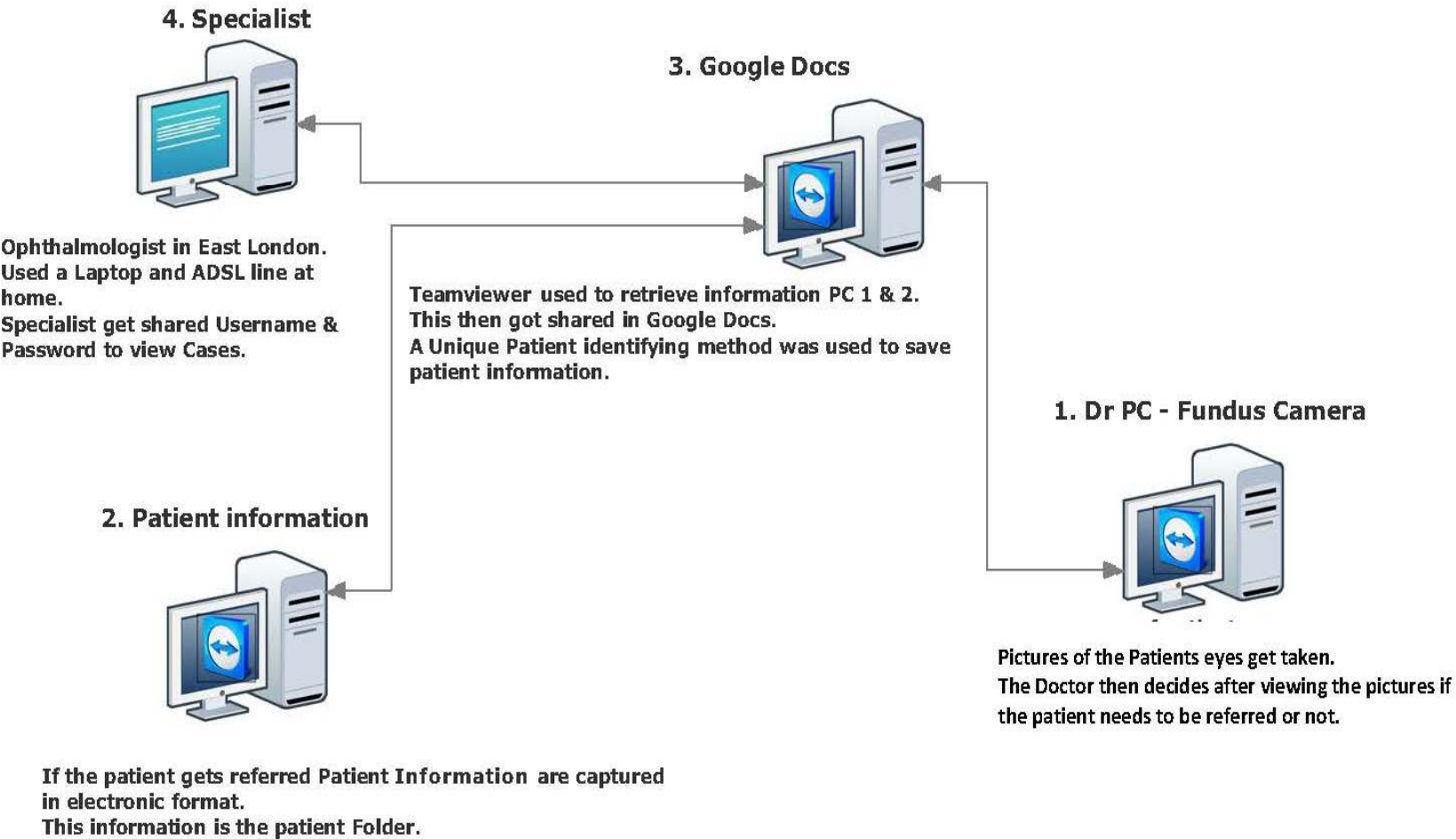
Introduction

- Diabetes
 - One of the fastest growing diseases in the world.
- Diabetic retinopathy
 - The most common complication of diabetes.
- Eye Screening Day
 - To provide an ophthalmology service to Diabetic patients.
- Grabouw CHC
 - Situated 68km from Cape Town.
 - Approximately 400 Diabetic patients on register.



Methodology

Workflow



Technology Used

- Fundus Camera
 - Canon CR 2 digital Non-Mydriatic Retinal Camera
- Patient Information Document
 - Patient Information were captured from hard copy onto an electronic form.
- TeamViewer
 - Computer Software package for remote control, desktop sharing and file transfer between computers.
- Google Docs
 - Was use as referral method.
 - Specialist could open and view cases and comment.
 - Security played a major role.
- 3G modem
 - Most Health facilities don't have Internet Infrastructure therefore 3G connectivity was used.
- SMS Service
 - With each new case the Specialist were notified by SMS or Text message that there is a new case.



Results

Grabouw CHC – Diabetic Screening		
	Totals	Percentage
Diabetic Patients	400	100
Patients Turnout	217	54.25
Eyes screened (Fundus Camera)	61	15.25
Non Urgent Referrals	17	4.25
Urgent Referrals	10	2.5



Discussion

- The importance of Screening
 - Annual Screening.
 - Early detection of sight threatening retinopathy.
 - Reduce the rate of avoidable visual loss.
- The Need to reduce referral patterns
 - Specialist Availability
 - » Earliest appointment 3-6 Months
 - Reduce of referrals
 - » Safe Time, Cost
 - Prevent Blindness
 - » Awareness has been raised



Conclusion

The use of ICT has not only demonstrated that it could enable ehealthcare in an affordable efficient manner but also improve the quality of life of SA's and other patients world wide living with diabetes by minimising the risk of blindness.



Reference

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Thank You

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