

Eye Care in ICU – (a QIP)

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GP ST1



Why eye care is important ?

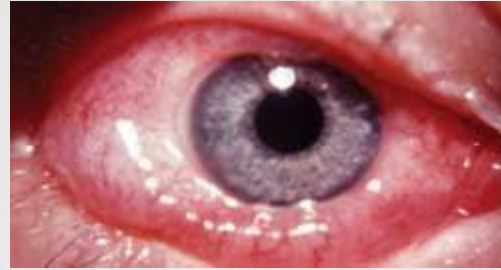
- Sedated/paralysed patients are at high risk of preventable ophthalmic complications due to **suboptimal blinking reflex**.



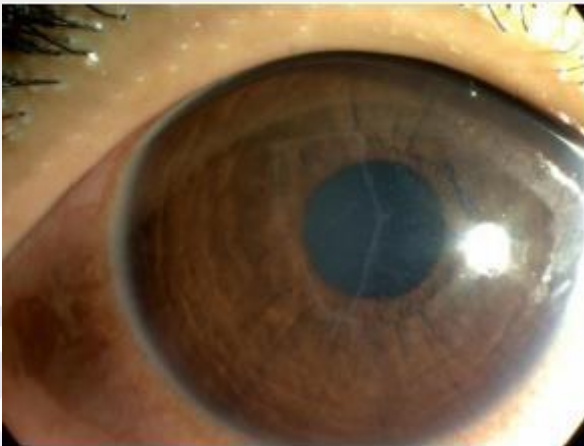
- Regular eye care in ICU prevents many eye, specifically corneal, pathologies.

Common complications in ICU

Chemosis



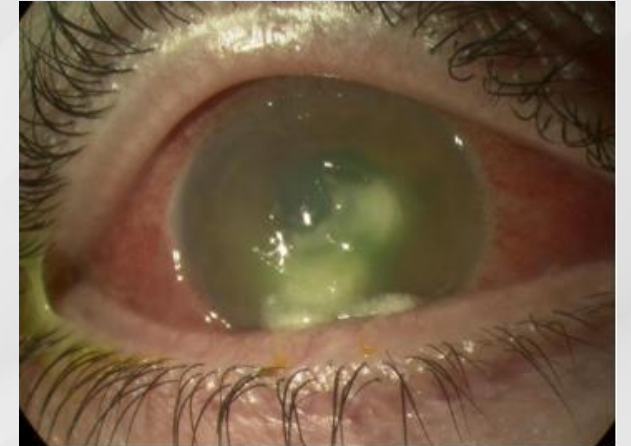
Corneal abrasion/exposure keratopathy



Conjunctivitis



Bacterial Keratopathy



West Suffolk hospital – ICU unit

430-bed small DGH in east of England.



**10TH EVOLVING PRACTICE OF OPHTHALMOLOGY
MIDDLE EAST CONFERENCE**

Standards of eye care for ICU

- Local hospital guidelines (Based on RCOPth guidance) was assessed:

Criteria			Target
Assessment	1a	Assessment within 2 hours of admission to ICU	100%
	1b	Assessment every 12 hours	100%
Delivery	2a	Sedated but not paralysed – give eye care 4 hourly.	100%
	2b	Sedated and paralysed – give eye care 2 hourly	100%
Prescription	3	Prescription of ocular lubricant	100%

Methods

- First cycle - Retrospective data collection between 1st Feb 2022 to 30th Apr 2022.
- ICU patients at **level 3** care or above (intubated/paralysed) were included.
- Data collection – “Metavision” (Electronic patient records screened to assess adherence to standards).
- Using different measures e.g. **Posters**, surveys, individual nurse **teaching** sessions and departmental **teachings**, aiming at educating staff about standardized eye care in ICU.
- Re-auditing – between July to August 2022.

Our initial adherence to eye care

40 patients included

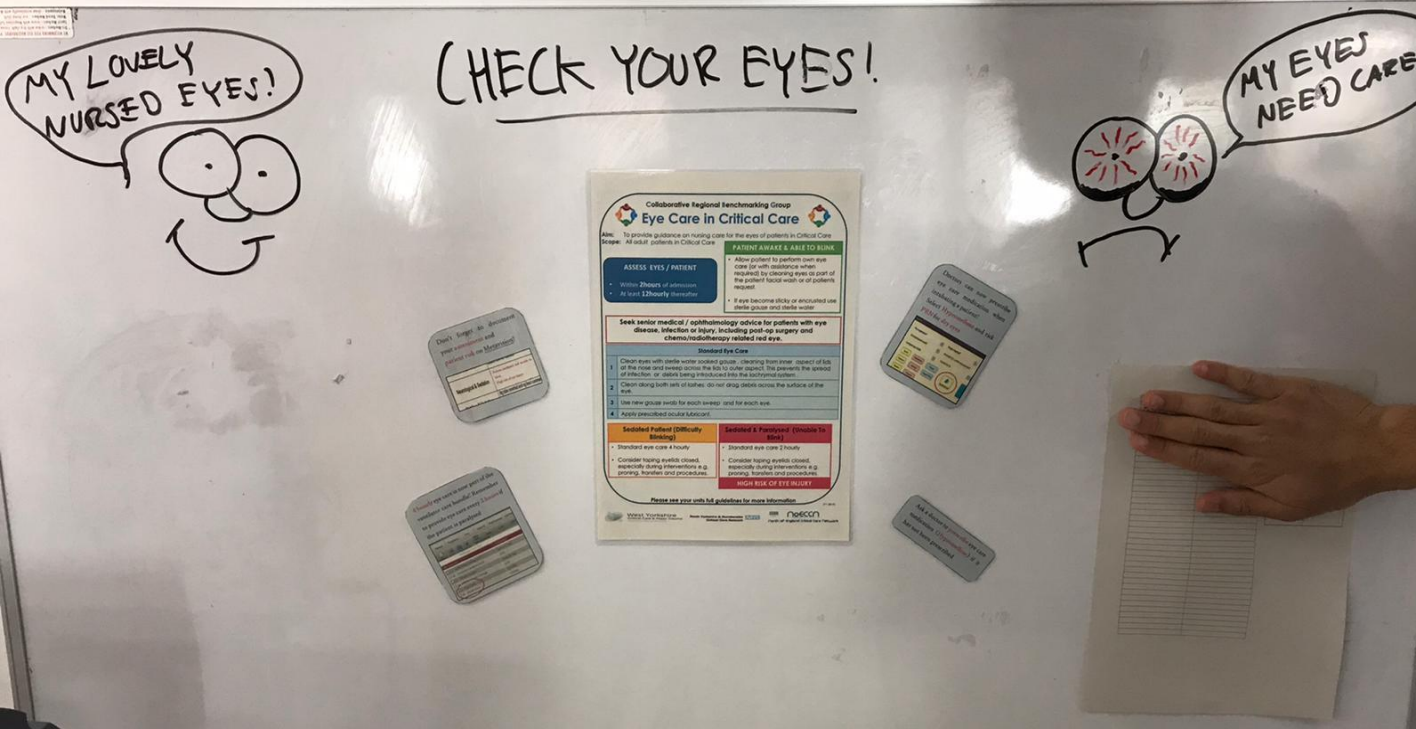
*Limited documentation of eye assessments


		Criteria	Target	Adherence
Assessment	1a	Assessment within 2 hours of admission to ICU	100%	23%
	1b	Assessment every 12 hours	100%	<5%*
Delivery	2a	Sedated but not paralysed – give eye care 4 hourly.	100%	62.4%
	2b	Sedated and paralysed – give eye care 2 hourly	100%	
Prescription	3	Prescription of ocular lubricant	100%	2.5%



Posters


In person education of doctors and nurses in the ICU.





Collaborative Regional Benchmarking Group

Eye Care in Critical Care



Aim: To provide guidance on nursing care for the eyes of patients in Critical Care
Scope: All adult patients in Critical Care

PATIENT AWAKE & ABLE TO BLINK

- Allow patient to perform own eye care (or with assistance when required) by cleaning eyes as part of the patient facial wash or at patients request.
- If eye become sticky or encrusted use sterile gauze and sterile water

ASSESS EYES / PATIENT

- Within **2hours** of admission
- At least **12hourly** thereafter

Seek senior medical / ophthalmology advice for patients with eye disease, infection or injury, including post-op surgery and chemo/radiotherapy related red eye.

Standard Eye Care	
1	Clean eyes with sterile water soaked gauze , cleaning from inner aspect of lids at the nose and sweep across the lids to outer aspect. This prevents the spread of infection or debris being introduced into the lachrymal system .
2	Clean along both sets of lashes; do not drag debris across the surface of the eye.
3	Use new gauze swab for each sweep and for each eye.
4	Apply prescribed ocular lubricant.

Sedated Patient (Difficulty Blinking)

- Standard eye care 4 hourly
- Consider taping eyelids closed, especially during interventions e.g. proning, transfers and procedures.

Sedated & Paralysed (Unable To Blink)

- Standard eye care 2 hourly
- Consider taping eyelids closed, especially during interventions e.g. proning, transfers and procedures.

HIGH RISK OF EYE INJURY

Please see your units full guidelines for more information

(V1 2019)

Changes implemented - Prescription

Ocular lubricant prescription

Intubation

Pre-oxygenation? Bougie required?

Cricoid pressure used? End-tidal CO2 confirmed placement?

Laryngoscopy Grade Inserted by Dr:

Create Order Patient has documented allergies

Orderable: Hypromellose Eye Drops

Route: Both Eyes

Frequency: Set interval Start: Now

hour

PRN
PRN indication:
Max. dose per 24 hr:

Stop: No time limit

Category: Topical Preparations

Quantity: 1 drop

Comments:

Alerts

Alerts
• Acabose

Changes implemented

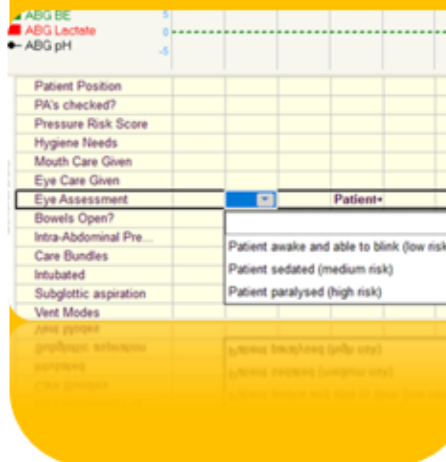
Action point 1 – Assessments

- Creation of a new task in Metavision
- All patients **within 2 hours of admission**
- All patients **12 hourly thereafter**

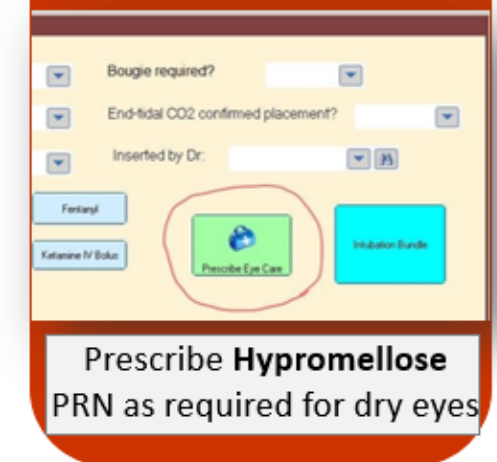
Action point 2 – Regular delivery

- Addition of regular 4 hourly eye care task to the ventilator care bundle
- After giving eye care, document on Metavision.

1. Document assessment



2. Doctor's prescription



Prescribe **Hypromellose** PRN as required for dry eyes

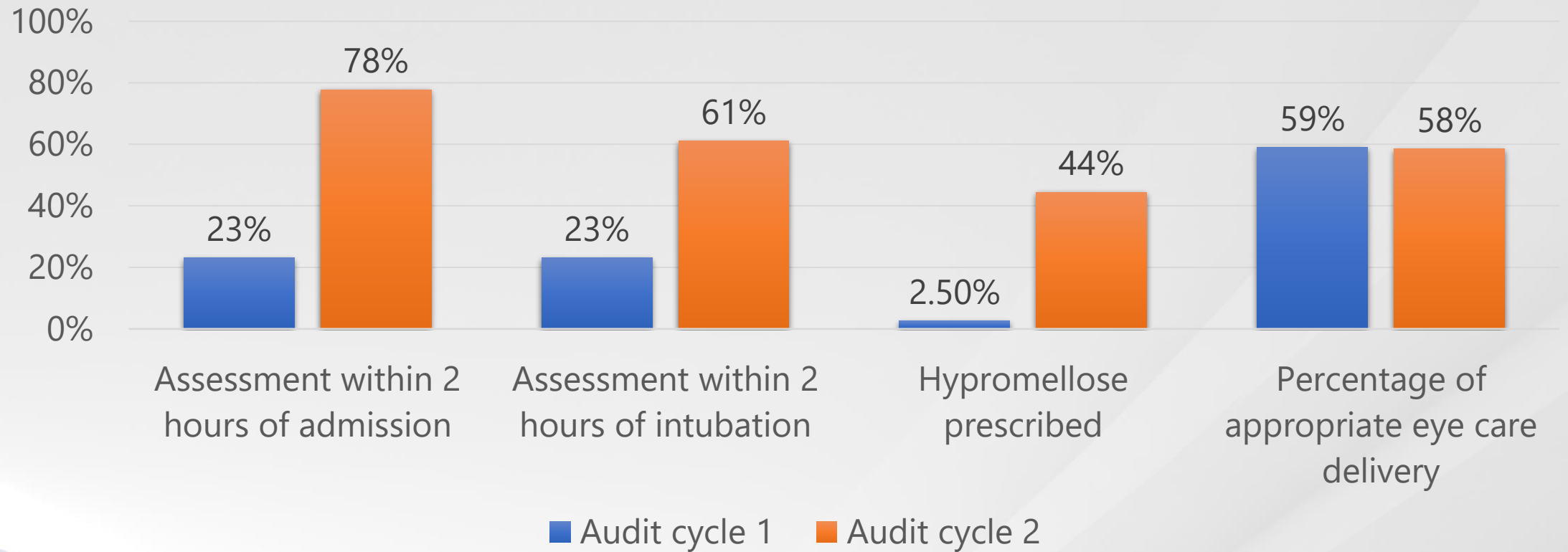
3. How to give eye care

Standard Eye Care	
1	Clean eyes with sterile water soaked gauze, cleaning from inner aspect of lids of the nose and sweep across the lids to outer aspect. This prevents the spread of infection or debris being introduced into the lachrymal system.
2	Clean along both sets of lashes; do not drag debris across the surface of the eye.
3	Use new gauze swab for each sweep and for each eye.
4	Apply prescribed ocular lubricant.

4. Document eye care given

	Sitting L+	Sitting L-	Sitting
Patient Position			
PA's checked?			
Pressure Risk Score			31
Hygiene Needs			
Mouth Care Given	<input checked="" type="checkbox"/>		
Eye Care Given	<input checked="" type="checkbox"/>		
Eye Assessment			
Bowels Open?			
Intra-Abdominal Pre...			
Care Bundles			
Intubated	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Subglottic aspiration	Yes		Yes
Vent Modes	Invasive +	Invasive +	Invasive +
Mews			

Adherence to RCOphth ICU Eye Care recommendations



Conclusions

- Eye **assessments** are rarely carried out and documented.
- Eye care was given in 62.5% of instances where it was needed
- Prescription of ocular lubricant was limited and this was a barrier to the delivery of eye care
- Questionnaire results show that there may be a gap in understanding of the guidelines

Thank you

Questions..?



References

1. Rcopth.ac.uk. 2022. [online] Available at:
<<https://www.rcophth.ac.uk/wp-content/uploads/2021/01/Intensive-Care-Unit.pdf>> [Accessed 12 July 2022].
2. Common eye complications in ICU:
Nurse-led eye care in ICU: a protocol for practice by Emily Brennan in Manchester university.