safety IN PRACTICE

General Practice Trigger Tool Guide 2020-21

Every patient, every time

AUCKLAND DISTRICT HEALTH BOARD Te Toka Tumai

Waitematā District Health Board

Best Care for Everyone

ALLIANCE HEALTH+ Inspiring Health Transformation

AUCKLANDPHO

comprehensive care

National Hauora Coalition

ProCare

Adapted with permission

Contents

Glossary & Abbreviations

ADHB	Auckland District Health Board
COPD	Chronic Obstructive Pulmonary Disease
CVD	Cardiovascular disease e.g. angina, heart attack
INR	International normalised ratio. A blood marker used to monitor the anti-coagulant medication warfarin.
LTC	Long term conditions
NSAIDs	Non-steroidal anti-inflammatory medications e.g. ibuprofen
Patient safety incident	Anything that happens to a patient as a result of interaction with healthcare services (environment, workers, and treatment) that you would not want to happen to you or your relatives.
PMS	Patient management system e.g. MedTech, MyPractice, ToniQ, RxOne
PHO	Primary health Organisation e.g Alliance Health Plus, Auckland, Comprehensive Care, East Health Trust, National Hauora Coalition, Procare, Total Healthcare
TIA	Transient ischaemic attack, also known as a 'mini-stroke'
Trigger	A trigger is a 'prompt' or a 'flag' that indicates that the patients' notes need to be examined in more detail looking for a patient safety incident that may or may not have occurred.
WDHB	Waitemata District Health Board
SIP	Safety in Practice

Section 1: Overview

1.1 Introduction

The practice of medicine today is complex and at times carries risks. Primary care practitioners have recognised that patients may experience harm or a patient safety incident as a consequence of their interaction with the health service.

A patient safety incident (PSI) can be defined as:

"any event or circumstance that could have resulted, or did result, in unnecessary harm to a patient"

WHO

" it includes both 'near-misses' and 'adverse events'"

HQSC

It can also be useful to think of it as:

"any clinical or administrative incident that 'should not have happened', something to be avoided in the future"

"something that you would not want to happen to you or your relatives"

BPAC & NHS Scotland

The rate and severity of patient safety incidents is still being researched, with reports varying from as low as 1 incident per 120[1] consultations, with more recent data suggesting rates of 7-10 incidents per 100 consultations[2]. Most of these episodes cause minor harm and related to medication.

1.2 What is a trigger tool?

A trigger tool is a simple, cost effective methodology that is widely used across the health sector to identify, quantify and track patient safety incidents in order to improve the quality and safety of services provided. Trigger tools have been shown to identify up to ten times more patient safety incidents than traditional approaches, such as voluntary reporting. The Trigger tool approach typically identifies the more common every day 'incidents', particularly near misses, that may impact on the patient experience but which don't reach the threshold for reporting. They should therefore be regarded as an important complementary tool[3]. The Global Trigger Tool (GTT) was developed by

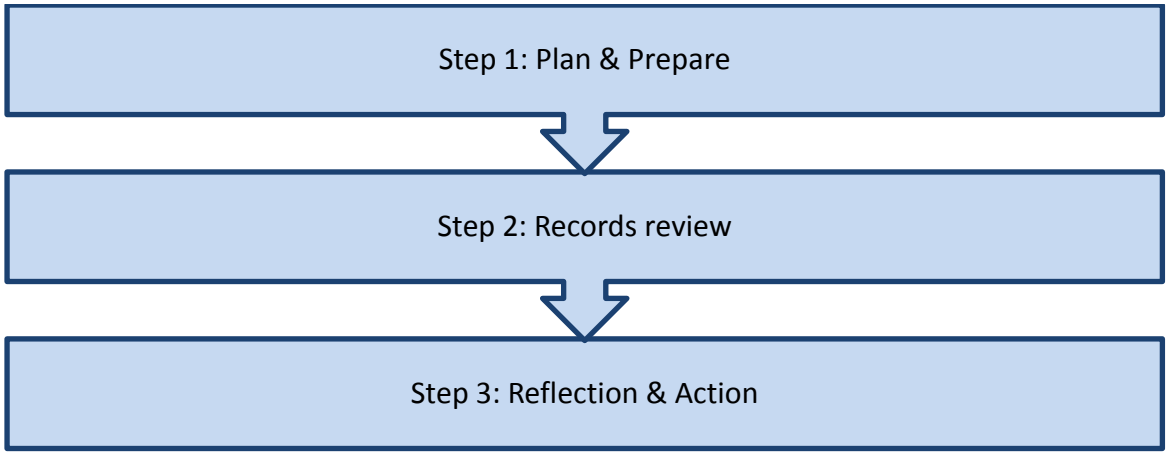
the Institute for Health Care Improvement (IHI) and is used internationally. The Safety in Practice (SiP) trigger tool has been adapted to include relevant 'triggers' that are appropriate to New Zealand primary care setting[3].

The primary aim of the trigger tool is to identify patient safety incidents by rapidly reviewing a selection of case notes in a structured and focused manner, and use them as a focus for improvement. Rather than trying to review all patient notes, a cohort that is relevant to the practice is chosen, where patient safety incidents may be more likely to occur. A random selection of patients from this cohort is screened against a checklist of "triggers". A trigger is not a patient safety incident, a trigger is a 'prompt' or 'flag' to indicate a detailed review of the patients' records is required, looking for possible patient safety incidents. The focus is not on individual error, but on system and processes behind any errors, with the aim of identifying how to improve these to minimise the risk of recurrence.

The Trigger Tool can be used as part of a quality improvement activity for Cornerstone accreditation.

Section 2: Instructions

The Trigger Tool Process



Step 1: Plan & Prepare

Before you start this process, it is suggested have a practice meeting to introduce the concept and discuss what is involved and how you plan to approach it, for example:

Who will be involved?	How you will share findings with your team?	How you will prioritise and plan any improvements as a result of the review?	How frequently will you undertake reviews?

Whilst unlikely, it is possible that you may find a serious patient safety incident during your review, making it important that your team consider how this would be managed within the practices' Incident Management System.

In particular it is important to discuss the concept of patient safety incidents in the context of the SiP programme, reassuring team members that the trigger tool is for system improvement and learning and not to focus on individual accountability. By involving team members in the review who don't have a formal governance role you are expanding and up skilling them in patient safety. You can use the poster in Section 3.1 to raise awareness of the trigger tool in your team.

Find your cohort

Patients' susceptibility to safety incidents varies widely and is influenced by many factors, including ethnicity, age, frequency of consultation, co-morbidities and the number and types of prescribed medications.

The rationale for choosing a specific sub-population of patient records to review is that some patients are more likely to experience harm or have potential to experience more harm than others. Choosing a higher risk cohort increases the likelihood of detecting patient safety incidents and provides greater opportunity to reduce harm and make improvements. There is no single 'right' group to choose. The selected patient groups are likely to depend on the practice demographics, reviewers' preference and ease of identifying the cohort within your patient management system.

You will only choose one cohort for the Trigger Tool for this review, but it could consist of a combination of factors, for example Māori patients over the age of 50 who have diabetes.

Examples of potential cohorts

Table 1: Examples of potential cohorts

At risk individuals	Patients with one or more LTC	Patients on one or more high risk medication/s
Residential care/housebound	Chronic kidney disease and on NSAIDs	Insulin
Aged 75 years or older and on 6 or more medications	COPD	Opiates
Recent or multiple hospital admissions	Diabetes	Warfarin
Palliative care	Heart Failure	NSAIDs
Recent death	CVD	Diuretics x2
Ethnicity	Stroke / TIA	
Combinations of the groups above Example**:** Residential care patients prescribed NSAIDs; patients with heart failure and who are prescribed 2 or more diuretics.		
Choose your own cohort Example: Patients discharged after an unplanned hospital admission (review the period before and after admission), Māori or Pacifica patients.		

Select random records within your population

A list of 25 records is then randomly selected from your cohort. This is the maximum number of records you'll review.

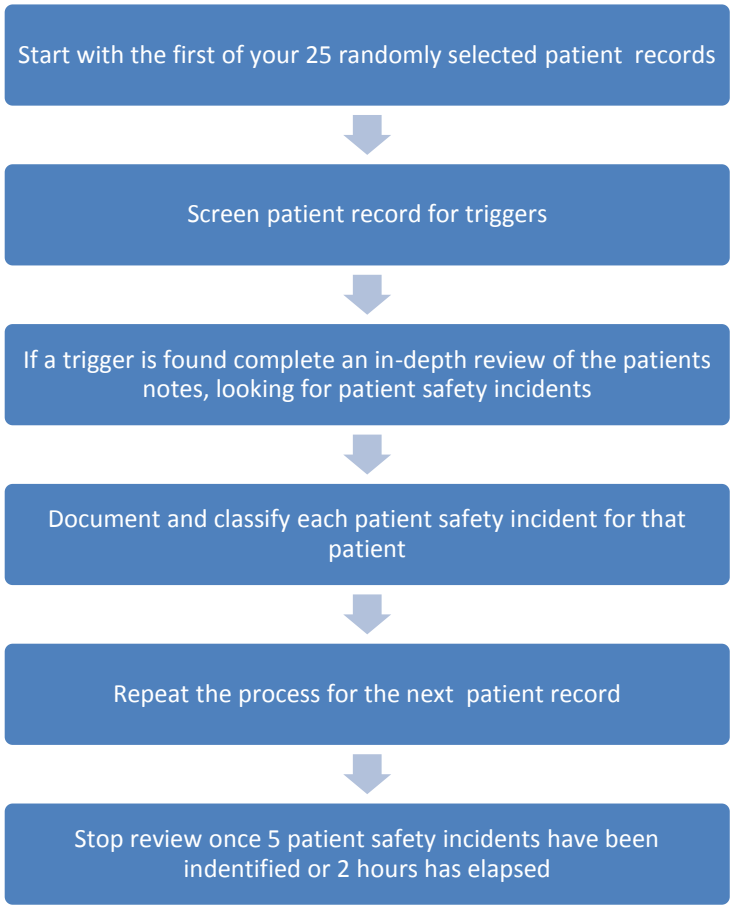
To do this it is recommended that you search for an online random number generator to help you select a total of 25 records. An example of a random generator that other practices have found useful is Research Randomizer https://www.randomizer.org/

Please Note: *Safety in Practice does not endorse advertising associated with such tools.*

Step 2: Records Review

In brief:

In each patient record apply the following process:



Timeframe

It is recommended that **three consecutive complete calendar months** are reviewed in each record; however any number of months may be chosen, depending on a clinician or practice's specific aims and available resources. The *same* calendar months should be reviewed in each record during this trigger tool process.

To allow relevant correspondence to return from other health care colleagues, we suggest you allow at least two to four weeks from the end of the last month of the review period before undertaking the review.

Document as you go

- We suggest you document your findings as you go using the 'Trigger Tool Submission Form' in Section 3.2.
- Tick one box each time you find a trigger in the record.
- Some triggers may occur more than once.
- More than one patient safety incident may also be recorded for the same patient.

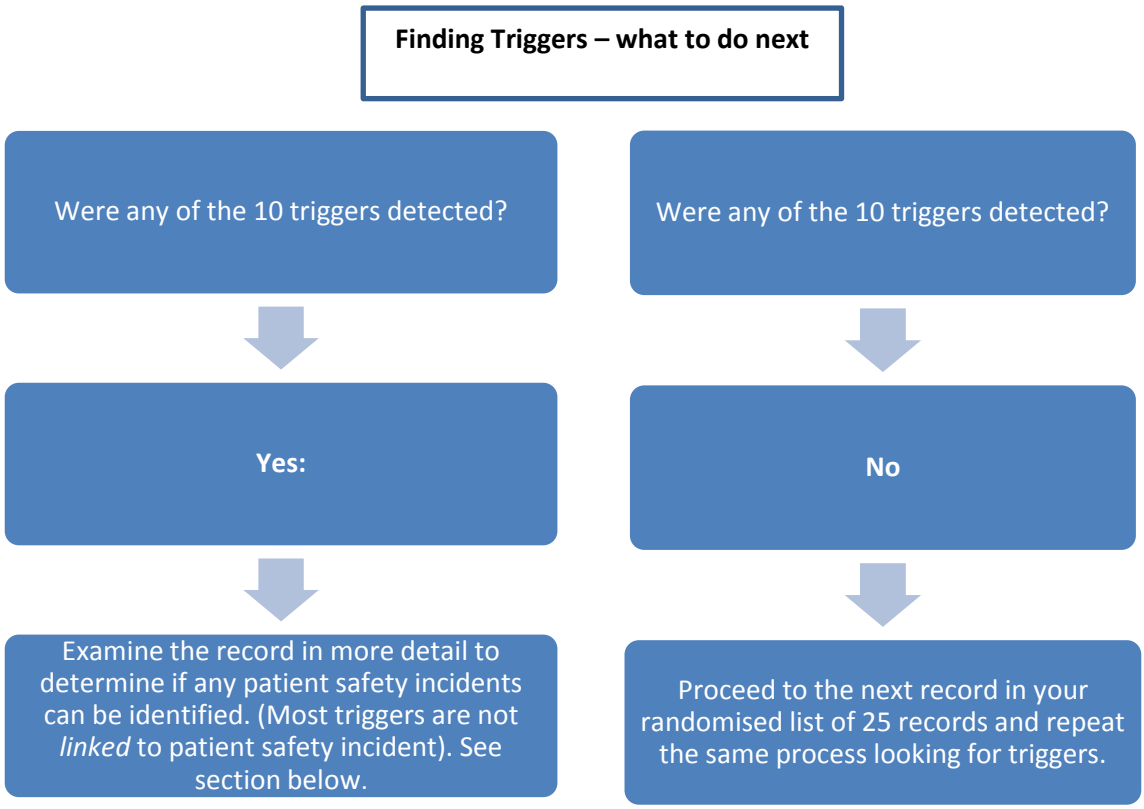
Remember: A trigger is not the same as a patient safety incident.

Looking for triggers

A trigger is a 'prompt' or 'flag' that indicates that the records need further, in-depth review looking for a patient safety incident i.e. actual harm or a near miss. You will review each record in turn checking against each of the following 10 triggers. When checking for triggers briefly review each section of the PMS in turn.

Table 2: Explanation of triggers

Trigger	Explanation
≥2 consultations within 7 days	Multiple consults can be the result of the patient being very unwell, needing review or treatment not progressing as predicted. Look for unintended events from other care/treatment that required consultation
Cancer	New diagnosis of cancer within the review period.
New allergy/adverse reaction	An allergy/adverse drug reaction documented through the 'alert' system in the PMS within the review period.
Cessation of medications	Look for medications that have been stopped or discontinued and the reason this was done. This may be due to factors such as drug interactions, development of side-effects, or medication no longer indicated. It may also be related to a prescription error. Do not count medication initiated as a trial unless there was a premature stop to the trial.
Reduction in medication dose	Look for change in the dose of a medication and the reason for the decrease in dose. This may be due to factors such as change in medication regimen, development of side effects, or drug interactions.
Attending Emergency Dept. or After Hours provider within the review period.	Look for reasons; this could indicate an inadequate response to GP initiated treatment, incorrect diagnosis, inability to access GP review or deterioration of the patient's health.
Hospital discharge	Refers to *any* unplanned (e.g. emergency admission) or planned admission (e.g. elective surgery) during the period of review. The discharge correspondence and the period just before and after the admission should be screened for the presence of potential patient safety incidents.
Hb < 100	Refers to haemoglobin of < 100.0 g/dl recorded during the period of review. It is a prompt to consider the possibility of a patient safety incident and general care of a patient and does not by itself signify error or patient safety incident.
eGFR (<35)	Patients with results outside of range have a greater risk of experiencing an adverse event. The lab value is only a trigger, so look for evidence of patient safety incident.
Death	Death during the review period.



Reviewing for patient safety incidents

If a trigger is detected, thoroughly review each section of the PMS in turn:

- Clinical encounters section (all types of documented consultations)
- Medication-related section (for example acute and chronic prescribed or discontinued items, item intervals, dosages, directions and indications)
- Clinical read codes section (Various events such as allergic drug reactions, diagnoses, interventions and investigations can be coded. Some systems allow codes to be prioritized as low, medium or high importance)
- Inbox
    - Correspondence including Electronic Discharge Summaries
    - Results

Remember:
A patient safety incident (PSI) can be defined as:

"any event or circumstance that could have resulted, or did result, in unnecessary harm to a patient"

WHO

… it includes both 'near-misses' and 'adverse events'

HQSC

You are looking for *obvious* problems - if there is reasonable doubt whether patient safety incident occurred, the incident should not be recorded. You are unlikely to find something 'dramatic', most records do not have a trigger or patient safety incident.

In Section 3.3 of this document are some examples of patient safety incidents to give you a feel for the sort of things you might be looking for.

Commission vs. Omission

Patient safety incidents may be things that have been done (commission) or things that have not been done (omission).

Both may be appropriate or inappropriate, and both may result in positive or negative patient outcomes. The following table outlines acts of commission and acts of omission which in some instances have the potential for patient safety incident.

Table 3: Determining commission and omission of care example

Act of Commission Prescription for antibiotic	**Appropriate** Patient has fever, tachycardia and unilateral chest signs suggesting pneumonia.	**Positive** Patient fully recovers
		Negative Patient's condition worsens due to atypical pneumonia or has a severe allergic drug reaction **(Non-preventable patient safety incident)**
	Inappropriate Patient has a viral infection with non-specific signs.	**Positive** Patient fully recovers **(Potential for patient safety incident)**
		Negative Allergic drug reaction **(Preventable patient safety incident)**
Act of Omission No prescription	**Appropriate** Patient has viral infection	**Positive** Patient fully recovers
		Negative Patient develops secondary infection and is hospitalised **(Non-preventable patient safety incident)**
	Inappropriate Patient has bacterial pneumonia	**Positive** Patient fully recovers **(Potential for patient safety incident)**
		Negative Patient admitted as an emergency. Potentially preventable through earlier antibiotic therapy **(Preventable patient safety incident)**

When is the review complete?

Whichever Comes First

Classify the patient safety incidents

Once you have completed the record review, classify each of the Patient Safety Incidents according to severity and preventability:

Severity

Grade the severity of patient safety incident using the following table.

Table 4: Severity scale

Severity	Definition
1	Any event with the *potential* to cause harm (includes where an incident ran to completion without harm, or mitigating action was undertaken which avoided harm, or where insufficient details were available)
2	Mild harm - inconvenience, further follow-up or investigation to ensure no patient harm occurred
3	Moderate harm - required intervention or duration for longer than a day
4	Prolonged, substantial or permanent harm (including hospitalisations and death)

Preventability

Based on recorded evidence or using professional judgement, determine as best as possible where the patient safety incident originated and whether it was preventable or not. This will help you prioritise improvement activities.

Table 5: Preventability Categories

Preventability	Definition
1	Not preventable and originated external to this practice (secondary care / other provider)
2	Preventable and originated external to this practice *OR* not preventable and originated in this practice
3	Potentially preventable and originated in this practice
4	Preventable and originated in this practice

Prioritising improvement efforts

In any records review it is likely that a number of avoidable patient safety incidents will be identified, mainly of a low grade of severity. When considering how to prevent or reduce harm and improve care quality, the review team will need to prioritise actions.

Adding the severity and preventability scores together gives a number which can assist with this. The higher the 'priority number' the greater the impact is likely to be and the more likely that actions will be able to prevent these incidents in primary care.

The decision about what type of incidents to prioritise is best decided through a combination of this and discussion with your team taking into account:

- Severity
- Frequency with which it is likely to occur
- Origin & preventability
- Whether a feasible solution exists within the practice

Submit your completed form (3.2) to:

"Safety in Practice Trigger Tool Submission Form"

audit@safetyinpractice.co.nz AND your PHO facilitator

by 15 March 2021

We recommend that you complete the trigger tool review by 15 February 2021 so that you have time to arrange a meeting with your team to discuss the results and plan your improvement activities by 10 March 2020.

Bring your completed form also along to Learning Session 3 so you can discuss them in the collaborative breakout sessions.

Remember: Please **DO NOT submit NHI or patient identifiable information to Safety in Practice** although you may wish to note this information separately for your records. We recommend giving each patient in your sample an anonymised code e.g. 001 and using this when documenting your findings for submission.

Recording Incidental Findings

As you go about undertaking the notes review you may also notice other things that would not qualify as patient safety incidents in the review period, but are still useful to consider from a quality improvement viewpoint. It is useful to make a note of these as you complete your review. Examples might include:

- Administrative and systems failures e.g. recalls irrelevant or out of date
- Inadequate record keeping e.g. classifications not being updated

Step 3: Reflection & Action

The clinician or practice team can use the review process and results in a number of ways. Some of the possible actions are described in more detail below:

> The actions you take to ensure and improve patient safety are the most important element of the trigger tool process.

Immediate actions

Arguably, the first task for the clinician or practice is to acknowledge the detected levels of harm, irrespective of whether errors had occurred. In those instances where an error occurred it may be necessary to contact the affected patient(s). With regard to those patients where a safety incident was detected - there may still be an opportunity to intervene to prevent further progression or alleviate complications. It may be possible through early, targeted intervention to prevent similar patient safety incidents happening to other patients.

For example:

- A female patient with severe migraine attacks thought to be complicated by the combined hormonal contraceptive pill.
- Warfarin and aspirin being co-prescribed.

In both examples an audit or focused review of similar records may identify other cases and help to prevent future harm.

Reflection & learning

Sharing and reporting the findings

The clinician or practice team should individually and collectively reflect on the review findings as part of routine educational or practice meetings.

It is recommended that every practice team member is included whenever possible, including those that did not participate to the process. This may help to identify individual or practice-based learning needs.

For example:
A GP trainee detects a case where an elderly patient's INR temporarily increases to > 5 after prescription of an oral antibiotic for a suspected urinary tract infection. The learning point that patients prescribed anticoagulants require more intensive monitoring during illness is shared with clinical team members during the practice meeting.

It may also be useful, and on occasion necessary to share some specific findings with relevant stakeholders, for example:

- Your PHO which can enable other network practices might also benefit from the learnings
- Community pharmacies
- Secondary care

Primary and secondary care interface

- Consider appropriate feedback: If a practice discovers concerning and frequent events relating to secondary care, it would be appropriate to approach the relevant groups for feedback and discussion.
- Consider a joint Significant Event Analysis: If a serious patient safety incident was discovered involving care across the interface, a joint significant event analysis may be appropriate.
- Identify personal learning needs for improvement, appraisal and governance: While the aim of the review is for systems improvement, there may be occasions when doctors and nurses recognise knowledge gaps within the practice.

Evaluating and sustaining change

Where a practice has chosen Trigger Tool as their Safety Culture Tool, the expectation is that only one Trigger Tool is completed for the Safety in Practice year.
Some practices have found benefit from repeating it at a further interval – say 3-6 months.
Regular application of the trigger tool has a number of potential benefits:

- Additional patient safety incidents may be detected (providing further opportunities for improvement) with each review.
- Further educational needs may be identified.
- It provides a measure of an individual clinician or practice's commitment to safety to a variety of potential stakeholders.

These benefits may be realised by repeating reviews within the same patient population.

Section 3: Resources

3.1 Poster


Waitemata
safety
IN PRACTICE
AUCKLAND
Trigger Tool
As part of our work with Safety in Practice we are completing the Trigger Tool. A few members of our team will systematically review randomly selected patient records looking for incidents where patients were or could have been harmed.
The idea is to look at our systems, to make things safer for our patients and not judge individual actions or performance.
If you have questions speak to:
www.safetyinpractice.co.nz

3.2 Safety in Practice Trigger Tool Submission Form

Please complete and please email a copy of completed form to audit@safetyinpractice.co.nz

Name of Reviewer		**Name of Practice**	
Date of Review		**Profession**	
No. of Records Reviewed		**Review Period** (e.g. 3 mths)	
What Patient Group did you select records from?			

Review of Records

Please review up to 25 records from the chosen patient group. Tick one box (✓) next to each trigger each time you find it in one of the records.

Trigger (A 'prompt' that may indicate a safety incident)	001	002	003	004	005	006	007	008	009	010	011	012	013	014	105	016	017	018	019	020	021	202	023	024	025
≥2 consultations in 7 days																									
New diagnosis of Cancer within 3 months																									
New allergy/adverse reaction add to PMS																									
Cessation of Medication																									
Reduction in Medication																									
Out of Hours/A&E attendance																									
Hospital discharge																									
Hb <100																									
eGFR <35																									
Death within review period																									

Incidental Findings

Please briefly describe any incidental findings that you have detected.

Review Patient Safety Incidents

For further clarification see Trigger Tool Guide page 15.

Severity	Definition
1	Any event with the *potential* to cause harm (includes where an incident ran to completion without harm, or mitigating action was undertaken which avoided harm, or where insufficient details were available)
2	Mild patient safety incident: inconvenience, further follow-up or investigation to ensure no harm occurred
3	Moderate harm: required intervention or duration for longer than a day
4	Prolonged, substantial or permanent harm (including hospitalization or death)

Preventability	Definition
1	Not preventable and originated external to this practice (secondary care / other provider).
2	Preventable and originated external to this practice ***OR*** not preventable and originated in this practice.
3	Potentially preventable and originated in this practice.
4	Preventable and originated in this practice.

Anonymised patient number	Description of detected patient safety incidents	Severity	Preventability	Priority
(Example) 006	Patient prescribed antibiotic to which they were known to be allergic but was recorded incorrectly in the Patient Management System	4	4	8

Reflection, Action & Improvement

A. Please describe any actions/improvements made DURING the review (e.g. updated coding or prescribing)

B. What do you plan to do NEXT as a result of the trigger review findings? (Use the priority scores to guide you)
Examples might be to develop or update a process or policy, undertake PDSA cycle, undertake Significant Event Analysis or complete an audit.

C. Please describe identified individual, professional or practice team learning opportunities:

Any other comments	
Finally, approximately what length of time (in minutes) did it take you to review all records?	**Mins**

Please email a copy of completed form to audit@safetyinpractice.co.nz

3.3 Examples of patient safety incidents and classification

Case 1: Example of potential harm identified during the trigger tool process

Context: A 17 year old Māori female patient presents with fever, no cough and a sore throat. The examination discovers purulent tonsillitis temp 38.7 and enlarged tender nodes.

Potential patient safety incident: GP diagnoses bacterial tonsillitis, takes swab then prescribed Phenoxy-methyl penicillin 500 mg bd. Patient goes to chemist next door who notes that she is recorded as being anaphylactic to penicillin in their system and so contacts GP practice and a replacement prescription for Erythromycin 400mg b.d. is generated. Patient fully recovers. During trigger tool process the GP realises penicillin allergy was only documented as a 'note' in patient record rather the correctly in the medical warning section.

Did harm occur: No
Was there potential for harm: Yes
Patient safety incident category
Severity Category: 1 potential harm mitigated by contact with pharmacist
Preventability Category: 4 preventable and originated in practice

Learning: Correct entry of medicine warnings in PMS and reminder check allergies with patient with every prescription

Case 2: Example of less-avoidable patient safety incident

Context: Same above scenario: A 17 year old Māori female patient presents with fever, no cough and a sore throat. The examination discovers purulent tonsillitis temp 38.7 and enlarged tender nodes. No penicillin allergy. The GP takes a swab and starts Phenoxy-methyl penicillin 500mg bd. The patient recovers from tonsillitis but returns 7 days later with vaginal thrush. The swab confirmed strep tonsillitis.

Did harm occur: Yes

Patient safety incident Description: The patient developed vaginal thrush in response to antibiotic.

Patient safety incident category
Severity Category: 2 mild harm / inconvenience
Preventability Category: 2 (not preventable and originated in practice) or possibly 3: potentially preventable if known has had similar side effects previously

Case 3: Example of more serious patient safety incident

Context: 70 year old man with hypertension on a diuretic and an ACEI. Prescribed NSAID for episode of gout. Bloods tests taken that week noted drop in eGFR from 45 (3 months previously) to current results of25 ml/min.

Did harm occur: Yes

Patient safety incident description: Likely deterioration of renal function related to combination of medicine use (triple whammy)

Patient safety incident
Severity Category: 3 moderate harm lasting longer than 1 day (potentially 4 – prolonged and serious harm)
Preventability Category: 4 (preventable and originated in practice)

3.4 References

[1] Sandars K, Esmail A. The frequency and nature of medical error in primary care: understanding the diversity across studies. Fam Pract. 2003; 20: 231-6

[2] Eggleton K, Dovey S>M et al. Using triggers in primary care records to flag increased adverse event risk and measure patient safety at clinic level. NZMJ 2014; 127: 1390: 45-52

[3] HQSC https://www.hqsc.govt.nz/our-programmes/adverse-events/projects/trigger-tools/