



Ensuring Adequate Patient Pre-Operative Requirements for Outpatient Cataract Surgery at the Royal Alexandra Hospital

Dr. Hermina Strungaru, MD, PhD, FRCSC Hilary Salmonson, Karen Harris, Nichole Pereira, Dr. Keith Drader, Dr. Chris Rudnisky, Dr. Karim Damji

Day Eye Surgery Clinic Royal Alexandra Hospital

- × High volume clinic
- × 13,000 annual ophthalmology surgeries
- Up to 40 cataract surgery admissions per day



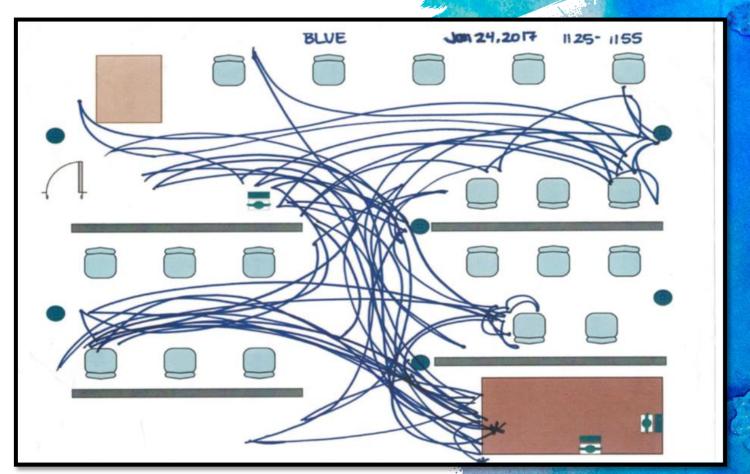


Staff are constantly searching to ensure patients' pre-surgery requirements have been met.

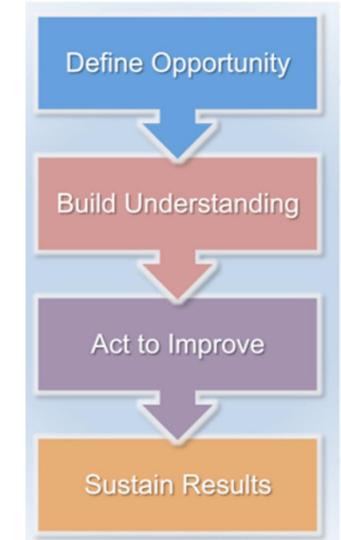
They are frustrated!

Result: Delayed surgical flow, re-work, & patient risk if requirements are not completed prior to surgery.

SPAGHETTI DIAGRAM



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Describe the problem, opportunity and goal, confirm as a priority and link to AHS Strategic Goals

Validate opportunity, baseline performance, use facts/data to pinpoint waste, variation, root causes, design criteria

Develop, test, measure & refine changes; manage risks; confirm achievement of intended outcome(s)

Ensure: ongoing measures & monitoring; capacity to support new practices; accountability & support



1. Define Opportunity Project Team:

Patient Care Manager
Unit Manager
Unit Clerk
Clinical Section Head of Ophthalmology
Ophthalmologists
Surgical Coordinators
Nursing
CQI

Patients





Pre-surgical requirements:

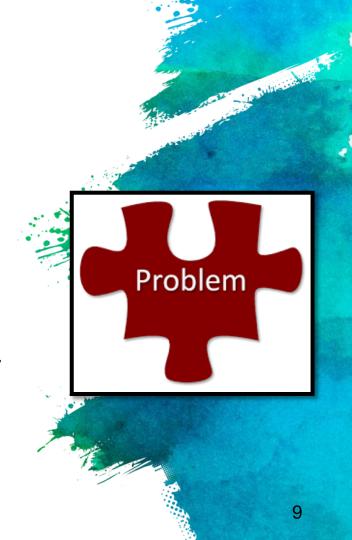
1. History and physical examination 2. Laboratory testing (ECG)

BOTH Valid for 3 months prior surgery

PROBLEM:

3% (15/487) of patients daily arrive for their cataract surgery with incomplete and/or expired physician history and physical forms.

23% (112/487) of patients daily arrive for their cataract surgery with incomplete and/or expired ECGs.

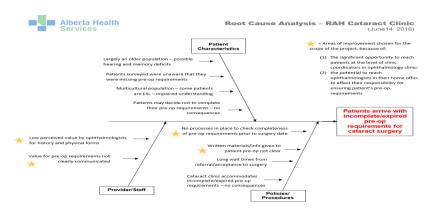


GOAL:

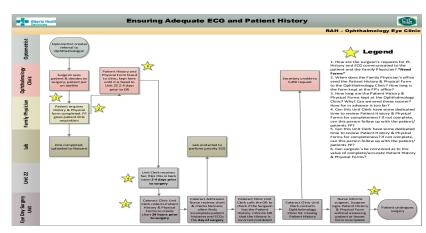
By February, 2017, <10% of patients who present for cataract surgery will arrive with incomplete/expired pre-surgery requirements.



2. Build Understanding

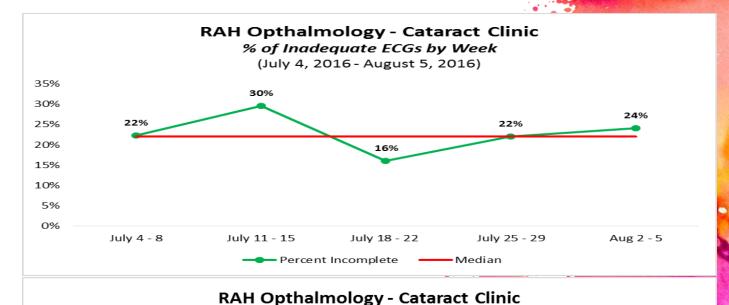


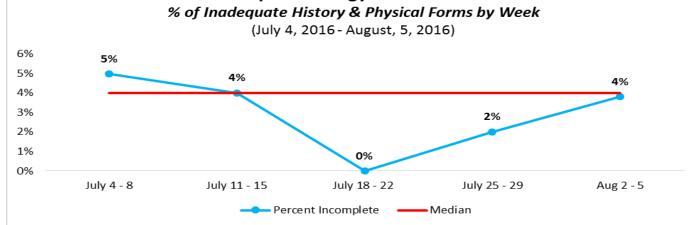
ROOT CAUSE ANALYSIS



PROCESS MAP

Pre DATA







Investigating the Value of Pre-Op ECGs for Cataract Surgery						
Title	Author & Year	Design	Population	Results	Findings	Notes
Routine Preoperative Medical Testing for Cataract Surgery (Review)	Keay, Lindsley, Tielsch, Katz, Schein 2012	Cochrane Review	All patients with age-related cataracts (n = 21,531 sugeries)	707 total adverse events (61 hospitalizations;	Preoperative medical testing did not reduce the rate of intraoperative or postoperative medical adverse events compared to selective testing or no testing.	
		(3 studies: Shien et al., 2000; Lira, et al., 2001; Cavallini, et al., 2004)		'	Cost was estimated to be 2.55 times higher in those who had routine preoperative medical testing compared to those who had selective preoperative testing. There was no difference in the rate of cancellation (approx 2%) between those with routine preoperative testing and those with no or limited preoperative testing.	Rigorous study
Are routine preoperative medical tests needed with cataract surgery? Study of visual acuity outcome.	Nascimento Lira RP, Soares PH, Spessatto N, KaraJose N, Arieta CE. 2004	Randomized control trial	1025 patients: 512 assigned to the routine-testing group (12- lead ECG, CBC, & serum glucose); 513 assigned to the selective- testing group	The two groups had similar proportions of operations canceled and not subsequently rescheduled (2% in each group). The preoperative and the postoperative best-corrected visual acuity were similar in both groups.	Routine medical testing before cataract surgery did not	Rigorous study
Preoperative medical testing in Medicare patients undergoing cataract surgery.	Chen, Lin, Bardach, Clay, Boscardin, et al. 2015	Prospective, observational	440,857 patients	53% had at least one preoperative test in the month before surgery. 36% of ophthalmologists ordered preoperative tests for more than 75% of their patients. Probability of testing was associated mainly with the ophthalmologist's practice.	Preoperative testing before cataract surgery still occurrs frequently, but is more strongly associated with provider practice patterns than with patient characteristics.	Rigorous study

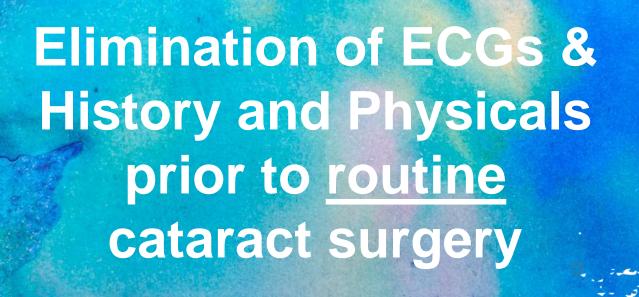
COST/BENEFIT ANALYSIS

Upwards of \$50,000/year

3. Act To Improve

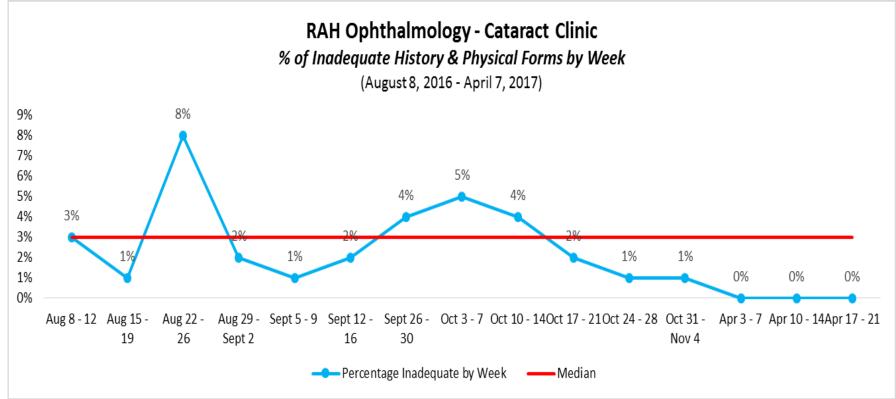
AFTER EXTENSIVE CONSULTATION ...

A radical change!



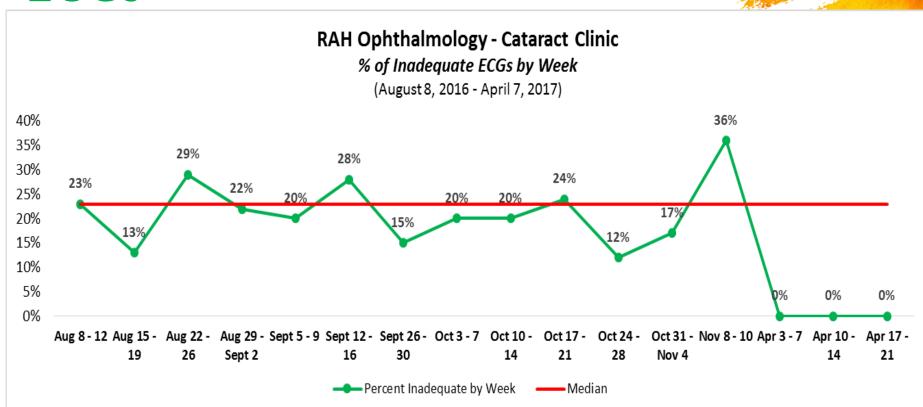
post-DATA History & Physicals





post-DATA ECGs







0% of cataract surgery patients arrive to clinic with outstanding pre-surgery requirements

Shared with other ophthalmology offices throughout the province

4. Sustain Results

Communication Plan

Change Management



Hosted a staff forum to address concerns (transparency)

Held medical/operational leadership accountable for addressing patient concerns that resulted from changes

Cataract Clinic Practice Change - Update Hx & Physical/ECGs

Background

Evidence suggests that ECGs prior to low risk, non-cardiac surgery:



- do not predict patient outcomes,
- do not reduce the rate of occular surgical complications.
- do not influence visual acuity outcomes, or
- do not affect the rate of procedure cancellation.

This, coupled with current efforts to decrease the amount of forms we interact with daily & new billing structures has led to the following practice change:

Patients undergoing routine cataract surgery in Edmonton Zone Hospitals under topical, retrobulbar or peribulbar anaesthesia will no longer require physician history and physicals, nor will they require pre-op ECGs or lab tests.

This initiative is a part of a wider plan to update pro-op guidolinos for all high, modium, and low risk surgories across AHS. Your work in the cataract clinic will influence the roll-out of these guidelines over the coming months.

We welcome your feedback!

Please record any concerns you encounter on the sheet available at the clerk's desk. These will be shared and addressed by the leadership team at the ophthalmology Quality Councils.

Thank you for your attention as we strive to continue to provide safe and quality care to our patients and families.









LESSONS LEARNED

Challenge: Addressing the "Desire" or "What's in it for me?" among ophthalmologists and frontline staff, especially when the "patient voice" did not specifically illuminate a need to change.

Developing relationships among team members, ophthalmologists and their individual clinics was key to success!



QUESTIONS?