Safety Enhanced Design Brief

Ensuring Timely Order Results Management

Background: Patient safety concerns arise when results of medical orders are mishandled or lost. Providers need assistance to track their orders in busy and distracting environments, in order to ensure timely medical care. Allowing providers to take action rapidly as they are reviewing results will also increase efficiency and reduce chances of errors (e.g. forgetting to complete the follow-up process). Institutions need help to track on-time and late processing of tests.

1 To help organizations determine normal and abnormal delays

 Log order completion times per order type, test facilities, operators etc. and provide reports.

This will allow organizations to determine what should be considered an abnormal delay. Record at least the time between ordering and return of the results, and when possible record the timing of each step in the process to detect the source of the delays (alternatively consider modeling the multi-step processes)

- Allow users to define thresholds for abnormal delays
- Use those thresholds to tag orders as late or lost
 (e.g. a blood test sent to an outside facility may be considered late if no results are received after 5 working days, and lost after 10)
- Allow customization, i.e. not all orders need to be tracked

Either allow for manual selection of a few orders for assisted tracking, or track all orders but allow manual de-selection of certain orders or order types that may be tracked "as needed" on a case by case basis

2 To improve safety by improving awareness and reducing missed results

Show pending results

In addition to the usual list of results to review, give rapid access to a list of pending orders, especially those that have NOT returned after the expected time (i.e. late or lost).

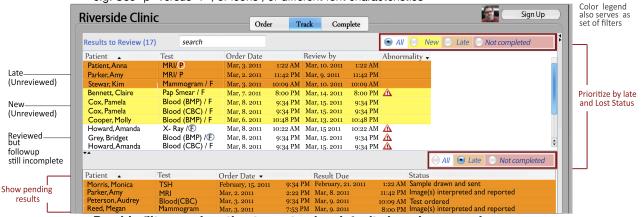
• Sort tables of results by order of importance for timely management

Results that have not been reviewed in a timely manner move to the top of the result list . Next list results that are new, then results that have been reviewed but the follow-up is incomplete.

Similarly the pending orders that appear to be late or lost move to the top of the pending orders list. Support sorting by criticality

Distinguish preliminary and final results in the lists of results

e.g. Use "p" versus "F", or icons, or different font characteristics



When possible clarify responsibility

(e.g. indicate the last person or office to take action on the order)

Provide retrospective analysis interfaces to managers

so they can monitor and compare the performance of various order processing facilities, adjust lateness thresholds or take action so late or lost orders can be processed or re-ordered. Provide filters and sorting to customize default views by user role

e.g. while you can support providers by showing only their orders by default, you can support office assistants by showing critical, late or lost results for todays' patients (so they might make appropriate calls to test facilities), or support clinic managers by showing results with late or no follow-up so they could alert providers or reassign results for review.

• Embed Actions in result tables for quick handling of common/low risk tasks

e.g. "inform patient" (while reviewing normal results), or "cancel order" (while reviewing list of pending

