Ophthalmology Global Trigger Tool (OGTT): A recommended audit tool for assessing quality and safety for patients in eye clinics

October 2017

Contents

Section

Date of review: October 2020

1   Background

The global trigger tool (GTT) was developed by the Institute for Healthcare Improvement (IHI) as a systematic method to identify and assess risk and potential harm to patients and to take a pro-active role rather than take a reactive approach to patient safety [1,2,3.]

In the IHI Global Trigger Tool, the definition used for harm is as follows:

"Unintended physical injury resulting from or contributed to by medical care that requires additional monitoring, treatment or hospitalisation, or that results in death."

Trigger tools have been found to compare well to other approaches, to be relatively sensitive and to accurately and consistently identify significantly more adverse events compared with traditional self-reporting approaches. A key strength is the simplicity and ease of training of reviewers, which has been shown to increase reliability of the tool [5].

Originally intended and widely used as a review process for in-patient hospital records in acute general hospitals, the GTT has been refined by Moorfields Eye Hospital [4] for use specifically in ophthalmology (the modified global trigger tool or **mGTT**) which examines basic record keeping and clinical care in ophthalmology, with patient blindness as "the ophthalmic equivalent of death". It is intended to be a rolling audit, regularly looking through a small sample (around 30) of patients notes to check for sub-optimal practice and any potential risks.

Adverse events identified are categorised by severity and type, and recommendations can be made for improving patient safety before incidents reach the level of a Serious Incident. The OGTT affords the ability to track changes and trends over time, providing a measure of the percentage rate of adverse events (number per 100 patients).

The OGTT allows senior clinicians to become more aware of practice within their clinics by more junior colleagues, and permits comparison between services or at different sites within trusts. It also provides a method for appraisal and revalidation audits for clinicians whose practice does not lend itself to the commonly performed outcome audits (e.g. non-operating consultants).

Championing excellence in eye care and patient safety, The Royal College of Ophthalmologists encourages all NHS ophthalmology providers and professionals to incorporate regular OGTT audits into their audit programme. The College is very grateful to Moorfields for allowing use of this audit for the College members.

2   Audit Objectives

1. To identify and categorise risk to ophthalmology patients according to the global trigger tool classification by retrospective review of clinical records

2. To make recommendations for improvement in services, clinical management and documentation

3   Evidence Base for Audit

The Audit Standards are:

• RCOphth Critical Incident Guidelines: 0% incidents
• Institute of Health Improvement framework for risks: 0% adverse events

Evidence Base Details:

Categories of adverse events: **mGTT**

0   No harm or error
A   Capacity to cause error
B   Error that did not reach patient
C   Error reached patient but did not cause harm, had potential to cause harm through eg.   delayed management
D   Error reached patient, did not cause harm but required additional visits, monitoring or treatment
E   Minor temporary harm to patient
F   Significant temporary harm, prolonged hospitalization/ recovery, loss of sight
G   Permanent harm to patient, permanent reduction of vision
H   Required sight threatening urgent intervention
I   Patient death – ophthalmology equivalent: blindness

Categories of adverse events: **RCOphth Definitions of Critical Incidents** [6]

• Delay: delay in referral or clinic appointment leading to visual loss
• Missing notes: missing case notes
• Poor notes: incomplete or absent notes
• Intraocular foreign body (IOFB): delayed diagnosis IOFB
• Tumour: delayed diagnosis intracranial tumour
• Tear: delayed diagnosis retinal tear
• Retinopathy of Prematurity (ROP); failure to screen or treat ROP leading to visual loss
• Drugs: wrong drug administered; prescribed drugs not instilled; wrong prescription

4   Performing the OGTT

1. To undertake OGTT case record reviews, either one senior reviewer or a small team of reviewers is required, with the expertise to review the service being audited (e.g. medical retinal service/ primary care). It is suggested that a team should consist of at least three individuals, typically the team might include a doctor, a nurse and another allied health professional, and ideally, they receive informal training or guidance in the use of trigger tools from their local audit department

2. The team should randomly select and retrospectively review around 30 case records, looking at the most recent 1-2 attendances. If necessary reviews can be split into two sessions

3. Independent review of at least 10 of the records should be performed by two separate reviewers to establish inter-reviewer reliability and for standards setting.

4. Using the template audit tool to guide information collection (**Appendix 1**) the records are reviewed, for a maximum of 20 minutes, looking for triggers i.e. less than ideal service process, clinical care or record keeping. An informed clinical judgement is sometimes required on whether care is good. Note brief details for all aspects where performance is not ideal. Once reviewers get used to performing the audit, individual case notes are often possible to review in less than 5 minutes.

5. The review should include:

   - Patient attendance type: new/ follow up appointment
   - The diagnosis
   - Review of referral details; legibility, source of referral, whether there is sufficient information for triage
   - Review of referral process: whether patient seen within appropriate timescale/in the appropriate service
   - Review of clinical record (written notes/ electronic record): whether legible, comprehensive, whether appropriate history, examination, investigation and treatment, proper management decisions and plan, clear documentation of information
   - Review of clinic letter/discharge summary: whether understandable to patient/GP/optometrist; whether plan clearly stated
   - Review of results of investigations if applicable: whether results in notes/missing; action taken appropriately if results abnormal
   - Review of prescription if applicable: whether legible, signed and complete
   - Discharge decision and appropriateness

6. Once a trigger is identified the record should be reviewed in more detail to identify if harm occurred. An adverse event is harm to the patient from the viewpoint of the patient. If harm has occurred assign each adverse event to one or both of:

   - GTT adverse event category
   - RCOphth critical incident category

7. All data should be entered onto a reporting spreadsheet for the organisation/ service and adverse events/ incidents should be highlighted along with a note of any aspect which could be done better

8. Results can then be simply presented in this suggested format:

Title/service reviewed
- Number of notes review, typically a total of 30 per audit
- Age range XX- XX years (mean X years)
- New patients: XX or %, follow up patients: XX or %
- New to follow up ratio X:X
- DNA X%, cancellations X%

Main diagnosis types e.g. in pie chart

Appropriate triage of referrals and time to appointment

- Ideal in XX/XX patients (XX%)

Detail any less than ideal e.g. "one patient unclear why urgent referral from optometrist, could have been directly referred to medical retinal service as longstanding"

Discharge
Patients discharged/ followed up in clinic
- Total patients discharged: XX (X%)
- Discharged at first appointment: X/30 (X%)
- Discharged at first follow up appointment X/30 (X%)
- Note any inappropriate discharge/failure to discharge

Trigger rate
- Optimal management with no associated risks: x/30 (X%)
- No harm occurred to any patient *or* harm occurred to XX (%) patients
- OGTT risk categories X/30 (XX%) patients – broken down by category

Detail cases which are not ideal

Example:

One patient with no date documented in notes when seen and no GP letter in notes

➢ Capacity to cause error
➢ RCOphth critical incident- i.e. poor quality notes

GTT Category C risk

Action plan

Record suggested action plan in the following format. Present the audit and share with all relevant staff and amend and agree action plan following discussion. Plan the re-audit if issues.

Table 1 Action plan

Issue identified	Action required	Lead person	Deadline
e.g. need to demonstrate improvement	e.g. audit report presented	Named lead(s)	e.g. immediate
e.g. Audit requires approval by audit committee	e.g. email this report to audit department		e.g. three months
e.g. delayed attendance in clinic due to too few staff	e.g. business case for more nurses		

5   Learning and Improvement

As for any audit, the OGGT should provide a framework to identify risks or sub-optimal care and provide opportunities to address areas for improvement. It is important to discuss and feedback any lessons learned, patterns and trends to staff in the department. Success stories should be shared as well as lessons learned, and data used to drive educational programmes and staff development. It is crucial to track measures over time to determine whether improvement has occurred, usually through a re-audit.

Data from the OGTT should be regularly fed back to the audit committees and trust boards as part of their clinical governance system. Any trigger with harm or the capacity for significant harm should be reported on the organisation's incident reporting system.

6   Possible Barriers to effective use of the OGTT

- Fear of change
- Breakdown of Communication
- Poor staff engagement
- Limited time

From the outset, it is essential to engage with staff, communicate about the potential benefits of a new process and to share the data and results of improvement efforts.

7   References

1. Griffin FA, Resar RK. IHI Global Trigger Tool for Measuring Adverse Events (Second Edition) IHI Innovation series white paper Cambridge, MA, Institute for Healthcare Improvement 2009
2. Classen DC, Lloyd RC, Provost L, Griffin FA, Regards R. Development and evaluation of the Institute for Healthcare Improvement Global Trigger Tool. Journal of Patient Safety. 2008 Sep; 4(3):169-177
3. Adler L, Denham CR, McKeever M, Puronton R, Guilloteau F, Moorhead D, Resar R. Global Trigger Tool:Implementation basics. Journal of Patient Safety. 2008 Dec;4(4): 245-249
4. Moorfields Eye Hospital Annual Report 2011-2. http://www.moorfields.nhs.uk/sites/default/files/Annual%20report%20and%20accounts%202011-12_0.pdf
5. RK, Rozich JD, Classen D. Methodology and rationale for the measurement of harm with trigger tools. Quality Saf Health Care. 2003 (12) Suppl 2; I 39-45
6. Kelly SP Guidance on patient safety in ophthalmology from The Royal College of Ophthalmologists: Eye(2009) 23, 2143-2151; doi 10.1038/eye.2009.168

8   Appendix 1 Methodology of Ophthalmology Global Trigger Tool

Table 2 Methodology of Ophthalmology Global Trigger tool

Process	Details reviewed
Diagnosis	Make a note of diagnosis
Patient attendance type	New/ Follow up appointment
Review of referral details	Legibility
Review of triage process	Source of referral clear
Review of written notes	Sufficient information for triage
Review of clinic/discharge letter	Patient seen within appropriate timescale
Review of results if applicable (e.g. blood tests, imaging	Patient seen in appropriate specialty/service
Review of prescription if applicable	Legibility
Discharge decision	Comprehensive
Risk categorisation	Appropriate history/examination documented
Overall analysis of level of care	Appropriate investigations/treatment performed/documented

9   Author

- Quality and Safety Group, The Royal College of Ophthalmologists
- Moorfields Eye Hospital Trust