

EYE DROPS IN CATARACT SURGERY

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PROMISE



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- Ophthalmology Dept: Dr. Clements, Dr. Tu, Dr. Winges, Dr. D’Ostroph, and facilitator Heidi Layton
- Pharmacy Dept: Aaron Nicholson, Leanna Lawyer Wade Taylor, Lisa Anderson
- EBP Fellowship mentor: Christy Locke
- VAPORHCS Librarian: Sola Whitehead

BACKGROUND

- Is the patient ready for cataract surgery?
- Variable use of eye drops by Veterans for cataract surgery
 - Pre-procedure education lacking?
 - Patient understanding?
- Significance for nursing practice / health care?
 - Veteran trust
 - Veteran anxiety / confusion
 - Unnecessary expense
 - Increased workload

PICO QUESTION

How does the eye drop plan currently prescribed at VAPORHCS for adult cataract surgeries compare with best practice?

(option 1) Intervene by modifying patient education to promote increased adherence to the cataract surgery eye drop plan.

(option 2) If VAPORHCS is not following best practice, make a recommendation to the Ophthalmology Service to change the current eye drop plan to align with evidence based practice.

TERMINOLOGY IN LITERATURE

Endophthalmitis infection

Topical vs Injection prophylaxis

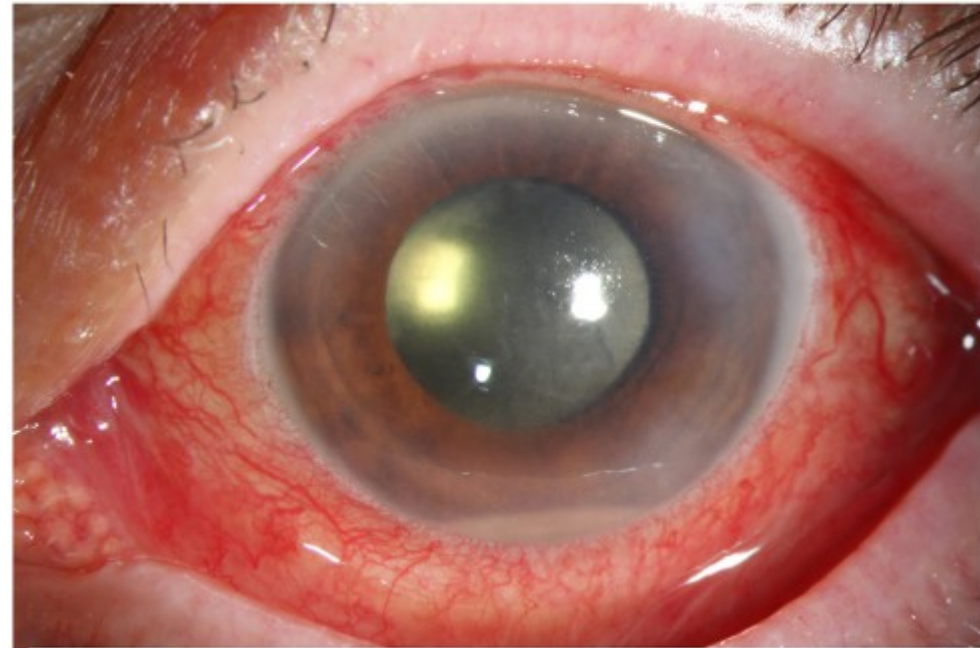
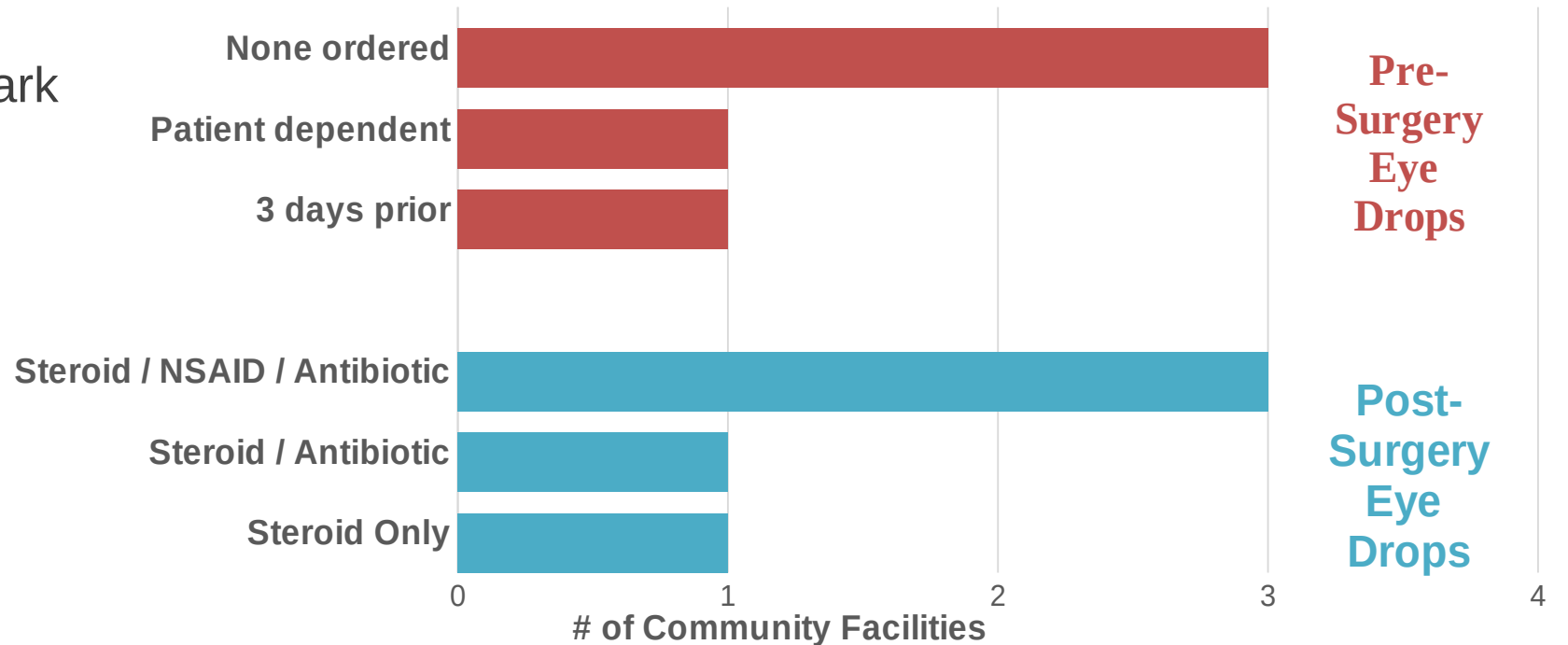


Figure 1 External photograph, left eye, demonstrating acute-onset postoperative endophthalmitis following cataract surgery.

EVIDENCE BASED SEARCH

- Ophthalmology Guidelines – American Academy of Ophthalmology

- Community Benchmark



EVIDENCE RETRIEVED

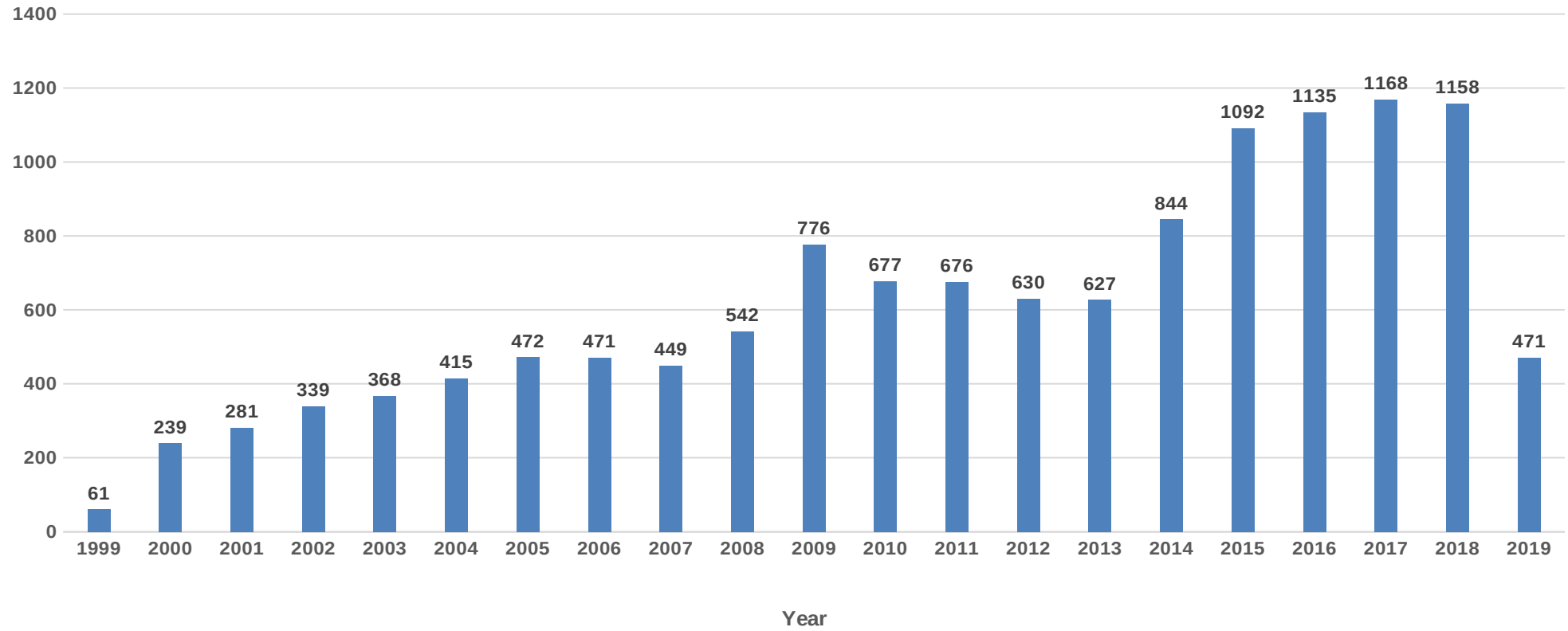
(# / Quality per JHNEBP Criteria)

Research Evidence				
Non-experimental	Quasi-experimental	Experimental	Systematic Reviews	Meta-analysis/ Meta-synthesis
<u>Example:</u> 1 (Good)	1 (Good)	9 (Good, High)	2 (Good)	2 (Good,)
Non-Research Evidence				
Expert Opinion	Organizational (QI/financial data)	Clinical Practice Guidelines		
<u>Example:</u> 2 (Good)		2 (Good, High)		

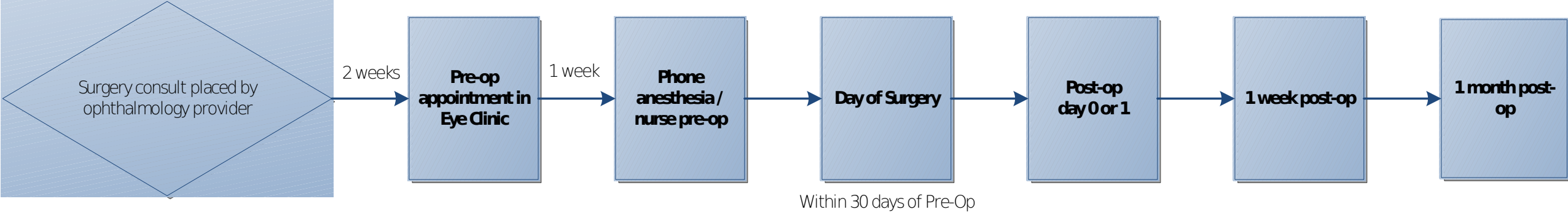
- Databases searched: Pubmed, Cinahl, Cochrane
- Key words used: endophthalmitis; intracameral; cataract; phacoemulsification; topical; eye drops;
- Limits used (e.g., years, human, age): human, adults

VAPORHCS CURRENT STATE

cataract surgeries



CURRENT STATE – PROCESS FLOW



Please wait 3-5 minutes between different bottles

Please spread your drops throughout the day



Ofloxacin or Vigamox (tan cap)

Begin 3 days **BEFORE** surgery and
CONTINUE after surgery
1 drop into (Right / Left) eye
4 times a day until your next
appointment



Ketorolac (gray cap) - if given

Begin 3 days **BEFORE** surgery and
CONTINUE after surgery
1 drop into (Right / Left) eye
4 times a day until your next
appointment



Prednisolone (white or pink cap)

Begin **after** surgery
1 drop into (Right / Left) eye
4 times a day until your next
appointment

PATIENT ASSESSMENT – CURRENT DATA

n = 30

- Communication about eye drops?
- Satisfaction of the eye drop education?
- Phone calls?
- Pre-surgery eye drops accuracy?
- Understanding of post-surgery eye drops?
- Degree of confusion about pre or post eye drops?

NEXT STEPS

- Provider presentation (June 2019)
 - Literature Review
 - Benchmarking
 - Patient assessment results
- Addressing gaps in process
 - Timing of information provided to patient
 - verbal and written thoroughness
- Re-Assessing patient experience ~2mo following implemented change

CHALLENGES

- Overwhelming, yet insufficient literature
- Recommending a change in practice when infection rate is so low
- Limitations of project
 - Assessment of Veterans

IMPLICATIONS FOR PRACTICE

- Increased patient adherence
- Decreased workload:
 - Eye clinic phone calls
 - Explanations on the day of surgery
 - Pharmacy workload



QUESTIONS & DISCUSSION

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