OPEN ACCESS

GAVIN PUBLISHERS

Journal of Hospital and Healthcare Administration

Research Article

Maqsood S, et al. J Hosp Health Care Admin 4: 133.

DOI: 10.29011/2688-6472.000033

What Comes after Covid-19: A UK District General Hospital Response for Ophthalmology

Sundas Maqsood*, Kashif Qureshi, Shahram Kashani

East Sussex Healthcare, Eastbourne District General Hospital, Hastings, UK

***Corresponding author:** Sundas Maqsood, East Sussex Healthcare, Eastbourne District General Hospital, Hastings, UK

Citation: Maqsood S, Qureshi K, Kashani S (2020) What Comes after Covid-19: A UK District General Hospital Response for Ophthalmology. J Hosp Health Care Admin 4: 133. DOI: 10.29011/2688-6472.000033

Received Date: 20 June, 2020; **Accepted Date:** 29 June, 2020; **Published Date:** 06 July, 2020

Abstract

Hospital based medical and surgical specialities are dramatically affected by the current corona virus crises. Ophthalmology is second most busiest speciality following Orthopedics by outpatient activity in UK. Ophthalmologists face a mounting risk of catching the virus due to close proximity examination and surgical procedures. The specialty represents a fair mix of both medical and surgical field which sees a very high number of elderly and vulnerable patients for long term sight threatening conditions.

This article explores a real time response to corona virus by a busy district general hospital in UK. By adapting new patient protocols, treatment pathways and innovative approaches to tackle patients care and safety during the recovery phases of crises, Ophthalmology has shown capacity to transform in the face of adversity. The steps taken by the hospital Ophthalmology management can prove pivotal in accommodating the new demand to mitigate risks and offer ophthalmic services to a huge patient backlog created due to the crises. Lessons can be learned from these adaptations by other hospital medical and surgical specialities.

Keywords: Ophthalmology; COVID 19; Personal protective equipment; Aerosol generating procedures; Risk stratification; Risk assessment; Referral refinement; Tele Ophthalmology

Abbreviations: CCGs: Clinical Commissioning Groups; PPE: Personal Protective Equipment; AGPs: Aerosol Generating Procedures; PHE: Public Health England

Introduction

Starting as a case of pneumonia of unknown origin in Wuhan, the emerging disease swept across the globe leading to declaration of a pandemic by World Health Organization (WHO) in March 2020 due to the novel coronavirus disease (COVID-19) [1]. Mathematical modelling at Imperial College London predicted total deaths in excess of 250,000 in United Kingdom alone unless stricter social distancing rules are applied, leading to introduction of lockdown by the government more than 8 weeks ago [2].

With now the largest number of fatalities in whole Europe, National Health Service had to take drastic measures freeing up services across all four nations.

Like other surgical subspecialties, Ophthalmology has been drastically affected with doctors and allied healthcare staff joining the fight against pandemic while eye care services were limited to emergency only by the guidance from The Royal College of Ophthalmologists [3]. Ophthalmologists also face an increased risk associated with virus due to proximity of patient contact during clinical examinations with a significant risk of catching the disease amongst the specialists.

Methods

This article explores a real time, prospective response from ophthalmic department to Covid-19 adaptation at East -Sussex Healthcare, a busy district general hospital in south east of England. Also the article highlights the challenges faced by implementation of guidelines suggested by local and national governing bodies.

Results

East Sussex Healthcare NHS Trust provides acute hospital and community health services for a population of 558,600 with outpatient services extending across three sites. With three major clinical commissioning groups (NHS Eastbourne, Hailsham and Seaford CCG, NHS Hastings and Rother CCG and NHS High Weald Lewes Havens CCG) covering one of few CCGs in England with over 65 population of 147,300.

At the time this article was written, Ophthalmology department had 83,000 expected annual outpatient appointments with 18,000 new and 65,511 follow up visits across three sites (Eastbourne District General Hospital (EDGH), Conquest Hospital and Bexhill Hospital) for the year 20/2021. The services offered by Ophthalmology include Emergency eye care, cataract service, medical Retina and Uveitis, Oculoplastic, Glaucoma, Pediatric and Neuro Ophthalmology.

Immediate steps

As an immediate step, all routine face to face outpatient care and elective surgery was stopped from first of April 2020 to support social distancing preventing COVID spread and diverting staff resources to Covid stricken wards and intensive care units.

Risk assessment of workforce: The work force team including doctors, nurses and healthcare assistants were risk assessed and advised to shield/ self-isolate for 12 weeks if they had underlying health conditions. Out of the 64 outpatient and theatre nursing and allied healthcare staff at three sites, 34 (53%) were redeployed to Covid care, 7 (11%) were advised shielding, 7 (11%) went off sick due to COVID symptoms and were advised to self-isolate between 7-14 days according to the UK's national guidelines.

Utilization of remote Covid free site for Ophthalmic services: The eye units at EDGH and Conquest Hospitals were moved to one of the underutilized site at Bexhill Hospital with a documented reduced capacity (16,580 outpatient appointments and 2088 day case capacity recorded in year 19/2020).

Service prioritization: Considering the capacity and staffing crises, new timetables were planned for the workforce, prioritizing only ophthalmic emergencies and high risk sight threatening conditions (Age related macular degeneration, retinal vein occlusion and diabetic macular edema receiving sight saving injections, sight threatening glaucoma, retinopathy of prematurity, amblyopia and children under care protection plans). All pending new and follow up appointments were validated by responsible consultants in this immediate period as Urgent (to be see within a week), soon (between 1-8 weeks) and routine (can wait more than 8 weeks). Only emergency surgery for ocular trauma was offered during this time period with retinal detachment repairs referred to the nearest tertiary hospital.

Intermediate steps

As an intermediate step during the lockdown phase of April and May 2020, both outpatient and surgical services were re-evaluated.

Risk stratification of outpatients and day-cases: All outpatient clinic lists were validated from 1 week to three months from the start of lockdown by sub speciality consultants for risk stratification of patients into routine, medium and high risk. Medium risk patients were stratified further on suitability for face to face assessment or for community follow up during lockdown phase. All high and suitable medium risk appointments were converted into 2-stop clinics with first visits reserved for diagnostic investigations allowing a virtual assessment or the face to face visit if required.

All patients were risk stratified on the surgical lists and lid tumors excision was offered from 27th April 2020 during this intermediate phase. All awaited cataract surgeries were also risk stratified and a high priority given to patients with cataracts in their good seeing eye and cataracts associated with co-existing morbidities like diabetes.

Revised discharging policy: Suitable patients were identified from Electronic patient record (n=3361) for their suitability for safe discharge (n=844, 25%) to screening services and optometrists form the hospital eye services.

Long term strategies

As we prepare for lockdown easing up in phases, resumption of healthcare for non COVID conditions needs to take place to tackle the backlog produced by cancelling all elective activity during the last 10 weeks of lockdown.

It is worth noting that even before Covid, the Ophthalmology services like many other outpatient services in UK were under huge pressure with pre-existing patient backlog. With expanding services to increased demand in the past 10 years, East Sussex Healthcare had already identified Ophthalmology as high risk due to challenges regarding patient experience, timely specialist input and follow up backlog of appointments. This has led to a major outpatient improvement initiative in last two years, with Referral to Treatment (RTT) performance reaching to 90.7% by Nov 2019 but still with a follow up backlog of nearly 3000 patients before covid lockdown started. The already strained service and the new infection control restrictions means much added pressure to provide for the effected population. This signifies the need for change in which the services are provided to the ophthalmic patients in hospital and community settings with significant opportunity to introduce new patient pathways and processes.

Utilizing community services: In the long term recovery phase, the unit propose utilisation of Covid-19 Urgent Eye care Services (CUES) [4], an initiative proposed in England to be delivered as a network of optician practices acting as urgent care hubs to support urgent care ophthalmology in immediate and recovery phase of the pandemic by enrolling it across all CCGs for chronic conditions where they can act as data collecting hub to support hospital eye services. The Trust currently collaborate with community optometric services under the Minor Eye Conditions Service (MECS) backed up by Eastbourne, Seaford, Hastings and Rother CCGs. Their data confirmed over a thousand patient attendance for

emergency assessments in 10 weeks of lockdown.

Developing new job plans for workforce: Revised job plans for the hospital staff is being introduced to tackle the capacity bottle necks caused by the social distancing rules like introduction of three session weekdays (8:00-20:00) and weekend work.

Referral refinement: New referral refinement criteria introduction for long term sight threatening conditions like macular degeneration and glaucoma via introduction of diagnostic hubs at both community and hospital level. Newer e-referral electronic software for eyelids disorders already in place for Dermatology services at the Trust.

Tele Ophthalmology: Application of Tele Ophthalmology for new and follow up referral, particularly post-operative patients of lid surgeries, tumor excision and patients of mild Thyroid eye disease and facial weakness.

Revising treatment pathways: Treatment pathways involving multi-disciplinary teams for new thyroid eye disease, orbital floor fractures and classified low priority procedures on lids lumps and bumps from clinical commissioning groups are revised across outpatient services for efficient service delivery.

Utilisation of minimally invasive surgical options and use of PPE: As part of phased recovery, high risk glaucoma patients requiring trabeculectomy with intensive post-operative follow up monitoring would be offered minimal invasive glaucoma procedures which have proven to have efficacious but come with much less follow up burden in outpatient clinics [5].

Defining aerosol generating procedures in Ophthalmology is still a matter of debate. Public Health England (PHE) has categorized adnexal procedures involving nasal and lacrimal mucosa as high risk Aerosol Generating Procedures (AGPs). Ophthalmic surgeries involving high speed devices like phacoemulsification and vitrectomy can be labelled as non AGPs with huge potential of research in this aspect. East Sussex Healthcare is planning to embark on non-urgent surgery within next two weeks at the previous pre Covid sites by following the current PHE guidance for all patients undergoing intraocular procedures to have 14 days self- isolation for all and a viral swab 72 hours prior to procedure for patients undergoing general anesthesia.

Risk mitigation for medico legal issues: All these service changes and restrictions can come with modified medicolegal risks as per coronavirus act 2020 [5]. All documentations of communications in individual patient records related to consents and remote consultations are strongly encouraged.

Discussion

Service transformation beneficial for long term sustainability of Ophthalmology care in a district general setting is a challenging task in this environment of great uncertainty backed up by insufficient evidence. However, the eye care services vary from other hospital specialities as they can be delivered in settings independent from the main hospital by using day case surgeries and local anaesthetic pathways making the return to the 'new normal' relatively quicker than other specialities.

With increasing capacity issues due to infection control requirements, there seems a golden opportunity to bring in new protocols and pathways to tackle the capacity and demand mismatch in long-term but also to put a long overdue quality improvement in place.

The most pressing learning point that can be extracted out of this pandemic for Ophthalmology, a face to face run service pre Covid is its transformation in care pathways, referral refinement and innovations like virtual, video and telephonic clinics through collaboration with community providers in a regional network of care.

Conclusion

This response of a busy district general hospital Ophthalmology unit catering for one of the most oldest population in UK depicts the drive to learn and transform services to mitigate risks in the face of the challenges posed by Covid.

Financial Support: None

Conflict of Interest

No conflicting relationship exists for S Maqsood,

Kashif Qureshi: travel grant: BAYER

Shahram Kashani: Travel grant and education fund: BAYER, NOVARTIS, ALLERGAN

References

1. WHO (2020) Coronavirus disease 2019. Events as they happen.
2. MRC Centre for Global Infectious Disease Analysis. COVID-19 scientific resources. Data scenarios (Report 12).
3. Covid-19 clinical guidance for ophthalmologists. RCOphth 2020.
4. Covid-19 urgent eye care specification (CUES) in England. NHSE/I 2020.
5. Ker NM, Wang J, Barton K (2017) Minimally invasive glaucoma surgery as primary stand-alone surgery for glaucoma. Clin Exp Ophthalmol. 45: 393-400.