MEASURING LEVEL OF HARM IN OPHTHALMIC SETTING – AUDIT

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OBJECTIVE

In 2021 Royal College of Ophthalmologist has published guidance for measuring level of harm in Ophthalmic setting.

AIM

to compare our measurement of harm level against the criteria proposed by RCOphth post external harm review.

METHODS

Retrospective review **of consecutive minor, moderate and severe incidents which were reported between June 2020 and June 2021** in Ophthalmology at King's College Hospital (KCH).

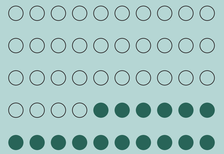
Data were collected from Datix and included: Incident reference, reported date, incident date, site, location, type, category, subcategory, investigation level, harm level, date of verbal DOC, date DOC documented in notes, date of initial DOC letter, date RCA report shared, description of the incident

The measure of agreement used was **Cohen's kappa** along with the Confidence Interval 95%. Cohen's kappa (K) of: 0.40 - 0.59 is considered moderate agreement, 0.60 - 0.79 is considered substantial agreement, 0.80 - 0.99 is considered outstanding agreement.

RESULTS

Data from 44 incidents were recorded: 38.6% at Queen Mary's Hospital, 36.4% at Denmark Hill, 20.5% at Princess Royal University Hospital and 4.5% at Orpington.

16 incidents were eligible to be graded using RCOphth criteria.



Concordance RCOPHTH vs KCH Harm level.

The measure of agreement used was Cohen's kappa = 0.553 (p-value<0.001), Confidence Interval 95%=[0.46, 0.64] which is considered **moderate agreement**.

	KCH Harm				
Level of harm RCOPHTH guidelines	No Harm	Minor Harm	Moderate Harm	Severe Harm	KCH Total
No Harm	1	1	0	0	2
Minor Harm	0	2	1	0	3
Moderate Harm	0	1	5	0	6
Severe Harm	0	0	2	3	5
RCOPHTH Total	1	4	8	3	16

Example:

WEB1038181 (RCOphth Severe harm Our level Moderate harm):

Patient with wet age-related macular degeneration on treatment in the right eye. Missed diagnosis in left eye and treatment delay of 4-5 weeks. Poor responder to treatment in the right eye and hence guarded visual prognosis with treatment in the other eye. Left acuity deterioration (despite treatment) from 6/36 to 3/60 due to diagnostic delay could be classified as moderate.

Concordance RCOphth vs KCH Investigation level

The measure of agreement used was Cohen's kappa = 0.349, Confidence Interval 95%=[0.28, 0.41] (p-value=0.029, which means a significant **low agreement** between RCO and Invest level).

Further analysis showed that the low agreement was a result of us tending to perform higher investigation level than that suggested by the level of harm.

	KCH Investigation Level			
Level of harm RCOPHTH guidelines	Minor Harm	Moderate Harm	Severe Harm	Total
No Harm	0	1	1	1
Minor Harm	2	1	0	3
Moderate Harm	0	4	2	6
Severe Harm	0	2	3	5
Total	2	8	6	16

Royal College of Ophthalmologist grading system

Category of Harm	Example Patient Outcomes
Catastrophic	Registered blind (severely sight impaired) NPL in both eyes Removal of both eyes
Major	Best corrected visual acuity in one eye of less than 6/60 An overall visual field deficit of ≥16 decibels Removal of one eye Registered sight impaired Best corrected visual acuity less than 6/18 in both eyes
Moderate	A loss of > 0.2 LogMAR or 2 Snellen lines of visual acuity in best corrected visual acuity score A deterioration, above expected disease progression, in visual field deviation of 23 decibels Best corrected visual acuity less than 6/18 in one eye Requirement for additional unplanned treatment Pain from treatment for a continuous period 28 days Intractable diplopia requiring coverage of one eye
Minor	A loss of > 0.1 LogMAR or 1 Snellen line in best corrected visual acuity in one eye Longer healing time than expected from treatment Pain from treatment for a continuous period < 28 days

CONCLUSIONS

1. There was a moderate agreement between the RCOphth harm level vs our harm level. The differences in grading may underline the importance of clinical judgement.
2. There was a low agreement between RCOphth harm level and our investigation level. This was a result of a tendency to perfom higher investigation level than the one suggested by the RCOphth level of harm

RCOphth guidance is a useful tool when measuring level of harm in Ophthalmic setting but clinical judgement must still be used by the clinician undertaking any investigation into an incident of harm.