

**Results of the**

**UK NEURO-OPHTHALMOLOGY SOCIETY SURVEY OF TRAINING AND SERVICE**

**July – Sept 2021**

**CONTENTS**

**SECTION 1**

**Why the survey was undertaken and intended application of results**

**Method**

**SECTION 2**

**Results: Neuro-ophthalmology Training**

**Current state of Neuro-ophthalmology training**

**Respondents’ opinions on future directions for Neuro-ophthalmology training**

**SECTION 3**

**Results: Neuro-ophthalmology Service - current provision and delivery**

**Respondents’ opinions on future directions for service delivery**

**SECTION 4**

**Respondents’ opinions on future directions for UKNOS**

**How UKNOS will use these results**

**SECTION 1**

**WHY THE SURVEY WAS UNDERTAKEN AND INTENDED APPLICATION OF RESULTS**

The UK Neuro-ophthalmology Society (UKNOS) is a relatively new society having been set up in 2019 to replace the UK Neuro-ophthalmology Special Interest Group (UKNOSIG).

UKNOS carried out this survey to look at the current state of Neuro-ophthalmology training and service, to ask what members want from UKNOS and to look at the role that UKNOS can play in supporting and developing Neuro-ophthalmology training and services in the UK.

**METHOD**

203 emails were sent to UKNOS members and the UKNOS mailing list and to 53 members of the British Isles Neuro-ophthalmology Club (BINOC). There is overlap between these email lists so the exact response rate cannot be calculated.

**SECTION 2**

**RESULTS: NEURO-OPHTHALMOLOGY TRAINING**

**Respondents:**

**Respondent specialty**

60% Ophthalmology

26% Neurology

8% (4) Medical Ophthalmology

6% (3) Orthoptics

**Respondents grade:**

39/46 (85%) consultant

2 trainees (4.3%)

2 fellows(4.3%)

2 orthoptists(4.3%)

1 specialty doctor

**Specialty:**

92.1% say they specialise in neuro ophthalmology

**CURRENT STATE OF NEURO-OPHTHAMOLOGY TRAINING:**

**Qualifications (41 responses):**

(Some hold more than one qualification)

FRCOphth/FRCS 64.3%

MRCP/FRCP 46.3%

MRCOphth 4.8% (2)

PhD 4.8% (2)

**Neuro ophthalmology training prior to taking up your consultant post (41 responses):**

Neuro ophthalmology fellowship 46.3% (UK 34.1%/abroad 12.2%)

Trainee selected component (TSC) 39%

Observership in neuro ophthalmology 36.8%

Ophthalmology based fellowship 22%

Neurology based fellowship 2.4%

**RESPONDENTS’ OPINIONS ON FUTURE DIRECTIONS FOR NEURO-OPHTHALMOLOGY TRAINING**

**What do you think is the minimum training REQUIRED to be a neuro ophthalmologist? (41 responses):**

(Could tick multiple options)

26/38 (68%) thought a neuro-ophthalmology fellowship (UK or abroad) was required

UK neuro ophthalmology fellowship 58.5%

Neuro ophthalmology fellowship abroad 26.8%

Observership 26.8% (36.8% had done an observership)

TSC 24.4% (39% had done a TSC)

**What type of CCT do you think is REQUIRED to be a neuro ophthalmologist (41 responses)**

Any type of CCT acceptable 47.4 %

Medical ophthalmology CCT 14.6% (2.6% hold medical ophthalmology CCT)

Ophthalmology CCT 14.6%

Neurology CCT 2.4% (1 respondent)

**What training do you think is DESIRABLE to be a neuro-ophthalmologist (41 responses):**

(Could tick multiple options)

Observer ship (UK or abroad) 46.3%

Neuro-ophthalmology Fellowship

18/38 (43.9%) UK

20/38 (56.1%) outside the UK

Ophthalmology-based fellowship 29.3%

Neurology-based fellowship 29.3%

Neuro ophthalmology TSC 24.4%

**As Neuro-ophthalmology develops, what qualifications should neuro-ophthalmologists have (46 responses)**

Either FRCOphth or MRCP 87%

Only FRCOphth 8.7%

Both FRCOphth and MRCP 2.6% (one respondent)

‘FRCOphth + neuroscience’ 2.6% (one respondent)

MRCP only - 0%

**Which area(s) of training should a neuro ophthalmologist have (43 responses)**

Bespoke neuro ophthalmology training module 56.5%

Ophthalmology based training 43.5%

Neurology based training 28.3%

Medical ophthalmology based training 19.6%

Any of the above 37.%

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**SECTION 3**

**RESULTS: NEURO-OPHTHALMOLOGY SERVICE PROVISION AND DELIVERY**

**CURRENT SERVICE PROVISION AND DELIVERY**

**Respondents:**

**Respondent specialty**

60% Ophthalmology

26% Neurology

8% (4) Medical Ophthalmology

6% (3) Orthoptics

**Respondents grade:**

39/46 (85%) consultant

2 trainees (4.3%)

2 fellows(4.3%)

2 orthoptists(4.3%)

1 specialty doctor

**Specialty:**

92.1% say they specialise in neuro ophthalmology

**Where do you take referrals from:**

Main emergency depart 67.4%

GP/primary care 65.1%

Community optometrist 60.5%

Eye emergency department 46.5%

Colleagues in your specialty 65.1%

Other sub specialties:

Neurology 76.7%

Ophthalmology 76.7%

Neuro surgery 74.4%

Medical specialties 72.1%

All of the above 58.1%

*58.1% of neuro ophthalmologists take referrals from all sources.*

**Who is in your neuro ophthalmology team (TOTAL REPLIES 43):**

**Consultant numbers:**

3 (7%) work in depts with more than 7 consultants

3 (7%) work in depts with 4 consultants

13 (30%) work in depts with 3 consultants

13 (30%) work in depts with 2 consultants

10 (23%) work in depts with 1 consultant

1 said there were no consultants (they are consultant but do not specialise in neuro ophthalmology themselves)

*60.4% work in a dept with 2 or 3 neuro ophthalmology consultants but 23% work in single-consultant neuro ophthalmologist unit.*

*14% work in dept with 4 or more consultants*

**Fellow numbers**

14/43 (32.5%) work in a dept with fellow(s)

2 work in a dept with 3 fellows

**Registrar numbers**

11/43 (25%) work in a dept with no neuro ophthalmology registrar

5 of these are single handed neuro-ophthalmology consultants

One has 2 fellows but no registrar

21/43 (25%) work in a dept with 1 registrar

11 work in a dept with 2 registrars

10/43 (23%) work in a dept with no registrar or fellow

2 respondents work in a dept with 2 neuro-ophth consultants but no reg or fellow

1 respondent works in a dept with 3 neuro-ophth consultants but no reg or fellow

Only 1 respondent works in a dept that has fellows instead of a registrar (1 consultant +2 fellows)

*Most (67.5%) work in a dept without neuro ophthalmology fellows*

*11/43 (25%) work in a dept with no neuro ophthalmology registrar*

*Only 1 respondent works in a dept that has fellows instead of a registrar (1 consultant +2 fellows)*

**SAS grade (Staff Grade/ Associate Specialist)**

3/43 (7%) work in a department with an SAS grade in the neuro ophthalmology team

**Allied professionals**

67.4% work in neuro ophthalmology team which contains allied professionals (specialist nurse/specialist optometrist/specialist orthoptist)

**Optometrist with neuro training/specialist sessions**

5/43 (11.6%) work with an optometrist in the neuro ophthalmology team

3 work with 1 optometrist on the team

2 work with 2 optometrists on the team

**Orthoptist with neuro training/specialist sessions**

28/43 (65%) work with orthoptists on the neuro ophthalmology team

12/46 work with 1 orthoptist on the neuro ophthalmology team

7/46 work with 2 orthoptists on the neuro ophthalmology team

6/46 work with 3 orthoptists on the neuro ophthalmology team

2/46 work with 4 orthoptists on the neuro ophthalmology team

1 works with 5 orthoptists on the neuro ophthalmology team

*Orthoptists are the commonest allied specialty in the neuro ophthalmology team. Most have 1-3 orthoptists on the neuro team*

**Nurse with neuro training/specialist sessions**

10/43 (23%) work with 1 nurse on the neuro ophthalmology team

No one works with more than 1 nurse on the team

**Others on the neuro-ophthalmology team**

No one mentioned physicians assistants

Fields/photography/electrophysiology technicians mentioned – presumably common to all depts.

**Which patient groups do allied professional see**

Stable idiopathic intracranial hypertension (IIH) (64%)

Stable pituitary patient 64%

Visual field loss due to stroke 61.3%

Diplopia or other neurological symptoms due to stroke 61.3%

Assessment of patients referred with possible optic disc swelling 29%

Headache due to idiopathic intracranial hypertension 19.4%

No specific group of patients 12.9%

One respondent each: Optic neuritis, tumour monitoring, Parkinson's, screening, NF1

*The commonest patient groups seen by allied professionals are stable IIH, stable pituitary, visual field loss/ diplopia due to stroke. Less commonly possible disc swelling and IIH headache.*

**Managing capacity for urgent referrals (43 respondents)**

Urgent patient added on as overbooks 79.1%

17/43 (40%) use this as their only method of accommodating urgent patients

Dedicated clinic slots 25.6%

Urgent seen by fellow/registrar 23.3%

Dedicated urgent clinic 20.9%

Some use a combination of all of these

*40% of respondents manage all urgent referrals as over books. 25% have urgent clinic slots and 21% run dedicated urgent clinics*

**Managing overall service capacity (43 responses)**

**Overall capacity**

72.1% expect to receive too many referrals to deliver high quality neuro ophthalmology service post COVID

Service aspects with insufficient capacity to support neuro ophthalmology

Visual fields 48.8%

Neuro radiology 39.5%

Neurology 37.2%

Ophthalmology 37.2%

Photography (OCT etc) 23.3%

Neuro surgery 11.6%

Three respondents (7%) said no services had insufficient capacity

*Capacity issues are common with visual fields, neuroradiology and neurology/ ophthalmology.*

**Institutional factors preventing delivery of high quality neuro ophthalmology service**

Disorganised clinic booking 48.8%

Notes/referral letters not always available 44.2%

Access to radiology for timely imaging 41.9%

Results not always available 37.2%

Access to neurology 25.6%

Inadequate secretarial support 18.6%

Access to ophthalmology 16.3%

Access to neuro surgery 14%

2 respondent's (4.7%) had no institutional factors preventing deliver of high quality neuro ophthalmology services

*Institutional problems commonly interfere with delivery of a high quality neuro-ophthalmology service most commonly disorganised clinic booking, notes/ referral letters/results not being available and access to timely imaging*

**Unfilled posts on your team which impact on delivery of neuro ophthalmology service**

Consultant 27.9%

Fellow 18.6%

Specialist nurse 16.3% + general nurse 7%

Specialist orthoptist 9.3% +general orthoptist 4.7%

Specialists Optometrist 7% +general optometrist 2.3%

Registrar 4.7% (2 respondents)

No unfilled posts 44.2%

*Over half of respondents worked in a neuro-ophthalmology dept with unfilled posts - almost 1/3 worked in a department with an unfilled consultant vacancy*

**Innovations in service delivery which have been implemented to cope with limited resources**

Allied professionals added to the team 67.4%

21 (67.7%) have implemented orthoptists to cope with limited resources

9 (29%) have implemented nurse to cope with limited resources

2 (6.5%) have implemented optometrist to cope with limited resources

1 (3.2%) virtual clinics

1 (3.2%) ophthalmic technician

*Orthoptists are the most common allied profession to be added to the neuro team to cope with limited resources*

**Virtual clinics (46 respondents)**

63% work in a department which runs virtual neuro ophthalmology clinics

**Which patients are seen in virtual clinics**

Stable pituitary patients 75.9%

Stable idiopathic intracranial hypertension 69%

Assessment of patients referred with possible optic disc swelling 55.2%

Visual field loss due to stroke 41.4%

Headache due to IIH 24.1%

Diplopia or other neurological symptoms due to stroke 17.2%

1 respondent each: follow-up for meningioma/ amyloid/review of results/stable sarcoid and myasthenia

*The patients most commonly seen in virtual clinics are stable pituitary patients, stable IIH, patients referred with possible optic disc swelling and visual field loss due to stroke*

**What is done at the virtual clinic visit**

Visual acuity 86.2%

Colour vision 65.5%

Relative afferent pupil defect check by non-medical practitioner 44.8%

Visual field 82.8%

OCT 82.8%

Orthoptic assessment 44.8%

Basic investigations eg Bp, BM, weight 37.9%

Eye clinic liaision officer review 13.8%

Optometrist/refraction 10.3%

Intraocular pressure 1 respondent

*Referral to eye clinic liaison officers or optometrist for refraction are linked to a minority of virtual clinics*

*Some of these virtual clinics may be double vision assessment clinics so fields etc not needed*

**Do you carry out telephone/video consultations post-COVID (46 responses)**

No 15% (2 of these are allied professionals)

**How will the frequency of telephone/video consultations change post-COVID**

Stay the same 30.4%

Increase post COVID 23.9%

Reduce post COVID 23.9%

*85% of respondents carry out telephone or video consultations for neuro ophthalmology*

**Does your team have regular Multidisciplinary team meetings (MDTs) (46 responses) – which other specialties do you meet**

Neuroradiology/radiology 65.2%

Neurology 45.7%

Ophthalmology 28.3%

Neurosurgery 26.1%

None 21.7%

Oncology 8.7%

1 each: Neuro-ophthalmology colleagues , neurovascular, pathology, endocrinology

*22% (10) of members do not do attend any MDT –*

2 med ophthalmologists

5 ophthalmology consultants specializing in neuro-ophthalmology

2 neurologists specializing in neuro-ophthalmology

1 ophthalmologists who doesn’t specialise in neuro-ophthalmology

**Does your team have standardised clinical pathways for specific conditions**

Idiopathic intracranial hypertension 60.9%

Visual loss due to pituitary lesions 54.3%

Optic neuritis 50%

Visual problems due to stroke 50%

Non arteritic anterior ischaemic optic neuropathy 26.1%

Acute onset double vision 34.8%

No pathways 8.7% (4 respondents)

*Most respondents work in a dept with standardised pathway(s)*

**RESPONDENTS’ OPINIONS ON FUTURE DIRECTIONS FOR SERVICE DELIVERY:**

**FREE TEXT COMMENTS:**

**Any other methods for improving service delivery**

* More space
* Scribes
* Big picture platforms to open multiple ophthalmic software
* Technician to do basic assessments: VA, Ishihara, BM, BP VA, Ishihara, BM, BP
* Guidance for optometrists for disc swelling score to see degree of urgency of referral
* I do a combined clinic as I feel the ophthalmologist will never know the breadth of knowledge of a neurologist, but then a neurologist will never know the plethora of subtle signs picked out by an ophthalmologist.
* Pan-London approach to triaged, investigation and management including shared protocols

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**SECTION 4**

**RESPONDENTS’ OPINIONS ON FUTURE DIRECTIONS FOR UKNOS**

**How can UKNOS support Neuro-ophthalmologists and Allied Professionals in the delivery of specialist care?**

Education:

* Meetings when members as well as invited experts can present
* Educational content
* Highlights /research findings of clinical relevance to neuro ophthalmology

Sensible guidelines for common conditions

* Optic neuritis
* Giant cell arteritis
* Anterior ischaemic optic neuropathy
* Pituitary follow-up
* Idiopathic intracranial hypertension
* ‘ guidelines must not require all suspect disc swelling referrals to have same day CT, lumbar puncture’

Engage with RCP/ABN/RCOphth/SBNS etc

**HOW UKNOS WILL USE THESE SURVEY RESULTS**

1. **Clinical guidelines** have been added to the website
2. The **UK Neuro-ophthalmology fellowship list** is on the website
3. There will be an **update section on every UKNOS meeting**
4. **Research updates** and links will be added to the website
5. **There will be information on the website for trainees regarding**
   1. How to find out more about **neuro-ophthalmology as a career**
   2. How to find information on **joining regional neuro-ophthalmology teaching**
   3. How to **arrange to sit in on local neuro-ophthalmology clinics**
   4. How to **become involved in neuro-ophthalmology projects or research**

6. The UKNOS committee will look at **ways of increasing neuro-ophthalmology exposure during training**

7. The UKNOS committee will look at **competency based neuro-ophthalmology training as equivalence with neuro-ophthalmology fellowships.**

8. The UKNOS committee will look at **competencies for allied professionals** and a **network or meeting of neuro-ophthalmology allied professionals.**