Police Data Quality Offence and Incident Recording 2024

Annual Report

Prepared by Data Quality and Integrity Team, Assurance Group

November 2024



Introduction

High quality data is critical to providing the policing services New Zealanders expect and deserve. Data is an asset that helps Police better understand and respond to demand and manage their service delivery to victims and the wider public. Patterns in the data also allow Police to identify opportunities to prevent and reduce harm in our communities.

Police recognises that consistent, accurate, timely and reliable data can only be achieved if it is actively monitored and managed. The Data Quality and Integrity Team (DQIT) was established in 2014 to lead that work. The influence and reach of the team has grown over time and its focus on risk and evidence-based quality assurance has contributed to sustained improvements on Police's data quality relating to Offences and Incidents.

This report focuses primarily on the quality of data in 2024, but also reflects on the journey New Zealand Police has taken to improve Offence and Incident data over the last decade.

Executive Summary

The Data Quality and Integrity Team's report and the aligned visual resource (Appendix A) shows continued improvement across all aspects of Offence and Incident data quality.

The team supports incremental improvement by influencing programmes of work that have data quality implications, initiating and managing change requests to systems and processes as well as improving awareness of staff across the business about compliance with the *National Recording Standard* (NRS).

While there is still work to do, indicators and audits show the organisation is moving in the right direction and positive progress continues to occur. Furthermore, DQIT has visibility of the people, process and practice issues left to resolve and is actively working on them.

Background

DQIT's work focuses predominantly on the accuracy of Offence and Incident data. The team uses a defined *Assurance Operating Model* (see next page) to systematically examine and respond to issues identified within an end-to-end systems and processes model.

DQIT has three broad objectives:

- Championing Data Quality: embedding an ethical recording culture, which is underpinned by efficient and effective data quality systems and processes;
- Evolving the NRS and Legislative Reference Table: as well as related policy and education resources, to deliver improvements in staff knowledge, DQ recording practice and outputs;
- Providing Organisational Assurance: delivering an annual risk-based national audit plan, as well as promoting the development of quality assurance capability within Districts and workgroups; focused on identifying improvement opportunities related to leadership and governance, systems and processes, and people and skills.

Assurance Operating Model

The adjacent *Three Lines of Defence*Assurance Framework and Assurance
Operating Model shows how DQIT works
to promote assurance across New
Zealand Police, with a focus on risk and
continuous improvement.

The team's activities occur within a *Three Lines of Defence Assurance Framework*, which draws the line between functions that own and manage risks (the 'hands-

on' operational activity - first line), functions that oversee risks (offering organisational oversight - second line), and functions that provide arms-length assurance (the independent or third line perspective).

Within the Assurance Operating Model, DQIT set and maintain the National Recording Standard and the National Audit Plan (NAP). The NAP sets out the scope of the team's annual national, risk-based, internal audit programme for Police covering Offence and Incident recording. The NAP focuses on ensuring that Offences and Incidents that are mandatory to record in Police's primary case management database (NIA), are recorded in line with our standards.

In a third line capacity, DQIT undertake the 'Monitoring and Testing' (Detect) stage of the

Assurance Operating Model. This includes automated and manual checking quality assurance and audit checking, scanning trends, and undertaking reviews.

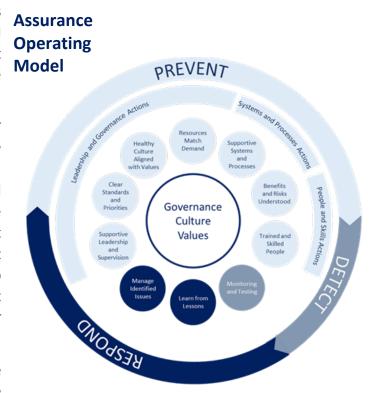
When undertaking audits, the team identify issues and examine underlying causes – grouping them under three broad headings:

- Leadership and Governance
- Systems and Processes
- People and Skills.

When publishing audit results, the team present findings using those headings along with improvement opportunities or recommendations.

Three Lines of Defence Assurance Framework

Executive / Assurance & Risk Committee Senior Management 3rd Line of Defence 1st Line of Defence 2nd Line of Defence Management and Internal Risk Management and OA Internal Audit Control Measures Processes 'business as usual' checks of aspects of BAU effectiveness of organisational policies, procedures and processe WHO: Various business groups/ s in the organisa (CRL, Online, FM&T), Front Counte WHO: DQIT or external auditors Includes NCO/Supervisor checks



The team also work with Districts, Service Centres and PNHQ workgroups to embed the findings from their reports and to promote activities and actions that improve data quality outputs and outcomes.

This includes improvements to policy, system and process functionality and architecture, as well as increasing awareness of, and compliance with, the NRS.

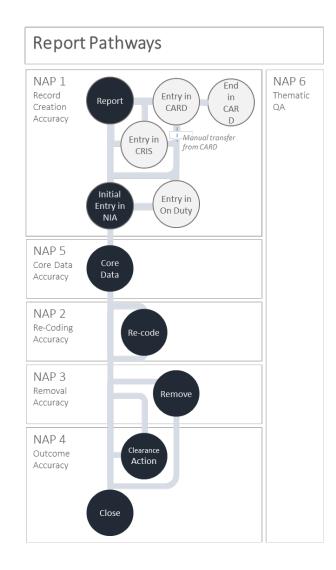
The National Audit Plan

Through the NAP, DQIT monitors the quality of data at each critical stage of the end-to-end (report to resolution) process. The team look at the extent to which reports are lost or misclassified as they travel through the different pathways (refer adjacent diagram).

Data Governance and Infrastructure Improvement

Police adopted a <u>Data Strategy and Roadmap</u> in 2022. Work to fill identified gaps in data governance and improve data architecture has begun. A Data and Information Sub-Portfolio governance group has been established to oversee all data and information related work. DQIT have representation at this forum and provide regular reports to that group.

National Audit Plan Strands



Championing Data Quality and Evolving the National Recording Standard

In 2023/24 the 12 person DQIT team undertook a wide range of activities to support and lead initiatives affecting data quality. This team snapshot (below) highlights major contributions of the team during that year.

This work included updating the *National Recording Standard* (NRS), and maintaining the Legislative Reference Table (LRT) which is Police's master list of Offence, Incident and Task codes; as well as leading two major change projects, as well as activities to implement updates to the our Offence classification system ANZSOC.

Data Quality and Integrity Team

2023/24 Snapshot

Promoting Quality Assurance (QA) Activities

DQIT audits Offence and Incident records, as part of our annual risk based National Audit Plan (NAP). This includes delivering a national QA process for Hate Crime and providing QA support for NZCVS (MoJ)

4.000+ Police records checked over 7 audit and review topic

1.200+ NZCVS records moderated for Cycle 5

13,000 Hate Crime QA flag accuracy checks in CAD and NIA

15,400 Hate Crime checks for missing flags in CAD and NIA

5,100 Hate Crime data quality fixes by HCQAT

950 Referrals to Officers to improve recording practice(s)

105 High risk referrals to Nat Sec, Firearms / Districts

52 National and District hate crime reports published

48 District ISPL and Service Demand and Risk Dashboards

9 Quality Assurance SAS reports maintained / improved

Evolving the NRS and LRT-Codebook

DQIT evolved the National Recording Standard (NRS), as well as the LRT-Codebook and associated system tables and meta data.

4 Pan Business NRS Reference Group Meetings

2 Formal NRS Updates published (internal and external)

360+ LRT Updates – 40 new offence codes500+ Additions to the LRT Statute Search tool

Advice, Support and Education

DQIT has supported Districts, PNHQ and Service Centres as well as a wide range and external stakeholders (including MOJ, Stats NZ, Corrections, Crown Law, IWCNZ, FIANZ etc.)

450+ Responses to shared and direct email queries

300+ Meetings attended with PNHQ workgroups80+ Meetings with DLTs or District DQ Groups

95 Training sessions with Districts, ECC or 105

45 OlA's, RFI's and/or Media responses

25 Briefings for Executive on DQ Issues

14 DISP and TRAG 'DQIT Updates'

7 DQIT Updates, and/or Panui News items
 NEW RNZPC Recruit Training – new DQ content

NEW NRS Community of Practice launched

Leading Business Change Projects

DQIT created project initiation documentation and is leading key change activity on the following projects:

Core Data Review (CDR)

14 Topic Scoping and Options papers written, reviewed and finalised

11 Workshops planned and attended

4 CDR Updates to DISP and DEP

ANZSOC 2023 Implementation

2,000+ Codes mapped

POLICE Ngá Pirihimana o Aotearao

Collaborated on...

- · ERHA (111) Project
- Core Policing Services (CPS)
- · Initial File Assessment (IFA) Review
- · Contact Management Strategy
- Te Raranga Programme
- RCOI Kapuia
- WAI 3060 Kaupapa
- · Understanding Police Delivery
- · Bylaw Recording Practice
- Child Abuse Recording Practice
- · Fraud Recording Practices
- Fleeing Driver QAIF
- Sexual Assault Recording / QAIF
- CYP Resolutions / QAIF
- Family Harm QAIF and Training
- Formal Warnings Project
- NZCVS Coding guides updated
- · Case Management 7 step model
- Firearms Event Reporting
- Gang Legislation implementation
- MoJ data reconciliation (CMS)
- ReFrame

Assurance

DQIT activities align to the <u>Data Strategy and Roadmap</u>, with the aim of incrementally improving Police's data maturity in relation to Offence and Incident data. The team also monitor known risks in the Case Management processes, working to a <u>National Audit Plan.</u>

Strand 1 - Record Creation

Strand 1 of the NAP relates to ensuring that records are created in NIA when they are required by the *National Recording Standard,* and they are accurately classified (coded) at that initial point of recording.

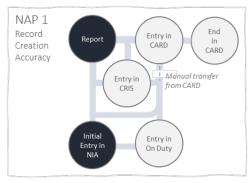
Work undertaken in earlier years has taught us that the two primary risk areas for *Record Creation* are:

- Reports received via the Emergency Channel not transitioning to NIA when they should
- Reports relating to Family Harm being miscoded in NIA as Incidents - when they relate to Offences.

Data Quality indicators for Strand 1 provide some confidence that initial recording practices are improving. High level trends show that the proportion of Victim Offence reports being received through the Emergency Channel is declining (as can be seen in the adjacent chart – the Proportion of Victim Offences by Channel). This will have had a positive effect on the rate at which initial reports about Victim Offences are accurately recorded in our systems.

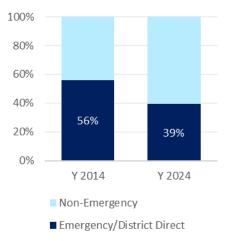
Emergency Channel – rate of transition to NIA

NRS requires all Victim Offences to be recorded in NIA so that Police can ensure records are held for all victims Police are aware of. These records are the basis of Police's Case Management process, which drives Police service response.





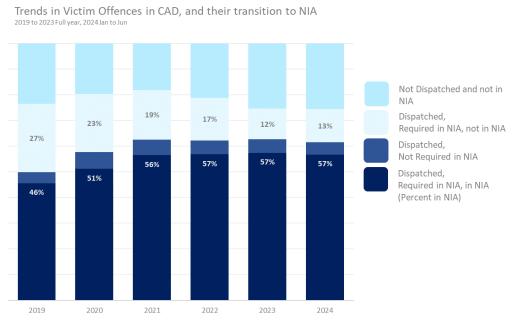




When the report of a Victim Offence is received and dealt with in the Emergency Channel, a Computer Aided Dispatch (CAD) event record is created, and is either Dispatched or Cancelled. For Dispatched CAD events, the onus of establishing what occurred, and creating and linking NIA records falls on District staff.

As can be seen in the following chart 'Trends in Victim Offences in CAD, and their transition to NIA', the rate at which this transition to NIA occurs for Victim Offences, improved through to

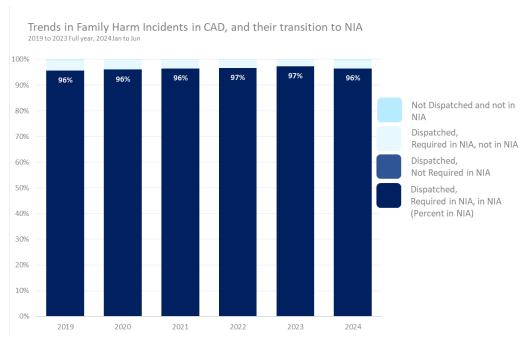
2021 and has been steady since and the rate at which Dispatched CAD events do not transition to NIA has been dropping.



Family Harm Recording

A topic previously raised in reports received via the Emergency Channel is accurate Offence coding within a Family Harm context. The concerns raised before were that our recording practices meant there were more victims than we recognised and reported in official statistics.

Interestingly, the rate at which Family Harm incidents are recorded in NIA is over 95% and has been for many years (refer chart below). Calculations for the FY 23/24 show even higher rates of Family Harm Offences also transition to NIA (98%), meaning that if a report relates to Family

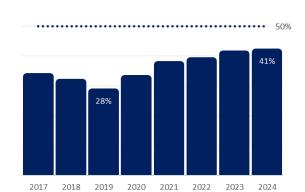


Harm it is almost certain to result in a NIA record. The accuracy of the Offence or Incident code within that record has historically been concerning, but it has been improving over time.

DQIT's audit work in the past has identified that, if coded accurately, approximately 50 to 60 percent of all Family Harm records should contain at least one Offence. The adjacent chart shows the proportion has been steadily increasing, which is a very positive sign.

This topic is to be the subject of another comprehensive audit in the coming year to check whether accuracy has further improved.

The proportion of Family Harm records with at least one offence continues to climb FY as at end of June each year



K3 and Re-codes in CAD

This cohort of records represent situations where the initial CAD event indicated it was required in NIA, but officers or ECC staff have re-coded them or closed them in a way that means they are no longer 'required in NIA'. Issues found in this audit align with known system and process issues and knowledge gaps. These were:

- NRS rules not complied with
 - Decision making / logic not documented
 - Deciding to not record in NIA, when required
 - Using K3 result code (Not an Offence) for records that are not Offences
 - Re-coding an Offence to an Incident (when K3 Not an Offence) applies
 - Coding serious assaults as common assaults
- CAD system issues (no correct option available)
 - Dispatched but not attended (Cancelled is not an available result option)
 - Limitations relating to how to code/close records where reporting occurs via a different channel
 - Limitations relating to the ability to result a CAD event as a duplicate
- NRS rules not allowing exceptions, in circumstances where there is no operational benefit in requiring a NIA record
 - Prior to attendance it is determined no Offence occurred
 - Prior to attendance, or while attending, the people the report is about are not identified / identifiable.
 - A second or subsequent report about something that is already recorded
 - Prior to attendance, or while attending, a missing person is found

DQIT Next Steps

DQIT checks within other Strand 1 checks also show the same clearly identified common situations where current rules require NIA entry, but where NIA entry would not provide any operational value. These scenarios also fall outside the recording rules common to similar

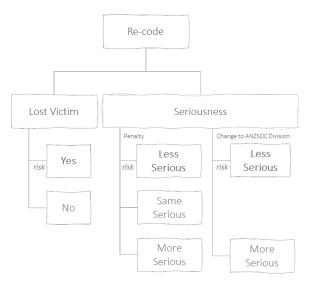
jurisdictions and consequently put us out of step with international best practice. DQIT aims to modify existing NRS rules to clarify Police's position on these points, ultimately providing a list of justified exceptions to the standard recording rules where these are practical and align with ethical recording practices.

DQIT will also undertake an international benchmarking exercise to check overall compliance levels in a way that can be directly compared to the accuracy checks in the police services of England and Wales. This will also provide Police with a quantifiable measure of data quality, relating to initial recording accuracy, which can be tracked over time.

Strand 2 - Re-Code in NIA

A NIA record can and should be re-coded when evidence exists that the initial code does not accurately reflect what occurred. Re-coding can be triggered when it is determined the originally recorded code is inaccurate, or when new evidence is received about that report.

DQIT focuses its audit on risky re-code transactions. Three risky re-code outcomes are targeted as described below.



Missing Victim Records

Where a Victim Offence has been re-coded to a Non-Victim Offence, a person who was considered a victim is no longer recorded or recognised as a victim. They stop receiving any victim centric response functions provided by Police; for example, victim contacts are not completed, and their victim history score is affected.

This year Offences re-coded to Incidents are discussed and reported on in Strand 3.

Less Serious (Downgrade)

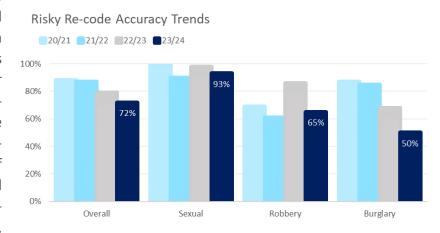
Where an Offence has been re-coded to an Offence that is 'less serious', this can affect operational decisions such as prioritisation, assignment and file retention periods. It can mean an investigation is delayed, assigned to the wrong team, or closed when it should be assigned. It also affects a range of calculated scores used to assist assessment of future risk or harm, such as risk matrix scores, victim history scores and crime harm index scores.

Lower ANZSOC Category (Downgrade)

Where an Offence has been re-coded to an Offence that sits within an ANZSOC category which is 'less serious', this can affect official statistical counts, i.e., Recorded Crime Victim Statistics (RCVS).

Audit Results 2024

The extent to which Offences are re-coded is monitored and audited every year. The trend in the accuracy of re-codes has been declining, driven by poor compliance with burglary recodes (as can be seen in the adjacent chart). Burglary recoding issues relate to a lack of awareness of the rules and definitions relating to non-traditional burglaries i.e.,



understanding whether the front boundary constitutes an 'enclosed yard' when a car is broken into in a driveway, or the Offence involves a trespassed shoplifter.

Overall, however, the numbers of Offences inaccurately re-coded to less serious Offences is **very small** (as highlighted in the table below), and we can be reassured that re-coding practice has very little impact on victim service experience or performance, and reported statistics.

For 2023/24

Total Offences recorded (excluding Traffic)	Re-coded (Lost Victim or Downgrade)	% Re-Coded (Lost Victim or Downgrade)	Estimated Re- coded Inaccurately	% Re-coded Inaccurately
639,000	5,450	1%	2,120	0.33%

Strand 3 - Removed from NIA

DQIT also audits 'Removed Offences' practices each year to check for accuracy. This includes reviewing staff decision making and ensuring "credible and verifiable evidence" to support the use of Removed Offence has been documented in NIA, as required by policy.

Within NIA, five Closure Reasons enable the 'Removal' of an Offence from official statistics. Those removal reasons are described as:

- Not an Offence
- Duplicate
- Error
- Prosecution by Other Agency
- Purged.

The trend in accuracy of Removed Offences has shown improvement this year. Some 95% of Removed Offences were justified and removed accurately (as can be seen in the light dotted line in the adjacent chart which shows 'All Offences – Removals').

Overall, as a proportion of all recorded Offences, those that are removed inaccurately is very small; 0.16% in 2024 (shown in turquoise in the adjacent chart).

Strand 4 - Outcomes

Strand 4 examines the recording of Police Closure Reasons and Clearance Codes, which together indicate the 'outcome' of Police enquiries about reports made by the public.

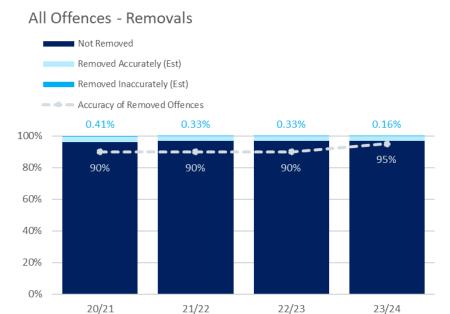
Warnings

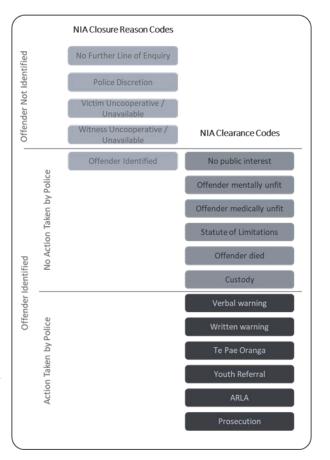
DQIT supported a review of Formal Warnings for very serious Offences, undertaken by Service and Resolutions Group. This work includes the creation of an ongoing Quality Assurance Improvement Framework for Warnings.

DQIT and Service and Resolutions Group will be undertaking further audit work in relation to Warning accuracy, as part of the *National Audit Plan* 2024/25.

Youth Clearances

A review of progress into the recommendations of Youth Outcomes Review from 2022 has been completed; showing slow, but steady progress across most recommendations.





Stakeholders have worked through the complexities to provide a clear picture of the technical changes required to make the ICT and Business Process systems work well and overcome the identified issues. The findings also informed an ambitious Core Data Review, and the solution design could inform a solution for the recording of adult offenders in the future.

Strand 5 – Other Core Data

There are a growing number of data fields that are essential for case management processes to work, and for the production of official statistics. In the 2023/24 year, DQIT led a comprehensive review of core data requirements, looking to firm up organisational requirements and identify and fix longstanding data issues.

The team also undertook an audit of the accuracy of Scene Type to establish its reliability for use in statistics and performance measures.

What we did Closure Reason Clearance Type Core Data What Offence / Incident Code Contributing Factor Flags Who Victim Suspect Where Location Scene Type Data When Occurrence Time/Date Reported Time/Date

Core Data Review

This review involved the input of 107 contributors from 52

stakeholder groups, collecting issues and requirements across 13 topics. All up the review resulted in 195 separate detailed recommendations. The findings for all 13 topics have been documented and collated, resulting in 33 summary level recommendations across 11 projects or programmes of work. This work has been presented to Police's Data and Information Sub-Portfolio governance group, and will be used to drive the detailed work needed to progress Data Strategy efforts relating to Offence and Incident recording.

Scene Type Audit

The audit determined we can be confident in 'Scene Type' data underpinning existing measures. Data used to identify Public Place Violence, Residential Burglary and Retail Crime measures are very accurate; all over 90% accuracy. Of note, Residential Burglary accuracy sits at 97% and Public Place Violence accuracy sits at 95%.

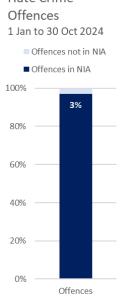
The audit did however find that within these measures there are some records included that should not be, and others are missed. But the rates at which this is occurring are low and the reported numbers are likely to be very close to the actual numbers.

Hate Crime Quality Assurance

DQIT continued to check all reports of Hate Crime to ensure they are recorded in line with NRS rules. This year the team also checked the recording of re-codes, closures and clearances for all Hate Crimes.

Records where issues were identified were either fixed or followed up, resulting in a very high accuracy rate for Hate Crime related records. This year 97-98% of Hate Crime related Offences were entered into NIA.

While not necessarily as good as a randomised sample, checks of Hate Crime related data provide a valuable window into data quality issues seen across all reports, and as such, their results provide a helpful 'pulse check' for the health of recording practices - from report to resolution.



Appendix A

DQIT have created this Scoreboard visual to provide an overall assessment of the state of Offence and Incident data quality in Police.

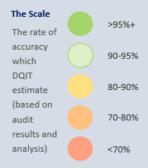
Our assessment draws on individual audits completed as part of the National Audit Plan which covers the processes from initial report to resolution.

Overall Assessment



How good is our data?

In priority areas, DQIT have ensured QA processes exist and that serious, sexual, hate crime, and family harm records are created in NIA. The overall quality of Offence and Incident data continues to improve over time.



Reassurance through clarity

In the 10 years since DQIT has been established, the team's work has resulted in an increasingly clear picture of the nature and scale of quality issues relating to people, process and practice within Offence and Incident data recording.

Offence and Incident Data Scoreboard

Core Data

Accuracy

23/24 Audit Results

Scene Type

Burglary Scene Type

Weapon Type

The Data Quality and Integrity Team Assessment of Offence and Incident Data Quality in 2024



to other victim offences. DQIT know that the causes of incorrect re-codes are the same fundamental misunderstandings of the recording rules that affect recording issues across the whole recording process. Addressing these issues is a focus within in our 'Planned Next Steps'.

Going Well

Leadership and Governance

» National governance processes in place

Hate Crime (97%+) Initial Code (95%+)

- x Data Strategy in place
- » Core Data Review provides a road-map for further progress
- » DQIT influence in key decisions affecting data quality is effective and growing.

Systems and Processes

- >>> When we have an identified victim, we create NIA records over 90% of the time
- » New Risk Harm Attendance model supportive of Data Quality principles.

People and Skills

» Our specialist data entry staff are trained in the NRS recording principles and how to apply them.

Planned Next Steps

Leadership and Governance

- »» Formalise valid exceptions to the standard recording rules (victim confirmation and finished incident rules)
- » Implement additional Core Data Review policy recommendations, i.e., provide clarifications in the NRS
- » Strategy development for NRS and Offence and Incident codes (LRT).

Systems and Processes

- » Document QA and audit check processes in a comprehensive DQ Assurance Manual
- » Implement Core Data Review system and process changes
- >>> Simplify offence code options.

People and Skills

Outcome

Accuracy

Prosecution

Formal

Warning

- » Further training of sworn staff in basic recording rule principles
- » Introduce a training and accreditation process for people actioning re-code and remove offence requests.

Monitoring and Reporting

- >>> Utilise new access to Power BI, to increase the number and improve the performance of our monitoring reports
- » Increase the range of exception reporting
- » Increase the range and use of trend monitoring for identified data quality risks
- Continue to evolve and deliver the risk based National Audit Plan.