Closed Loop Communication

ACT Pathology

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Acknowledgement of Country

Canberra Health Services acknowledges the Ngunnawal people as traditional custodians of the ACT and recognises any other people or families with connection to the lands of the ACT and region. We acknowledge and respect their continuing culture and contribution to the life of this region.

Artwork credit:
Natalie Bateman (Walbanja-Yuin)
Monga Waratah 2021

Communicating critical results to emergency departments

- Timely communication of critical pathology results it is important for safe and efficient patient care
- Laboratories are required to have procedures to identify and communicate critical results, with acknowledgement of receipt (NPAAC)
- This is generally done by phone
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Communicating critical results to emergency departments

- This is not *always* quick

- The time between result going to LIS and a call first call being logged was estimated to be 9.9 FTE over a year

- Results may be communicated to:
  - Nursing staff at station, who then find resident
  - Admin staff (in emergency departments, but not for all results) who then contact clinical team
  - Doctors, who generally action results.

Illustration by Robert Neubecker
https://slate.com/culture/2014/09/history-of-hold-music-how-did-we-end-up-with-handel-tinkling-through-the-telephone.html

Communicating critical results to emergency departments

- While we do have rules around which results to ring, doctors are often expecting abnormal results and the call may just add additional workload.
- All “tier 1” results get called to admitting officer in Canberra Hospital

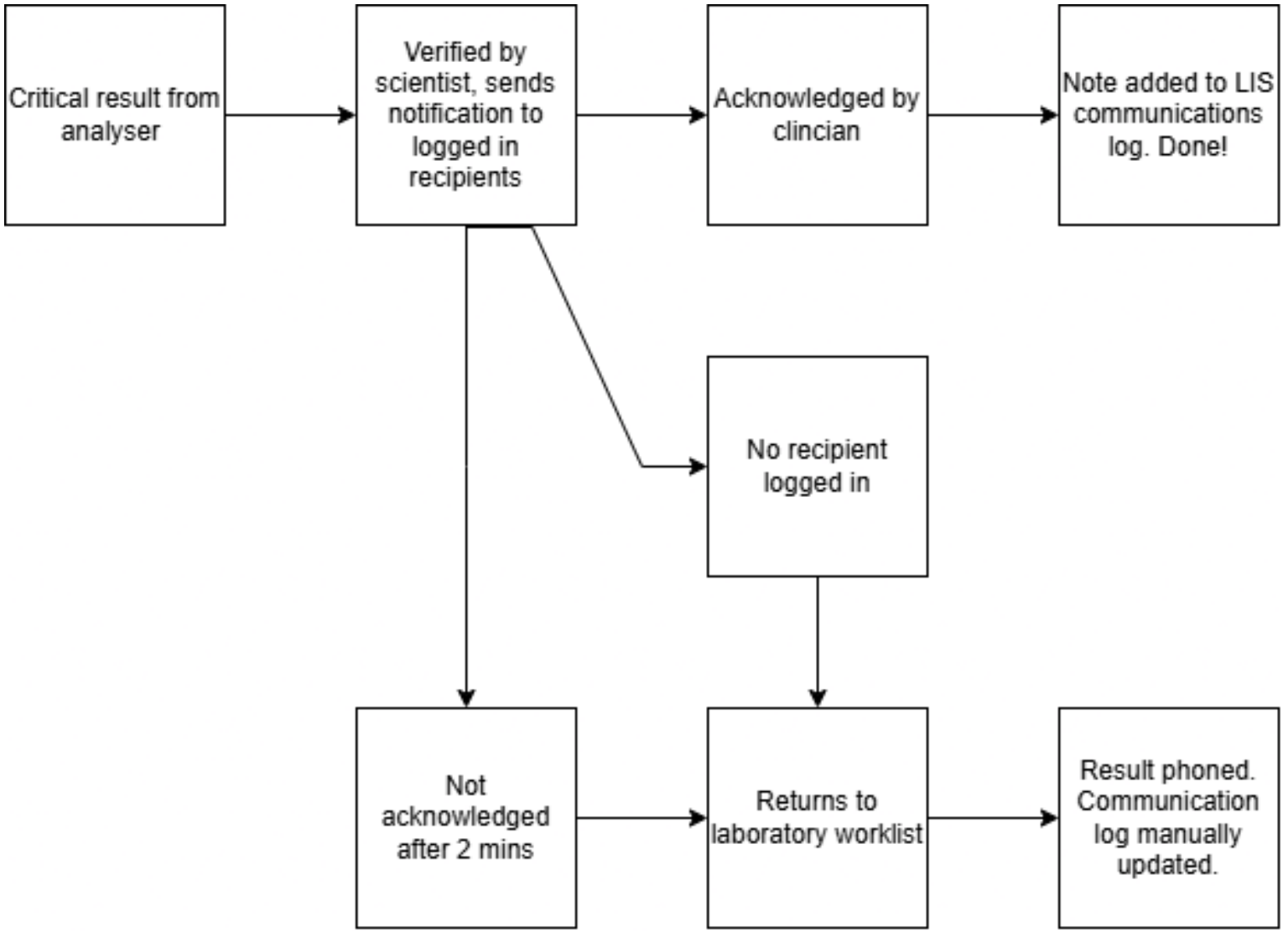
https://www.answer-4u.com/hubfs/The%20Business%20Risks%20of%20Taking%20Phone%20Calls%20at%20Work.png

Communicating critical results to emergency departments

Definitions

- Critical results: results agreed as requiring urgent communication, with numerical thresholds built into the laboratory information system (EPIC Beaker)
  - Does not include results with no critical limits or non-numerical, for example all microbiology
  - Can include site specific rules (e.g. don't call troponin to CCU, neutropenia to haematology) and change in values
- Closed Loop Communication: Result is sent to a provider, acknowledged and the laboratory is notified of that acknowledgement
- Recipients: pre-determined by rules. In ED: requesting doctor, doctors assigned to case, except not interns. Must be logged in when result is verified.

Key change: Process overview



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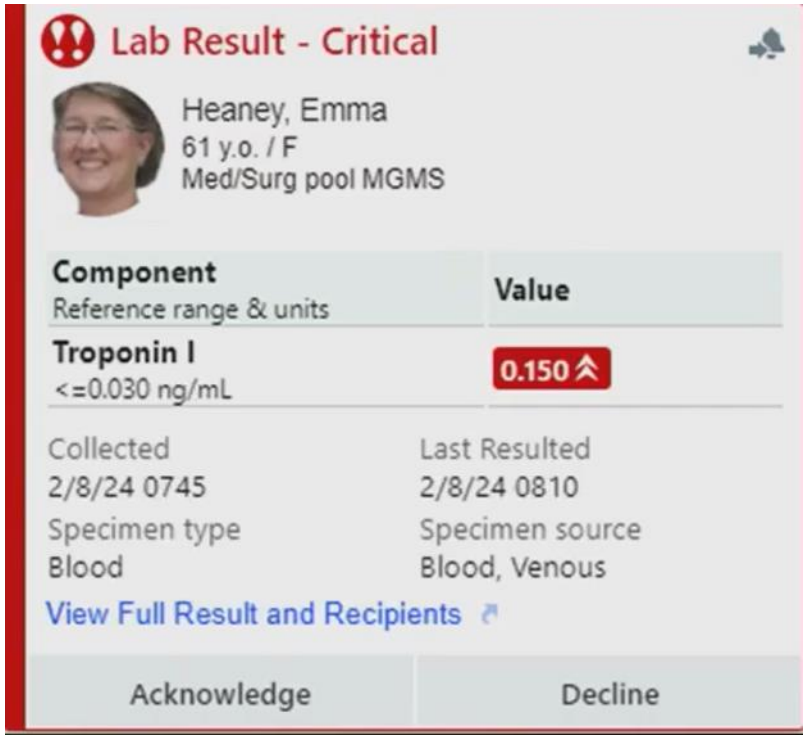
Notification

- Notifications pop up on front of screen to specific recipients
  - Desktop
  - Phone app
  - “Rovers”

- Can be declined if not in a position to action
- Acknowledgment by one removes for all
- Remains even after result returns to lab work list, until lab fills comms log
- Separate to result filing to chart

- Can only be built for people in our EPIC environment



Outcomes April 20 to July 31

- Canberra Hospital
- 47% of critical results acknowledged via closed loop process
- 1140 phone calls saved
- Only for ED (2513 critical results of 13637 hospital wide)
- Mean 21.71 minutes to acknowledgement by telephone
- Mean 14.57 minutes (median 10 minutes) to acknowledgment by closed loop (times are from first coming off analyser)
- Many ED results go to admin staff – further time to action

- Saves about 130 hours of laboratory work time.

Outcomes April 20 to July 31

- North Canberra Hospital
- 27% of critical results acknowledged via closed loop process
- 336 phone calls saved
- Mean 22.34 minutes to acknowledgement by telephone
- Mean 19.13 minutes (median 14 minutes) to acknowledgment by closed loop (times are from first coming off analyser)
- All ED results go to admin staff – further time to action

- Differences in senior staff allocation to cases between the 2 EDs

Next steps

- Endorsed for whole of service
- Planning ICU, ward and OP groups to roll out
- Build pathology determined individual case critical communication to include results without action limits, including

Communicating critical results to emergency departments ACT Pathology

- **Problem:** Communicating critical results is necessary to ensure safety but telephoning carries a significant burden and interrupts workflow
- **Solution:** Electronic closed loop communication within electronic health record
- **Results:** Significant savings in staff time, improved workflows and quicker communication

  Next steps: Roll out to rest of health service.

https://www.apsf.org/article/handoff-communication-an-apsf-safety-initiative-and-perioperative-provider-concern/

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