

Results Handling

Aim

100% of all lab results will be actioned within seven days

Background

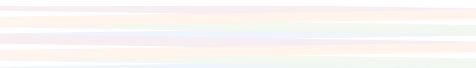
Internationally it is well recognised that the systems-based management of test results, and their communication to patients in primary care, is both complicated to manage and vulnerable to human error. The consequences can include avoidable harm and unnecessary distress, with suboptimal clinical management of illness and delayed treatments, poor experience of, and dissatisfaction with care, inconvenience of return appointments, repeat tests and complaints.

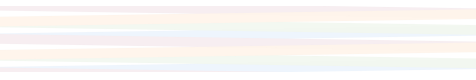
In its 2016 policy brief, "Managing patient test results", RNZCGP highlights that cases involving mismanagement of results within practices are an important source of complaints to the Health and Disability Commission. The brief refers to guiding principles for practices, initially outlined by the RNZCGP in 20053, which encourage practices to:

1. Create a culture where patients and staff can raise concerns about problems with processes and errors, acknowledging that mistakes can happen. Be hard on systems, but easy on people.
2. Develop a system to audit and improve the management of patient test results.
3. Have a clear, documented policy covering:
 - a. Patient notification
 - b. The process for tracking and managing tests ordered including identifying missing
 - c. results (particularly significant results)
 - d. Staff responsibilities (including results interpretation)
 - e. Actions and follow-up, all in a clinically appropriate and timely manner.

This audit and change package used by SiP has been developed from the Scottish Patient Safety Programme in Primary Care and has undergone over 6 years of development and testing with over 500 practices.

Instructions

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1. Identify patients for whom one or more of FBC/eGFR/LFT/TFT has been ordered in the previous month. A query has been developed for MedTech and My Practice PMSs to assist with this, which is available online. Ensure you change the dates.
 - This care bundle recommends focusing on Full Blood Count (FBC), eGFR, Liver Function Tests (LFT) or Thyroid Function Test (TFT) but you can vary this to suit your practice needs
 2. From the identified list, randomly select a sample of 10 patients
 3. Print and complete the Results Handling Audit Paper Form (included in the Results Handling audit spreadsheet)
 4. Transfer the data collected to the Results Handling audit spreadsheet
 5. Please make sure the date is entered beside each individual record. The data will automatically be collated and displayed on the run charts that can be printed as needed
 6. Save the spreadsheet
 7. Email the completed spreadsheet by or on the 10th of each month (i.e. June data is due on 10 July, July data is due on 10 August).
 8. The spreadsheet is to be emailed to your PHO Facilitator.



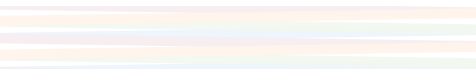
Audit Questions

Measures	Rationale	Guidance
<p>Was a definitive decision recorded by a clinician on EACH test result within seven calendar days of being received?</p>	<ul style="list-style-type: none"> • Risk exists around the variability in how clinicians acknowledge receipt of results and then action/respond to them. • Unclear or ambiguous test result communication by doctors can lead to uncertainty amongst other team members about how the result should be interpreted, what action needs to take place, and what should be communicated to the patient. • Unclear processes and variability creates increased workload within teams which contributes to stress and the likelihood of errors. • If new team members or locums do not understand the processes for the practice things are more likely to be missed. <ul style="list-style-type: none"> ◦ RNZCGP (2016, April) Managing patient test results Policy Brief, 6 	<ul style="list-style-type: none"> • The query for this module uses the FBC to generate a list of patients who have had blood test results done in the previous month. • Once you have the patient list you are going to look at ALL of the blood test results that have come back for that patient from that test order. EACH of the results needs to meet the measures criteria in order to answer YES for that patient. • Responses for this measure can only be 'YES' or 'NO'. If ANY of the results for a particular patient do not have a clear decision recorded by the clinician then the response will be NO. • This is an 'All or Nothing' approach, "Every Patient Every Time".
<p>Have the decisions for EACH test result been 'actioned' by the practice including appropriate recalls and tracking of the actions? (If no actions are required record at N/A)</p>	<ul style="list-style-type: none"> • Inconsistent processes increase the risks of errors and oversights, so undertaking actions in a consistent manner on every occasion decreases risks. • Communication between team members is a common area of risk – the practice's communication system need to be understood and effectively implemented by all participants. 	<ul style="list-style-type: none"> • Laboratory test results may or may not require further action to be taken for a patient. Examples of action might be: • Recall the patient for a further follow-up test in 6 months. • Contact the patient for review with the doctor. • Contact the patient to adjust the dose of a

	<ul style="list-style-type: none"> • All incoming test results or other investigations must be sighted and actioned by the team member who requested them or a designated deputy <ul style="list-style-type: none"> ◦ “Aiming for Excellence” RNZCGP Indicator 23 	<p>medication.</p> <ul style="list-style-type: none"> • For those patients where there were any actions required following the result, the response would be YES if every required action was clearly completed for EACH of the test results. If only some of them were completed but others had not, then the response would be NO. If there were no actions required for any of the test results for that patient then the response would be N/A.
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Was the patient informed as instructed? (If no instruction record at N/A)

<ul style="list-style-type: none"> • Unclear processes around notifying patients of their results creates confusion for patients and clinicians and are a common area of risk. This can be around who is responsible, along with how and when results will be conveyed and any actions required. • When a clinical investigation is requested, it should be discussed with the patient why it is recommended as well as when and how they will learn of the results so that all parties understand their responsibilities clearly. • Patients must be provided with information about the practice process for notification of test results – including, if standard practice is not to notify normal results, patient consent not to notify should be obtained. • If results do need notifying it should be clear how this will occur and in what timeframe, along with a record of all communication (including unsuccessful attempts). 	<ul style="list-style-type: none"> • Many practices have a policy that patients will not be specifically contacted if all the results are normal and do not require any actions. Patients need to clearly understand that this is the case, and if they want to be contacted regardless then this should be done. Therefore this is a good opportunity for practices to check on how patients are informed on this policy, and that they have the option to be contacted anyway. • This measure is checking that patients are informed of their results in the way that has been agreed and arranged with them. • If it was agreed that they would not be notified if the results were normal and they were all normal then choose N/A.
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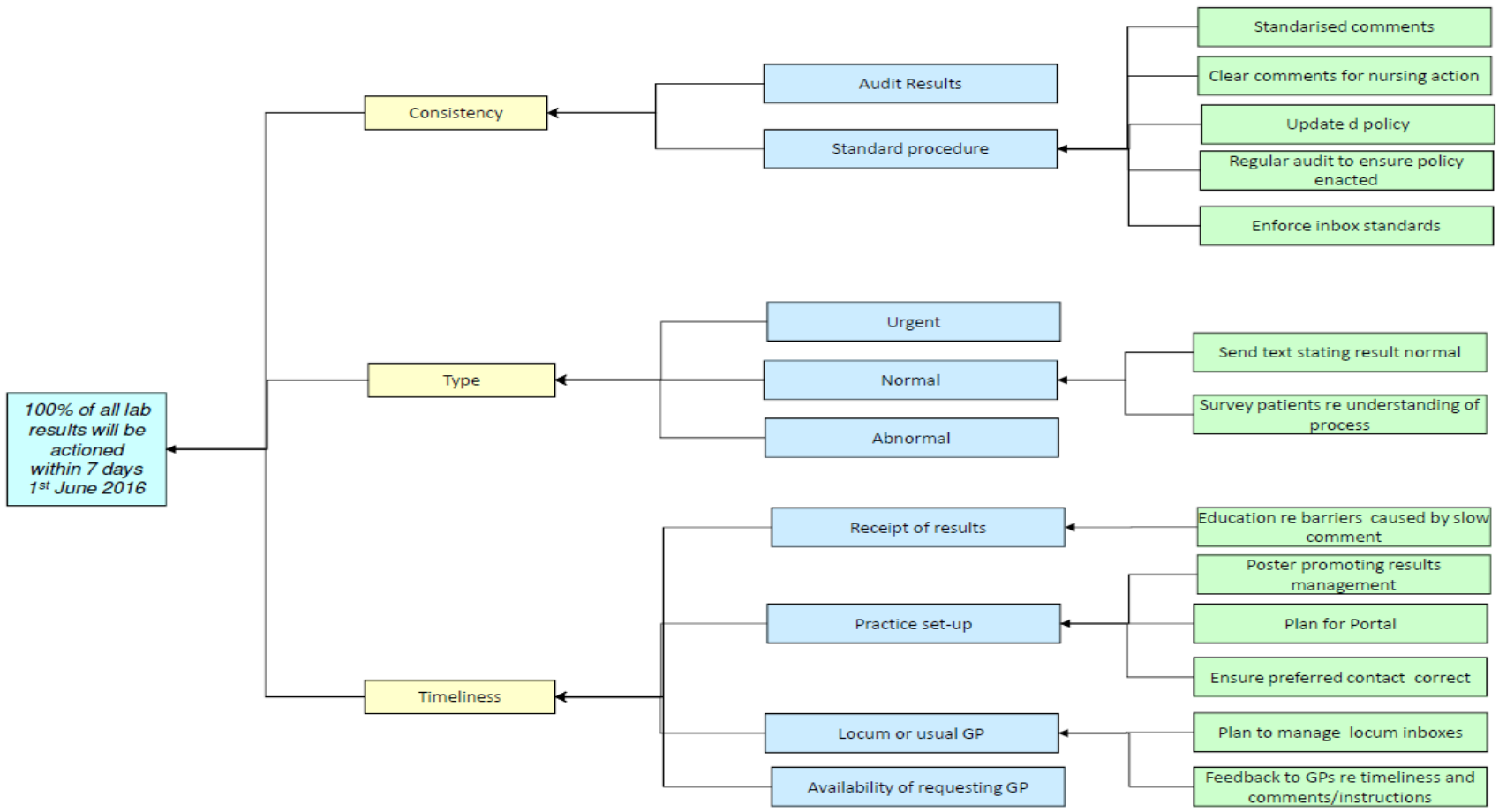


- The management of clinical investigations Dr Ian St George. Cole's Medical Practice in NZ – 2013 Medical Council of NZ Chapter 14
- "Aiming for Excellence" RNZCGP Indicator 23

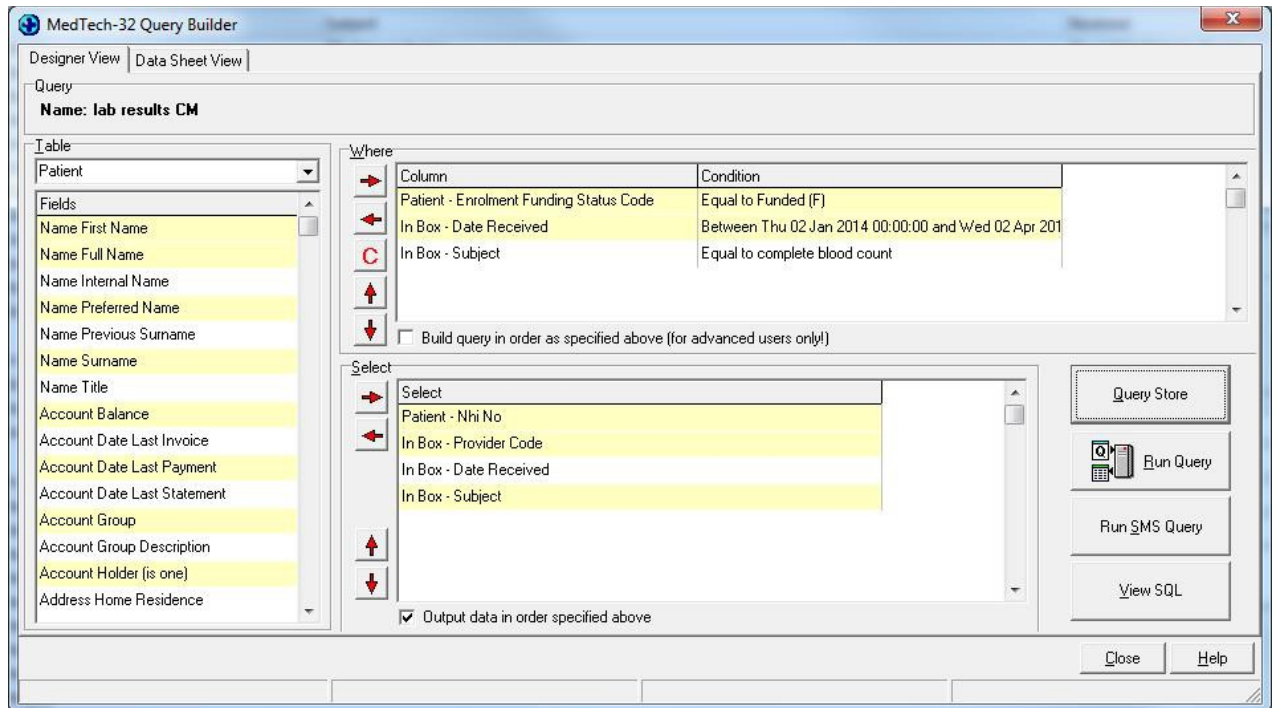


Theory of Improvement

AIM Measures	Primary Drivers	Secondary Drivers	Change Idea
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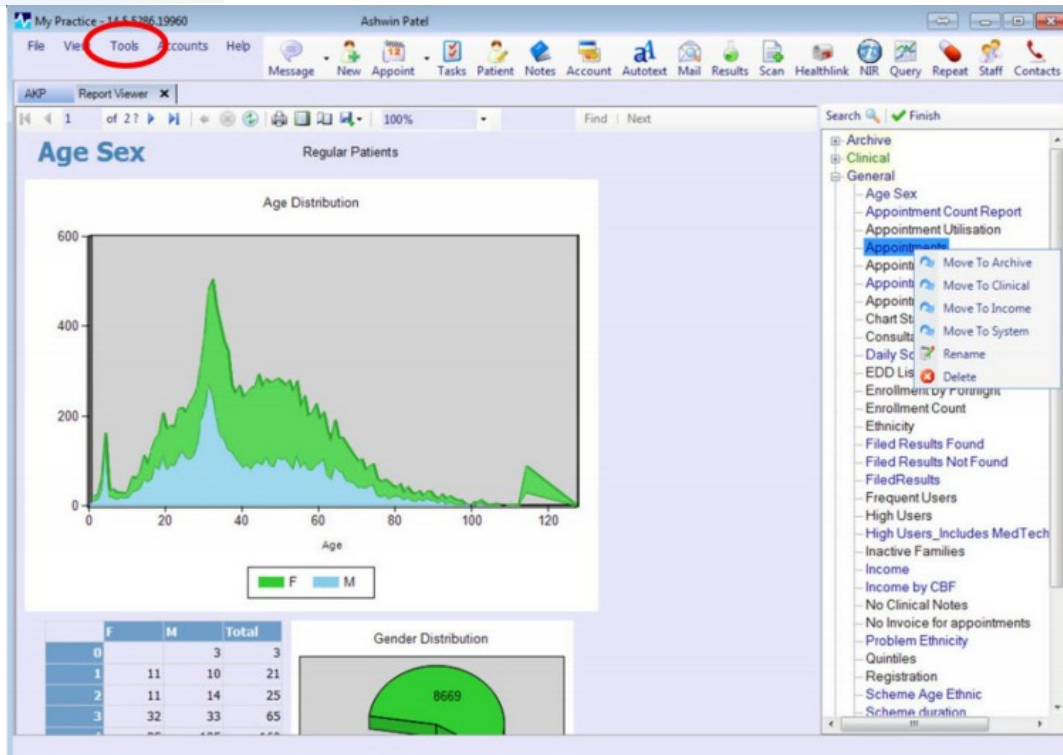
Query Build Example



Once you've imported the query you need to open it up and change the date parameter to the previous month (this will need to occur each time you run it) e.g. between 01/08/18 and 29/08/18 this should capture all the FBC results between this period. If you are finding there isn't 10 then use another measure e.g. LFT (a new query will need to be created for this)

My Practice

- Select Tools > Report Viewer to bring up the menu on the right hand side
- Medication Reconciliation and Results Handling are in the general folder.
- Click on a report name to run the report. You may be prompted for parameters such as date ranges. Reports may take a few seconds to minutes to run.



Change Ideas Tested by Previous Practices

Change Ideas Tested by Previous Practices	
General	<ul style="list-style-type: none"> • Have a doctor and nurse champion in the practice.
Ideas around practice processes	<ul style="list-style-type: none"> • Ensure patient 'preferred contact' info up to date – front desk and other team members • Text (or post letter) for normal results. • Enforce INBOX standards sent to doctors. • Allocating other doctors to monitor inbox of absent doctors. • Result forwarded to nurse to follow-up if result is not normal/stable. • Integration with use of patient portal. • Update results management policy and processes as a result of work in module.
Ideas around recording process in patient management system	<ul style="list-style-type: none"> • Use of "key words" within Medtech to speed up process and ease of writing comments that commonly used. • Agree as a practice on a selection of standardised INBOX comments. • Comments section used to advise nurses on action desired.
Ideas around practice team	<ul style="list-style-type: none"> • Education of doctors in barriers to dealing with results in a

roles and responsibilities	<p>timely manner.</p> <ul style="list-style-type: none"> • Individual feedback to doctors to not include both interpretation and action required. • Lead clinician audited inboxes/results daily.
Ideas around patient education	<ul style="list-style-type: none"> • Communication with patient at each visit as to how result will be communicated. • Update information on 'results process' for patient education. • Poster in waiting room advising patients to check for results if it has not been communicated to them within seven days of performing tests
Ideas around patient involvement	<ul style="list-style-type: none"> • Survey patients on their knowledge of current process. • Involving patients in the change process – provide good feedback on what they think works best from their perspective.

Benefits

- Streamlined, efficient systems.
- Buy-in from all staff.
- Aided integration of patient portal.
- Medical staff now check inboxes prior to leaving for the day and during the day as appropriate.
- Alerts and recalls set routinely.
- Quicker communication of results to patients.
- Strong drivers to doctors continuing to consistently annotate and try to improve.
- Decreased nurses workload.
- Better awareness within team of others' roles.
- Fewer interruptions to do with interpreting someone's results.
- Springboard to addressing other systems issues within the practice.

Issues

- GPs are finding that it takes longer to annotate results
- Keep developing new keywords for results – perhaps too many
- Sluggish uptake from some GPs to utilise standard result notes and participate
- We realise there is much more to be done and probably we are not that great at actually measuring things.

Additional Resources

Results Comments

Non-actionable comments

- Results are normal
- Normal see task
- Results slightly out with normal range but acceptable and no further action is needed
- Tell Patient Acceptable
- Noted EGFR low – no action needs to be taken
- Patient has been told
- Tell patient when they phone in
- Document seen – no action required”
- Review already organised
- GP has spoken to patient
- Nurse has already spoken to patient
- No significant infection found
- Antibiotic already given

Actionable comments

- Add/Change medication
- Contact patient and tell them
- Kidney function slightly abnormal – repeat in 1 week – phone patient
- Make an appointment for bloods
- Make an appointment for fasting bloods
- Make URGENT in person appointment with
- Make URGENT telephone appointment with
- Make NON URGENT appointment with
- Make NON URGENT telephone appointment with:
- A particular doctor

- Any doctor
- Make in person appointment with PRACTICE NURSE
- Make telephone appt with PRACTICE NURSE
- No action today – workflow to usual GP to advise
- Other results normal – forward to practice nurses for cholesterol/blood sugar comment
- Repeat test(s)
- Prescription required
- Prescription issued
- DNS to do test action to arrange with them
- Please print result and post to patient with attached comment if any
- Send benign letter to patient confirming that lesion removed at minor surgery was benign and does not need any further action.

Key Words

Key words relating to common results:	
.n	normal – within normal range
.,	normal (easier to type)
.n	normal no action required
.a	abnormal but acceptable
.a	acceptable
.a	acceptable, no action required
.aa .ar	acceptable, repeat in ...
.an	acceptable no action required
.abn	abnormal
.neg	negative no action required
.nad	no abnormality detected
.nar	no action required
.st	stable, continue to monitor in
.stn	stable no action required
.str	stable recall in
.sim .s	similar to previous - no current action required

Key words for timeframe of action:	
.disc .d	non-urgent, can discuss at next clinic visit
.tci	to come in (for review) pt to make appt to come in within 2 weeks
.tc	patient to come in to see doctor urgently
.tc2	patient to make appt to come in to discuss – not urgent
.tciu	to come in to see doctor URGENTLY pt to make appt to come in URGENTLY
.tci	to come in (for review) pt to make appt to come in within 2 weeks
.rgp	routine GP appointment
.ugp	urgent GP appt within XX days (where the X's need replaced with a number)
.1w	repeat in 1 week
.2w	repeat in 2 weeks
.1m	repeat in 1 month
.3m	repeat in 3 months
.6m	repeat in 6 months
.1y	repeat in 1 year
Key words specific for advice to patients:	
.let	to send letter with explanation and advice
.life	please discuss appropriate lifestyle advice + recall in:
.pa	advise patient (specify message to patient)
.rt	repeat test form at reception for collection
Results ordered by providers external to practice:	
.os	ordered by specialist/external provider
.s	test ordered by external specialist or provider
.sp	test arranged by specialist
.sp	test arranged by specialist. Follow up by specialist.

.ex	ordered and being f/u by external provider
.ext	external request – no action required
.ix	further investigations arranged further investigations organised – patient informed
Key words relating to warfarin INR:	
.inr .i	INR result has been actioned
.wm	patient under warfarin management
Key words relating to changes in medications:	
.me	note change in medications

Patient Engagement

In order to try to improve the services we provide our patients, please can you take a few minutes to answer these questions about your experience of having blood tests taken and receiving the results?

1. What went well with your experience of having a blood test and receiving your result?
2. What did not go well with your experience of having a blood test and receiving your result?
3. How could your experience of having a blood test and receiving your result be improved?
4. What matters to you most when you have blood tests taken and receive your results?

Practice Self-Assessment Questions

These questions might usefully guide a practice meeting about how to make your results handling systems safer.

Systems issues

- Does our practice have a results handling system outlined in a protocol?
- How does our practice ensure the results are reviewed and acted on in a timely manner?
- How does our practice handle results when a clinician is absent from the practice (e.g. on leave or due to illness) and/or when a locum orders a test?
- How does our practice action emergency test results communicated by the laboratory?
- How does our practice track tests that are ordered and results received so that missing results are identified and chased up?
- How does our practice monitor the reliability of its result handling system?

- How does our practice ensure laboratory results are reviewed and commented on by the appropriate clinician?
- What is the system in our practice to ensure laboratory results are seen by the clinician who ordered them?
- Do we have standards for reviewing abnormal and/or normal results within clinically appropriate timescales agreed within the practice?
- What is our practice system for dealing with multiple test results not yet returned to the practice? (i.e. this is to avoid a situation where a number of tests have been carried out and the patient is told that the result is normal, when other test results are still to be returned).

Training issues

- How are our staff, including locums, trained in the results handling system?

Communication issues

- Has our practice agreed on the nature of wording used to communicate test results? (e.g. 'no action' or 'normal' comments are often not of assistance to administrative staff in communicating effectively and safely with the patient)
- How do we review these phrases to ensure they are appropriate?

Patient's health literacy issues

- How does our practice inform our patients about the different steps involved in how, when and how to access their test results?
- How well informed do we feel our patients are about the process?
- How does our practice record that it has notified patients of their results and actions required?
- How does our practice identify patients who do not make appointments for tests or who do not attend for a related appointment?

Alternative Method – Tested by one practice

Nominate a staff member (nominee,) likely admin/reception staff, to run the initial part of the bundle progressively over seven days. Ensure nominee has access to and familiarity with the PMS sections/icons to complete the bundle audit. Select a random number generator the nominee can use (Google this, multiple choices) or simply select a list of numbers and use these each time, e.g. first 10 prime numbers; every third number starting from four. (For ease, I would recommend either of these two choices rather than random number generator). Identify a clinical staff member to complete the bundle (clinician).

1. Initially run through one trial audit of ten patients to assess the amount of time taken and effectiveness of the process then discuss as either the full practice team or the core Safety in Practice team in regard to:
 - a. Size of audit e.g. stay with ten per month vs expanded numbers based on practice size

- b. One audit per practice vs one audit per GP. Consideration may relate to level of FTE e.g. audit all GPs over 0.4 as separate audits and those equal or under as a group
 - c. Remember this is not necessary as the bundle is for an audit of 10 per month but may give more valuable data to both the practice and individual GPs but will be at a cost of time.
2. Nominee decides which day to select to start the bundle not advising other staff
3. Nominee starts prior to GPs on the day of the audit
4. Nominee opens provider inbox and selects all providers. After the initial audit and discussions above this may need to be for each individual GP or selected groups depending on practice decisions. Use the filter button (looks like a rainbow) to select lab test only for the provider inbox
5. Using random number generator, select the highest number for each providers' inbox and generate the list of ten numbers or use the preselected numbers to select the audited results.
6. Nominee records the NHI for the selected audit group and looks at results and checks that they are assigned to a specific GP from the practice.
7. Day 2, the nominee reviews the practice/specific-provider inbox and reviews if results are still present or have been filed. If not filed, is there any evidence the GP has interacted with these? E.g. record in notes or use "audit tab" heading within the inbox to see if the GP has accessed the result (question one)
8. Day 7, the nominee gives the NHI list to the clinician
9. The clinician reviews the inbox and notes of the patient and answers questions two, three and four of the bundle
10. The nominee and the clinician meet briefly to advise if question five is yes.

This completes questions one to five of the bundle.

In regard to question 6 and 7 of the bundle, the easiest way to do this would be to set all lab requests to be tracked starting the first of the month, and at the end of the month review any tracking tasks not signed off. For those patients who have not had the tracking task completed, review the notes and see if the requested task has not been done. Discuss the uncompleted list at a practice meeting. What does this mean to the practice; how do we manage this in the future?



- Summary of the evidence on patient safety: Implications for research. World alliance for patient safety: WHO:2008
- Fryer AA, Smellie WS. Managing Demand for Laboratory Tests: a Laboratory Toolkit J Clin Pathol 2013;66:62-72
- Managing Patient Test Results. RNZCGP 2005