Royal College of Ophthalmologists Essay Prize for Foundation Doctors 2019: Discuss the impact of multi professional working on eye care.

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Introduction: multi professionals provide a holistic approach to eye care

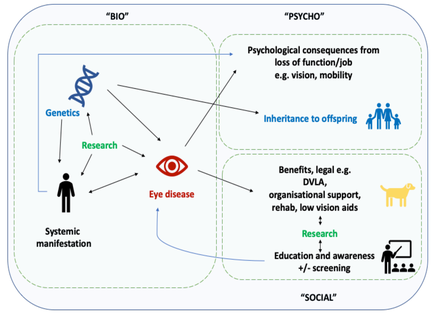


Figure 1. *Ophthalmology requires various professionals of diverse expertise to deliver different aspects of eye care, aiming to address not just biological issues but also the psychosocial impact these pathologies bring.*

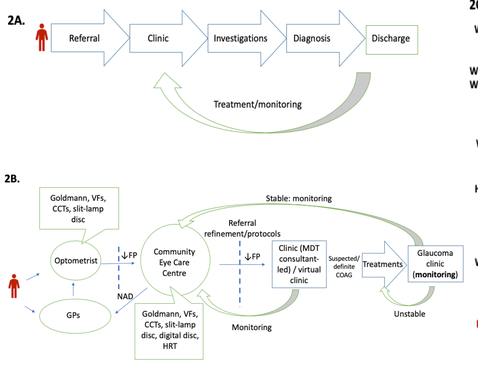
- Systemic diseases require collaborative delivery of multi-disciplinary services
- In diabetic eye disease – integrated programmes have been shown to reduce all diabetic-related complications and all-cause mortality by 20.4% compared to isolated service provision, in one study from Hong Kong.

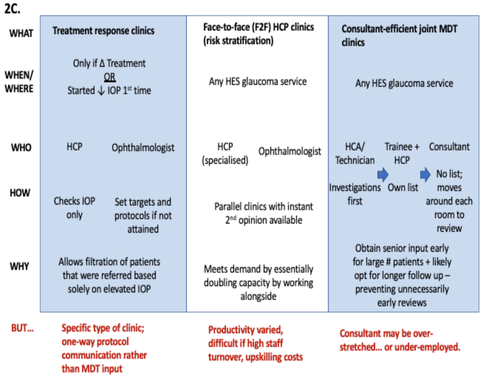
- Vision loss is a devastating morbidity which impact on psychosocial well—being
- Patients with visual impairment benefit from psychological support and rehabilitation.
- In the UK, eye clinic liaison officers (ECLOs) provide a crucial link between Hospital Eye Services and support organisations.

- There are special patient groups which require unique professionals as part of their multi-disciplinary team, including those with genetic conditions and learning difficulties.
- In patients with inherited eye diseases, additional support from clinical geneticist, genetic counsellors, and psychologists is necessary to provide holistic care.

Work flow optimisation via multi professional teams

- Multi-professional teams can streamline services through complementary expertise as emphasised by the Way Forward report by the Royal College of Ophthalmologists.
- Examples are shown in **Figure 2** and **Table 1.**



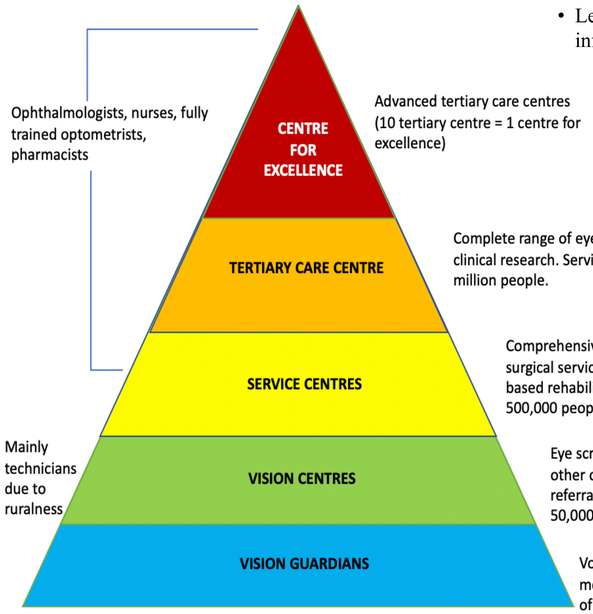


High volume areas in eye care	Examples of multi-professional aspect to optimise workflow	Measurable impact
Neovascular AMD	Nurses substituting for ophthalmologists for intravitreal injections to enable service to be "one-stop".	In one UK hospital unit, the volume of anti-VEGF injections increased by 50%.
Cataracts	High quality high throughput cataract surgery pathway[6] • One-stop preoperative clinic with nurses, optometrists, anaesthetics, consultants, trainee • Significantly more ophthalmic nurses allocated to the list to accompany patient throughout; same assigned nurses; nurses performing extended roles	In one UK hospital unit, around 7500 operations per year: 0.036% endophthalmitis rate (0.1% reference), no never events, >96% family and friends test score, 5 stars on NHS Choices.
Cataracts	Shared-care model with community optometrist delivering postoperative discharge	In one UK county, over 23 months, there were 1449 fewer postoperative follow-up to the HES, equating to 121 doctor-led clinics of 12 patients per doctor.

Table 1. *Examples of how multi-professional teams improve workflow in high volume areas in eye care.*

Figure 2.
A – *Traditional 'linear' model of glaucoma service.* ***B -*** *Glaucoma referral filtering and refinement schemes involving multi-professionals.* ***C-*** *Three examples of glaucoma clinic models to illustrate multi-professional collaboration.*

Impact on global eye care: a wider view



- Less developed countries may not have the proper infrastructure to form traditional multi-disciplinary teams
- Non-governmental organisations (NGOs) and local governments play important roles in this context.
- Indeed, the partial success of the VISION 2020 global joint initiative relied on collaboration of diverse professions all over the world.
- One successful case study is the LV Prasad Eye Institute model in rural India (**Figure 3**).

Figure *3.* *LVPEI model of eye care in rural India. Five interlinked tiers allowing each sustainable upscaling of referrals and cost-effective services. Professionals has been appropriately trained, across various disciplines and provide multidisciplinary holistic eye care service. Community participation was also emphasised.*
Adapted from Rao, G (2015).

Future Outlook

- Ophthalmology is a rapidly advancing field.
- Within a few years - there is approval for gene therapy, trials for retinal implants, and deep-learning/artificial intelligence
- This would require further multi-disciplinary collaborations to bridge the gap between research and clinic – for further understanding and utilisation of these new resources
- Reiterative audits can fine-tune and iron out gaps in patient care – staff with diverse expertise can provide a fresh look.

Full Essay & References: