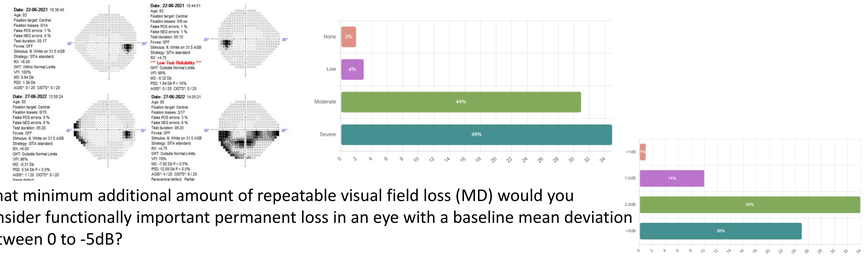
# Assessment of the Level of Harm Resulting from Glaucoma Progression

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## Question 1. Mild Glaucoma

These are the visual fields of an 83-year-old seen in June 2021 with IOPs 20T20mmHg. She was due to be seen in 6 months but was seen 12 months later with the lower field plots and pressures of 25T30mmHg (assume the field defect is repeatable and reliable). What level of harm would you classify this as?

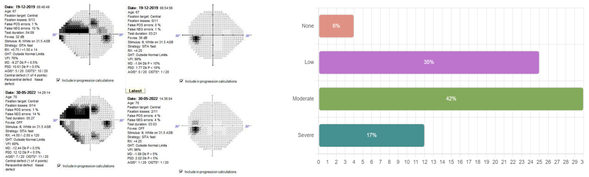



What minimum additional amount of repeatable visual field loss (MD) would you consider functionally important permanent loss in an eye with a baseline mean deviation between 0 to -5dB?



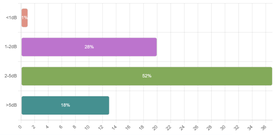

## Question 2. Moderate Glaucoma

These are the visual fields of a 70-year-old seen in December 2019 (assume the fields are repeatable and reliable). Treatment was altered and a 6-week review was planned. The patient was eventually seen in April 2022. What level of harm would you classify this as?



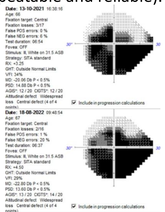


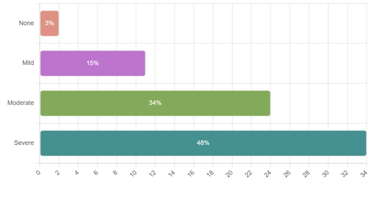

What minimum, additional amount of repeatable visual field loss (MD) would you consider functionally important permanent loss in an eye with a baseline mean deviation between -5.01 to -15dB?



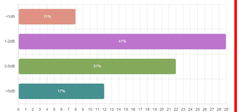

## Question 3. Advanced Glaucoma

This is the visual field of the left eye of a 67 year-old woman (the right eye has no perception of light vision). Her intraocular pressure was 24mmHg in October. Her treatment was changed, and she was due to be reviewed 6 weeks later. She was seen in August the following year with the fields depicted as above (assume the fields are repeatable and reliable). What level of harm would you ascribe in this case?






What minimum, additional amount of repeatable visual field loss (MD) would you consider functionally important permanent loss in an eye with a baseline mean deviation worse than -15dB?




## Background

- NHS England's Learn from patient safety events (LFPSE) service [1] is a national system for the recording and analysis of patient safety events.
- This provides a consistent approach to reporting harm throughout the NHS.
- Utility in an ophthalmic setting provides a challenge as severe harm includes metrics which are rarely relevant in an ophthalmic setting.
- In 2020 The RCO acknowledged this and published their 'Measuring Levels of Harm in an Ophthalmic Settling' document (see table)[2].

| Category of Harm | Example Patient outcomes |
|---|---|
| Catastrophic | • Registered blind (severely sight impaired)<br>• NPL in both eyes<br>• Removal of both eyes |
| Major | • Best corrected VA in one eye <6/60<br>• Overall VF defect ≥ 16dB<br>• Removal of one eye<br>• Registered sight impaired<br>• Best corrected VA <6/18 in both eyes |
| Moderate | • Loss of >0.2 logMAR or 2 Snellen lines BCVA<br>• A deterioration, above expected disease progression in VF MD ≥3 dB<br>• BCVA <6/18 in one eye<br>• Requirement for additional unplanned treatment<br>• Pain from treatment for a continuous period of 28 days<br>• Intractable diplopia requiring coverage of one eye |
| Minor | • Loss of >0.1 logMAR or 1 Snellen lineBCVA<br>• Longer healing time than expected from treatment<br>• Pain from treatment for a continuous period <28 days |

## Aim

- To assess how ophthalmologists quantify harm from glaucoma
- To generate consensus guidance for different stages of glaucoma
- To provide guidance for clinicians and others involved in the governance process of grading glaucoma harm.

## Design

- A web-based questionnaire of glaucoma harm scenarios distributed to members of UKEGS.

## Results

- 71 respondents of which 85% were consultants (86% of these were glaucoma sub-specialists) completed the survey

## Discussion

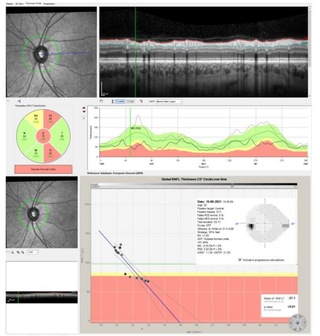
- The majority indicated >-2dB loss of MD in mild and moderate glaucoma should signify moderate harm with a lower threshold (1-2dB) in advanced disease (consistent with lower visual reserve).
- Very few felt visual acuity should be included in the harm criteria as glaucoma progression can be significant without affecting VA.
- No respondents suggested psychological harm should be an additional factor although the NHS England's Learn from patient safety events (LFPSE) service update in June 2024 has additional categories for psychological as well as physical harm[1].
- The majority felt a delay of >50% above the planned recall period should signify a significant delay.
- Most feel structural changes should be considered as harm irrespective of the visual field

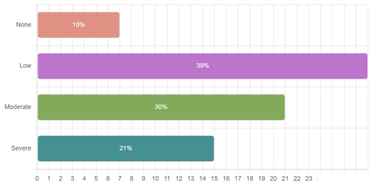
## Conclusion

- Awareness of the criteria for grading harm is poor amongst ophthalmologists
- The consensus driven quantification of harm for different reference levels of VF from this this survey can help those involved in the governance process more consistently judge harm in glaucoma.
- There is a need for updated guidance on the judgement of harm in glaucoma which should also include psychological harm as per the new NHS guidance.
- Further exploration of harm from RNFL thinning in the presence of normal VF needs to be undertaken

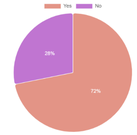
## Question 4. Structural Changes

These are the retinal nerve fibre layer scans of a 32-year-old uveitic patient with high pressures referred to the glaucoma team for surgery. The patient remains asymptomatic, and his visual field is full. If there was a significant delay in treatment, what level of harm would you classify this as?



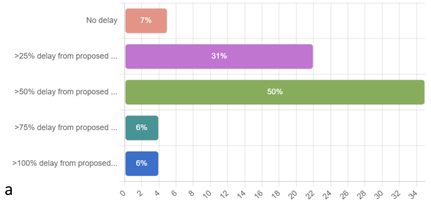



Do you feel structural changes (in OCT) should constitute harm if the visual fields remain full?




## Question 5. Proportion of Delay

Regarding glaucoma. In your opinion what proportion delay constitutes a significant delay from which we might attribute harm?




## Question 6. Other Factors

Do you think there is anything else that should be taken into account when considering harm in glaucoma (e.g. only eye, type of glaucoma)?

| Statement | Number (/46) | Proportion (%) |
|---|---|---|
| Only eye | 30 | 65 |
| Driving | 16 | 35 |
| Age | 13 | 28 |
| Type of glaucoma | 11 | 24 |
| Functionality/impact on function | 8 | 17 |
| Stage of glaucoma/advanced fields | 8 | 17 |
| Occupation | 7 | 15 |
| Drop in vision | 4 | 9 |

## Question 6. Other Factors ctd

Do you think there is anything else that should be taken into account when considering harm in glaucoma (e.g. only eye, type of glaucoma)?




**REFERENCES**

1. Learn from patient safety events (LFPSE) service. NHS England. NHS England » Learn from patient safety events (LFPSE) service | 2. Measuring Levels of Harm in an Ophthalmic settling. The Royal College of Ophthalmologists, June 2020. Measuring Levels of Harm in an Ophthalmic Setting | The Royal College of Ophthalmologists (rcophth.ac.uk)