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NATIONAL STUDY OF ABUSE OF OLDER PEOPLE:

Aged residential care: Evidence from the Integrated Data Infrastructure

Prepared for Ministry of Social Development | Te Manatū Whakahiato Ora by the New Zealand Policy Research Institute, AUT



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The views expressed in this report are those of the authors and do not necessarily reflect those of MSD or any other government agency.

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Disclaimer

The following disclaimer applies to findings based on analysis of data from the Integrated Data Infrastructure (IDI).

These results are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) which is carefully managed by Stats NZ. For more information about the IDI please visit https://www.stats.govt.nz/integrated-data/.

Access to the data used in this study was provided by Stats NZ under conditions designed to give effect to the security and confidentiality provisions of the Data and Statistics Act 2022. The results presented in this study are the work of the authors, not Stats NZ or individual data suppliers.

The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994 for statistical purposes. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

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EXECUTIVE SUMMARY

This report explores the prevalence of the abuse of older people (AOP; we define older people as those aged 55 and over), living in residential care facilities, in the Integrated Data Infrastructure (IDI) data held by Stats NZ. The data available are administrative, meaning they were collected during service delivery by various government departments, rather than being purposefully collected with research in mind. Using administrative data to investigate AOP prevalence among people living in residential care in Aotearoa New Zealand (NZ) presents some challenges and limitations. Compared to older people living in the community, these data limitations are exacerbated for the population living in residential care. For example, many incidents are managed within facilities and never reach administrative (e.g. hospital) records, and interRAI assessments used in long-term care do not include the abuse screening questions that are part of the interRAI home care assessment.

Administrative data are limited for older people living in residential care

While we report various prevalence estimates, the limitations of the data mean that these figures should be interpreted with caution. They do not provide a reliable indication of the scale of the problem, who is affected, or whether the situation is changing over time. IDI data only capture abuse when it leads to contact with public services such as police, hospitals, or ACC. As a result, they are more likely to reflect severe or physical incidents and miss other forms of harm.

Administrative data cannot be used to estimate AOP prevalence in residential care

At face value, these results simultaneously suggest both that AOP is not a large problem in the residential care population (because prevalence is only around 1%) and that the residential care population experiences much more AOP than the community-dwelling population (because the prevalence rate is 1% compared to 0.2%). However, the limitations of the data mean these estimates are not reliable and cannot be used to determine the true prevalence of AOP in residential care. This project has been useful to test whether prevalence could be measured using IDI data, but we find that with current data sources this is not possible.

It is crucial reliable data for estimating AOP in residential care are available

Given the large and increasing number of older adults living in residential care facilities (around 30,000 people for most years of our study period), and the vulnerability of this group, it is essential that good estimates of AOP for this population are available. A starting point would be to ensure that abuse screening is included as part of the compulsory interRAI Long-Term Care (LTC) assessment or undertaken alongside it during regular interRAI LTC reviews and assessments. This would help provide more reliable

data on the prevalence of harm in residential care. Additional data sources could include bespoke surveys, qualitative data collection, and examination of care facility records.

Older people with an abusive relationship flag are more likely to move to residential care

In this report, we also explore whether the home care assessment flag for abusive relationships leads to increased probability of moving to aged residential care (ARC). People who receive an abusive relationship flag are indeed more likely to move to ARC, and up to half of this increased probability cannot be explained by observable health and demographic factors.

1 INTRODUCTION

This report is part of the *National Study of Abuse of Older People in Aotearoa New Zealand*, commissioned by the Ministry of Social Development (MSD) as part of its Prevention of Abuse of Older People (AOP) work programme. It is a supplementary report to the main ***Evidence from the Integrated Data Infrastructure (IDI)*** on AOP in the community and focuses specifically on those aged 55 and over living in aged residential care (ARC). The report presents research using administrative data from Stats NZ's Integrated Data Infrastructure (IDI) (including police, ACC, hospital admissions, and interRAI assessments) to explore how AOP is captured for this population. Due to substantial data limitations, the report emphasises that current sources provide only a partial view of AOP in residential care and highlights opportunities to strengthen future data collection.

The *National Study* was undertaken in 2024 and 2025, with the wider project including five main components:

1. Prevalence Survey – A nationally representative survey capturing older people's self-reported experiences of abuse.
2. Integrated Data Infrastructure (IDI) analysis – Examination of AOP through linked administrative datasets, including police, ACC, hospital admissions, interRAI, and the NZ Crime & Victims Survey (NZCVS).
3. Qualitative Interviews – In-depth interviews with older victim-survivors of abuse to explore the contexts in which AOP occurs, and the barriers and enablers to seeking help across four groups: Māori, Pacific, NZ European, and disabled people.
4. Contextual analysis of financial abuse – Mixed methods study exploring how financial abuse is identified, addressed, and prevented within financial institutions, supplemented with insights from the legal sector.
5. Analysis of economic and social costs – Estimates the economic impact of AOP on individuals, whānau, communities, and government systems, and outlines broader social consequences, such as reduced wellbeing and lost productivity.

This study includes 10 key reports:

1. Overall synthesis report, summarising the key findings from all parts of the project.
2. Disability synthesis report, summarising key findings about AOP among disabled older people.
3. Survey findings report, presenting results from the *Prevalence survey on the abuse of older people in Aotearoa New Zealand.*
4. Survey methodology report.

5. Survey thresholds report, a supplementary report to the main *Prevalence Survey Report* that presents research into the application of AOP thresholds to the survey data.
6. Main Integrated Data Infrastructure (IDI) report, detailing analysis of AOP among those living in the community using administrative and NZCVS data from the IDI.
7. Supplementary IDI report on AOP among those in ARC **(this report)**.
8. Qualitative interviews report, presenting findings from qualitative interviews of victim-survivors undertaken across four groups: Māori, Pacific, NZ European, and disabled older people.
9. Financial institutions report, presenting system-level insights on financial AOP from qualitative interviews with finance industry and legal professionals, and supplemented with other information gathered from financial institutions.
10. Economic and social costs report, presenting research into the economic and social costs of AOP in Aotearoa NZ (NZ).

The structure of the report is as follows. Next, we summarise the aims of the current study and provide definitions for AOP and discuss the value of the IDI to explore AOP. Section 2 describes the population of interest, data sources, and key definitions. Section 3 presents prevalence results across data sources and demographic groups. Section 4 explores the relationship between AOP and residential care before Section 5 discusses limitations and directions of future work. Section 6 concludes with implications.

1.1 Study aims and definition of AOP[1]

The aims of the report are: 1) to describe the prevalence of AOP that can be detected in the IDI among older adults living in ARC and how this prevalence differs across demographic and socioeconomic groups; and 2) to explore whether people who experience AOP are more likely to go on to live in ARC.

Definition of AOP

Although there is some variation in the exact definition used across international research, the working conceptual definition of AOP is similar across the existing surveys examined. The *National Study* uses the following working definition of AOP, which is consistent with the most recent AOP prevalence survey completed in Australia:

[1] The *National Prevalence Study of Abuse of Older People (IDI)* was approved by the AUT Ethics Committee (AUTEC Ref. 24/368).

> *A single or repeated act or failure to act, including threats, that results in harm or distress to an older person. These occur where there is an expectation of trust and/or where there is a power imbalance between the party responsible and the older person* (Qu et al., 2021).

The study aims to capture different forms of physical, sexual, financial, psychological, cultural & spiritual abuse and neglect. The Australian survey (Qu et al., 2021) was the first to include abuse relating to language and culture. In other parts of the *National Study* (refer to the *Prevalence Survey Report* and *Qualitative Interviews Report*), we extend this previous work by asking a more detailed set of questions on cultural (including language) harm, as well as spiritual abuse. We also asked these questions of all participants, whereas the Australian survey only asked these questions of culturally and linguistically diverse (CALD) participants.

Like most international work in this space, our focus is on AOP that was committed by someone known to the respondent (e.g. family members, friends, neighbours, acquaintances or professionals), such as medical professionals, care workers, or finance professionals. This reflects the international definition of AOP, which emphasises harm that occurs within relationships of trust or where there is a power imbalance. In practice, this may not always align with the working definition of "an expectation of trust and/or where there is a power imbalance" between the party responsible and the older person.

For example, a neighbour or casual acquaintance might be known to the older person but may not hold a position of trust or power. Conversely, a stranger acting in an official capacity (e.g. a police officer or health worker) might hold significant power or trust yet be excluded from the survey's scope because they are not personally known to the respondent. This highlights a potential grey area in how abuse is defined versus how it is measured in prevalence studies.

The AOP definition used in the *National Study* does not require intent to harm. Harm is considered harm regardless of whether it was caused deliberately or unintentionally, through action or inaction. This reflects the reality that abuse can occur in a range of situations, including those where the behaviour is not recognised as harmful by the person responsible, or where it has become normalised over time. By focusing on the impact on the older person, rather than intent, the study aims to capture the full range of experiences that may cause harm or distress, particularly where there is an expectation of trust or a power imbalance.

This definition is consistent with international practice. For example, large national surveys in the UK and Ireland also define abuse as harm or distress occurring within relationships of trust, without regard to intent (O'Keeffe et al., 2007; Naughton et al., 2012). Some US research defines certain forms of abuse as intentional acts, but includes neglect without requiring intent (Acierno et al., 2010).

A note on terminology: We use the terms *abuse of older people (AOP)* and *harm* interchangeably. Abuse refers to the actions or failures to act that cause harm or distress to an older person. Harm describes the consequences or outcomes of those actions. Together, these terms capture both the behaviours and their impact on older people.

About AOP in the IDI

The IDI is a linked administrative database hosted by Stats NZ and contains a broad range of linked administrative data. At the centre of the IDI is the "spine", which identifies individuals based on birth records held by the Department of Internal Affairs and immigration records held by the Ministry of Business, Innovation & Employment. The spine represents the ever-resident population — people who have lived in NZ at some point and therefore appear in official records. It does not always align exactly with the current resident population, but it provides comprehensive longitudinal coverage of people who interact with public services.

Government agencies collect data on individuals during normal service operations (e.g. when an individual uses public services or interacts with the criminal justice system). In the IDI, these data are probabilistically matched to the spine, creating a longitudinal microdata set, which theoretically covers the whole population. In practice, the completeness of IDI data is limited by patterns in public service use and success in matching data records to the spine. This means that some groups are less well represented than others (e.g. people who are less likely to engage with public services or whose records are harder to match) (Kokaua et al., 2019; Kvalsvig et al., 2019).

An advantage of using the IDI is that we can directly observe both AOP and its impact on the whole population (notwithstanding the limitations described above). This means our data are not affected by sample selection bias or inaccurate recall. However, there is an important caveat around our ability to observe AOP in the IDI; only those cases which result in an interaction with public services will be detected.

1.2 How might AOP affect moves to ARC?

The process of moving into an ARC is as follows. First, Needs Assessment and Service Co-ordination (NASC) assessors conduct a home care (HC) assessment to evaluate the needs and preferences of older

people.[2] NASC assessors will then discuss the care options with the older person and their family. Older people who want to move into an ARC facility will then contact ARCs to check availability and move into ARCs once space opens.

The HC assessment includes a Clinical Assessment Protocol (CAP), which includes triggers for processes in certain circumstances. One such trigger is for abusive relationships. At the end of the HC assessment, assessors need to provide care plans for every triggered issue within the CAP. Therefore, if an abusive relationship CAP trigger is identified, it is likely to be important to assessors and influences how they discuss and recommend care options for the older person. Also, caregivers of older people who were assessed to have an abusive relationship may have different preferences for the use of residential care than non-abusive caregivers, in turn affecting older people's timing of moving into ARCs.

[2] An HC assessment is not uniformly required to move into ARC but is required if applying for the residential care subsidy, and many ARC facilities require the assessment as part of the application.

2 METHODS AND DEFINITIONS: PREVALENCE OF AOP

2.1 Population of interest

The population of interest is NZ residents aged 55 and over living in residential care. To identify this population within the IDI, we use the Stats NZ estimated resident population. Individuals are defined as being part of the resident population if they live in NZ, which is identified based on whether they interacted with government services (as captured by the administrative data in the IDI), as well as border movements and births and deaths data (Statistics New Zealand, 2016). The population is then restricted to those aged 55 and above as of 30 June of the year of interest (2015–2022) using birth date information from the IDI personal details table.[3] We focus on 2015–2022 because this is the longest period in which all key administrative data sources were available.

To identify those living in residential care facilities we match each individual's unique address identifier to the 2013, 2018 and 2023 census dwelling files, which specify whether the address is a private dwelling, residential care facility, or another type of dwelling. Since most dwellings are private, we assume those who we cannot match to census dwelling records live in a private dwelling. Those living in residential care account for 2.7% of those aged 55 and over.

2.2 Indicators of abuse

Our indicators of abuse are identical to those used in the main *IDI report* on the prevalence of IDI among those living in the community (see Chen et al., 2026). For convenience, we reproduce the description of how these indicators are derived here.

We derive indicators of AOP from police, ACC, interRAI home assessment and hospital admission data. Unlike the companion report on the prevalence among those living in the community, this report does not use NZCVS data within the IDI because the target population of NZCVS is those living in the community (i.e. those living in aged care facilities are excluded from the NZCVS). We examine only IDI

[3] Note that throughout this report, the year refers to the year ended 30 June. For example, 2022 refers to the year ended 30 June 2022.

data sources which contain information pertinent to AOP and that are considered to be of at least moderate utility for measuring AOP as outlined by Boven et al. (2023).[4] In selecting variables, we took a conservative approach. This meant prioritising indicators that had a high likelihood of reflecting genuine instances of AOP.

We describe the criteria for identifying AOP in each of these data sources below.

Hospital discharge data

We consider someone to have experienced AOP if they have had a private[5] or public hospital admission where the admission date is up to 12 months prior to the reference date (30 June), and the event meets at least one of the following criteria:

1. The medical description (including International Classification of Diseases (ICD- 10) codes)[6] of the event includes at least one of the following: sexual abuse, physical abuse, psychological abuse, other maltreatment syndromes, maltreatment syndrome (unspecified); and/or
2. The medical description of the event includes "assault", and the assailant is a spouse, partner, parent, family member, carer, acquaintance, or friend; and/or
3. The medical description of the event includes "maltreatment", and the assailant is a spouse, partner, parent, family member, carer, acquaintance, or friend.

While the hospital data include several different types of abuse, many people experiencing AOP will not present to a hospital (Boven et al., 2023). A major limitation of these data is only AOP severe enough to result in hospital admission will be captured. Also, these data are mostly limited to abuse of a physical nature. This limitation is particularly acute for people in residential care, as facilities often provide medical treatment on-site, meaning incidents that would otherwise appear in hospital data are less likely to be recorded. Thus, these data will likely underestimate the true extent of AOP.

Neglect cannot be directly identified in hospital discharge data, as there are no ICD-10 codes specific to neglect. Some of the medical consequences of neglect (such as malnutrition, pressure sores, or untreated illness) may result in hospitalisation, but in these cases the underlying cause is not recorded as neglect. As a result, most neglect remains invisible in hospital records.

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[4] Boven et al. (2023) assessed the usefulness of different IDI data sources for measuring abuse of AOP, rating each source from low to high utility. Their framework guided our decisions about which sources to include in this analysis.
[5] While we include private hospital admissions for completeness, no cases of AOP were identified via the private hospital data.
[6] ICD-10 codes are part of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, developed by the World Health Organization (World Health Organization, 2010). They provide a standardised system for classifying diagnoses and health conditions in clinical and administrative data.

Accident Compensation Corporation

We consider someone to have experienced AOP if they have an ACC claim record with an event date that is up to 12 months prior to the reference date (30 June), and the event meets at least one of the following criteria:

1. The medical description (including ICD-10 codes) of the event includes at least one of the following: sexual abuse, physical abuse, psychological abuse, other maltreatment syndromes, maltreatment syndrome (unspecified); and/or
2. The medical description of the event includes "assault", and the place of event is home.
3. The ACC claim has an "assault flag" and the place of the event is home; and/or
4. The ACC claim has a "sensitive claim" flag.

ACC data capture all injuries where the victim seeks medical treatment. This should capture some cases of abuse missed by the hospital data but will miss cases where no medical treatment is sought. Like the hospital data, ACC data capture primarily physical abuse, along with some cases of sexual abuse.

A limitation of the ACC data for our purposes is that it does not distinguish between injuries caused by someone known to the victim and those caused by a stranger. Thus, we restrict attention to the incidents relating to the ICD-10 codes mentioned above, as well as assaults which take place in the home. Assaults that take place in the home are most likely to be committed by someone the victim knows, with incidents such as assaults during home invasions by strangers being relatively rare occurrences. This definition is used in other family violence contexts, and incorporated into the family and sexual violence IDI code module (Te Puna Aonui, 2024).[7] However, it will not capture assaults committed by a person who is known to the victim if they occur outside the home.

Another limitation of ACC data is that some groups are less likely to lodge ACC claims after an accident. For example, those of Chinese, Māori, or 'other' ethnicity were less likely than NZ Europeans to have an accepted ACC claim in the event of suffering a limiting injury. Those who were older and those with less physical jobs were also less likely to make a claim in the event of an injury (Poland, 2018).

[7] www.stats.govt.nz/integrated-data/code-modules-initiative/

Police recorded crimes: Victims

The police victimisations data includes information on recorded victimisations from 2014 onwards. We identify AOP in this database in the following way. First, we include every type of offence available in the dataset, namely:

- murder
- attempted murder
- manslaughter
- driving causing death
- assault
- sexual assault
- abduction and kidnapping
- robbery
- blackmail and extortion
- unlawful entry with intent
- burglary
- breaking and entering
- theft
- illegal use of property

We then consider someone to have experienced AOP if they were the victim of an offence listed above up to 12 months prior to the reference date (30 June) and the offender is known to the victim (as opposed to the offender being a stranger or where the offender is not identified).

This dataset provides useful information on victimisations where the offence was reported to the police, the victim was identified in the records, and the nature of the relationship between the offender and victim was known and recorded. However, it has a number of notable limitations. A main limitation is that it only captures offences that are reported to the police. Also, it only covers forms of AOP that constitute specific offences (Boven et al., 2023). Indeed, many abusive behaviours may not be classified as specific offences (e.g. for emotional/psychological abuse, behaviours such as insulting, belittling, ignoring are not offences under this offence code).

Another limitation is that police reporting in the IDI only counts incidents where a specific offence is recorded. Many situations are excluded because they do not lead to a recorded offence and/or do not involve a specific offence. While police may collect information about these incidents, that information is

not passed into the IDI. This means matters resolved informally, cases where the complainant withdraws their complaint, situations where police cannot follow up because they cannot contact the complainant, or 105 non-urgent reports that are logged but not investigated further are not captured.

There are also limitations of the police victimisations data more generally, such as that it does not have as complete coverage as the police offences database for several reasons. For example, police may not take the details of a victim who is reluctant to provide them and where this information is not necessary for police purposes. Another reason is that burglary offences are often recorded without a victim since it may be unclear who the victim is (e.g. a particular member of the household, all members of the household, the owner/s of individual items that were stolen, etc).

interRAI Home Care Assessment data

In NZ, Te Whatu Ora | Health New Zealand is responsible for the interRAI programme. interRAI is an internationally developed suite of clinically validated assessment tools designed for older people who require support with daily living. Home care assessments are one of six interRAI assessment instruments used in NZ. They provide a clinical assessment that informs and guides the planning of care and services in community-based settings. It includes several criteria that are used to assess a person's risk of abuse.

Unlike the other data sources described above, the interRAI home care assessment indicators are used to assess an individual's *risk of* abuse; it does not provide a definitive indication that abuse is occurring. We consider a person to be at high risk of abuse if they meet both criteria in Table 1 in an interRAI assessment in the last 12 months.

A limitation of using interRAI to assess AOP is that assessments are only conducted on a select population, who tend to be older and frailer than the overall population of older adults (Hall et al., 2022). Because interRAI is specifically targeted at people entering ARC or receiving publicly funded home-based care, prevalence in this dataset reflects a particularly vulnerable subset of older people rather than all older New Zealanders.

Another limitation is that interRAI home care assessments are also considered to underestimate the risk of abuse. One reason is that the assessments are sometimes conducted with other people present (e.g. family members or carers) (Boven et al., 2023; Hall et al., 2022). Also, by its nature, the assessment is likely to capture some forms of abuse better than others (e.g. physical abuse or neglect may be better captured than financial abuse). Even in the case of neglect, the home care assessment may only pick up neglect that is of a more severe nature given the criteria in Table 1.

interRAI is of very limited use for assessing AOP within aged care facilities, as the abuse risk indicators are only included in home care assessments undertaken in the community, not in the long-term care assessments completed once people move into ARC. This means interRAI cannot provide information on AOP within residential care itself. However, we include interRAI data in this study because many people who later enter ARC have previously had a home care assessment. These records provide useful information on their risk of abuse at the point of transition into residential care, even though they do not capture experiences once the person is living in ARC. This limitation has important implications for interpretation, which we discuss further in Section 5.2.

Table 1: interRAI home care assessment criteria

Criteria	Indicators	Definitions
First criterion: one or more of the three indicators		
	F1e: Fearful of a family member or close acquaintances	The person expresses feelings such as abandonment, ingratitude on part of the family, lack of understanding by close friends, or hostility regarding relationships with family or friends
	F1f: Neglected, abused, or mistreated	The person experienced a serious or life-threatening situation or condition that went untreated or was not appropriately acknowledged. The situation may have put the person at risk of death, or of complications that impinge on physical or mental health.
	J3t: Unusually poor hygiene, unkempt or dishevelled appearance	Denote as 1 if the assessor chose 2, 3, 4, otherwise 0. 0: Not present 1: Present but not exhibited in the last 3 days 2: Exhibited on 1 of last 3 days 3: Exhibited on 2 of last 3 days 4: Exhibited on 3 of last 3 days
Second criterion: Two or more of the seven indicators		
	J7a: Conditions/diseases make cognitive function, activities of daily life (ADL), mood, or behaviours unstable (fluctuating, precarious, deteriorating)	For example, a person may have conditions such as ulcerative colitis, rheumatoid arthritis, or multiple sclerosis that cause pain or impair mobility or sensation, resulting in increased dependence on others and depression.
	J8: Self-reported health	Denote as 1 if indicator is 3, otherwise 0. 0: excellent; 1: Good; 2: Fair; 3: Poor; 8: could not respond
	M3: Adherent with medications prescribed by physician	Denote as 1 if indicator is 1 or 2, otherwise 0. 0: always adherent; 1: 80% of time in the last 3 days, and the last 24 hours; 2: less than 80%
	K2a: Weight loss	Weight loss of 5% or more in the last 30 days, or 10% or more in the last 180 days.

Criteria	Indicators	Definitions
	K2c: Fluid intake	Fluid intake less than 1,000 ml per day.
	F1d: Anger or conflict with family or friends	The person expresses feelings such as abandonment, ingratitude on part of the family, lack of understanding by close friends, or hostility regarding relationships with family or friends.
	sDRS: Depression	The Depression Rating Scale (DRS) uses seven Minimum Data Set (MDS) assessment items to screen people for depression. A person's DRS score describes their mood during the three-day look-back period. It also considers a person's symptoms that are present but not exhibited during the observation period. The DRS is '"observer rated" (Martin et al., 2008), which means it ignores the context or assumed cause of the behaviour. Each assessment item used by the DRS is given a code of 0, 1 or 2, and then the seven items are totalled to give the person's DRS score. The DRS ranges from 0 to 14: the higher the score, the greater the likelihood that they will be clinically diagnosed as depressed within the next six months. A score of 3 or higher identifies that the person is at risk of clinical depression (Burrows et al., 2000)
	Residential setting judged to be unable to meet needs, and it would be best if the person moved	
	P2b: Primary informal helper expresses feelings of distress, anger, or depression.	Primary caregiver expresses by any means, that he or she is distressed, angry, depressed, or in conflict because of caring for the person.
	E1i: Withdrawal from activities of interest	Including longstanding activities, being with family/friends.
	E1j: Reduced social interactions	
	F2: Lonely	The person states or otherwise indicates that he or she feels lonely. The person may feel that others do not visit enough or desires more social interactions even if visited regularly. Others may also report that the person sometimes comments on feeling lonely.
	BMI	Denote as 1 if it is lower than 19, otherwise 0.

2.3 Assessing prevalence

We conceptualise prevalence using individuals as the unit of analysis (i.e. we are attempting to estimate the share of the population of interest who experienced AOP over a defined time period).

Our data capture instances of abuse. This means that a single instance of abuse could appear in more than one dataset, and that a victim experiencing ongoing abuse (as opposed to one single incident) may meet our definitions of AOP on more than one occasion, whether in a single dataset or across multiple datasets.

To derive prevalence from these data, we calculate the share of the population who experienced one or more instances of AOP. This approach means we do not have a measure of intensity of abuse, but any attempt to measure intensity would likely have high levels of measurement error as we would have to discern if cases present in multiple data sources were the same or separate incidents.

Throughout this report, we use "overall prevalence" to refer to estimates from combining the four administrative data sources.

2.4 Descriptive variables

As well as reporting AOP prevalence for the whole population of interest, we also provide prevalence broken down across demographic characteristics. Table 2 shows how we assigned individuals to demographic categories.

Table 2: Demographic characteristics and their definitions

Characteristic	Data source	Definition or criteria
Age	IDI personal details table	Reference date minus date of birth. Age is grouped into 55–60; 60–65, 65–70, 70–75, and 75+.
Born in New Zealand	Administrative Population Census	Binary variable.
Deprivation	IDI personal details table Censuses	All addresses in New Zealand map onto meshblocks. These meshblocks assign values on the NZDep Index each census and are grouped into deciles of deprivation. We use the NZDep2018 Index (Atkinson, Salmond & Crampton, 2019) and combine deciles into quintiles.
Disability	2018 and 2023 censuses Manatū Hauora | Ministry of Health needs assessment (SOCRATES) interRAI HLFS survey	Following Stats NZ, we use the "Washington Group Short Set of Questions on Disability" (WGSS) to define disability (Stats NZ | Tatauranga Aotearoa, 2017). The WGSS is included in the census (which provides the bulk of cases for this study), as well as in the Household Labour Force Survey (HLFS) and the General Social Survey (GSS). We also use the approach of the Social Investment Agency to derive disability status (Wright & Anastasiadis, 2022).[8]

[8] A more complete description of the set of questions is available at: www.whaikaha.govt.nz/support-and-services/guidance-and-resources/resources-for-academics/an-explanation-of-the-washington-group-short-set-of-questions-on-disability

Characteristic	Data source	Definition or criteria
	General Social Survey	The six questions that comprise the WGSS focus on six core functional domains: seeing, hearing, walking, cognition, self-care, and communication. Responses options are: a. No – no difficulty b. Yes – some difficulty c. Yes – a lot of difficulty d. Cannot do it at all. An individual is classified as having a disability if they answer "A lot of difficulty" or "Cannot do it at all" in any category. Self-reported WGSS information is supplemented by administrative indicators that act as proxies for disability, such as interRAI assessments and Socrates (disability support) data. Stats NZ has investigated the concordance between administrative indicators and self-reported disability, finding only partial alignment (Wright & Anastasiadis, 2022). The study period was divided into 2015–2020 and 2021–2022. Respondents with any disability in 2015–2020 are classed as disabled for this whole period, and those with any disability in 2021–2023 are classed as disabled for 2021–2022.
Education	Administrative Population Census	Highest qualification held.
Ethnicity	IDI personal details table	Derived from multiple collections in the IDI. "Total response" ethnicity (i.e. individuals can contribute to the prevalence of more than one ethnic group). Categories are Māori; Pacific peoples; Asian; MELAA (Middle Eastern, Latin American and African); Other; and European.
Gender	IDI personal details table	Derived from multiple collections in the IDI. Sex is recorded in the personal details table. For consistency, we refer to this variable as gender throughout this report. We include two categories, male and female.[9]
Rainbow[10]	2023 census	If response to census gender question is "another gender" and/or response to gender status question is "transgender" and/or response to sexual identity question is coded as homosexual, bisexual, or sexual identity not elsewhere

[9] A third "another gender" category is not presented. Most administrative collections in the IDI record gender only as male or female, while the "another gender" response option is relatively recent and not consistently available across datasets. Also, the number in this category is small, which means results would not meet confidentiality rules in many cases.

[10] Note that we adopt the wording developed by Hohou Te Rongo Kahukura – Outing Violence (https://kahukura.co.nz/whakapapa/ "The words we use"). *Takatāpui and Rainbow communities* include: people with innate sex characteristics that do not fit normative medical or social ideas for male or female bodies; people who have a gender identity or expression that does not match the sex they were assigned at birth, including people who do not fit typical binary gender norms; and/or people who are not heterosexual. *Rainbow* is an umbrella term for sex, sexuality, and gender diversity.

Characteristic	Data source	Definition or criteria
		classified, respondent is categorised as part of Takatāpui and Rainbow communities. Respondents who are not part of Takatāpui and Rainbow communities based on above responses, and give responses “prefer not to say,” “don’t know”, “response unidentifiable”, “response outside scope”, “not stated” in any of these questions are categorised as missing for this variable. All others are categorised as not part of Takatāpui and Rainbow communities.
Urban-rural	IDI personal details table Censuses	Addresses are grouped into large and major urban areas, medium and small urban areas, and rural areas. We follow Stats NZ’s classifications (Stats NZ | Tatauranga Aotearoa, 2023).

3 RESULTS: AOP PREVALENCE

Table 3 shows the distribution of our descriptive variables across the residential care population. As expected, this population differs markedly from the population aged 55 and over living in the community (see the main *IDI report* for comparison – Chen et al., 2026). Some notable features of the population include:

- More than 80% have a disability (compared with 13% for those living in the community)
- Less than 25% are home owners (compared with 76% for those living in the community)
- More than 80% are 75 years or older (compared with 23% for those living in the community)
- Almost two-thirds are female (compared with 52% for those living in the community)
- More than 90% are European (compared with 81% for those living in the community)

These differences likely reflect the selective nature of the ARC population. Entry into residential care is more likely for those with significant disability, which explains the much higher rate compared with community-dwelling older people. The lower rate of home ownership also reflects both vulnerability and financing rules; older people without secure housing are less able to remain in the community, and they are also more likely to qualify for the Residential Care Subsidy because they have fewer assets. The older age profile is expected, as care needs rise steeply with age, and the higher proportion of women likely reflects their longer life expectancy. Finally, the ethnic distribution shows fewer Māori and Pacific residents relative to the community population, which may reflect different cultural preferences, caregiving arrangements, lower life expectancy, and barriers to accessing ARC.

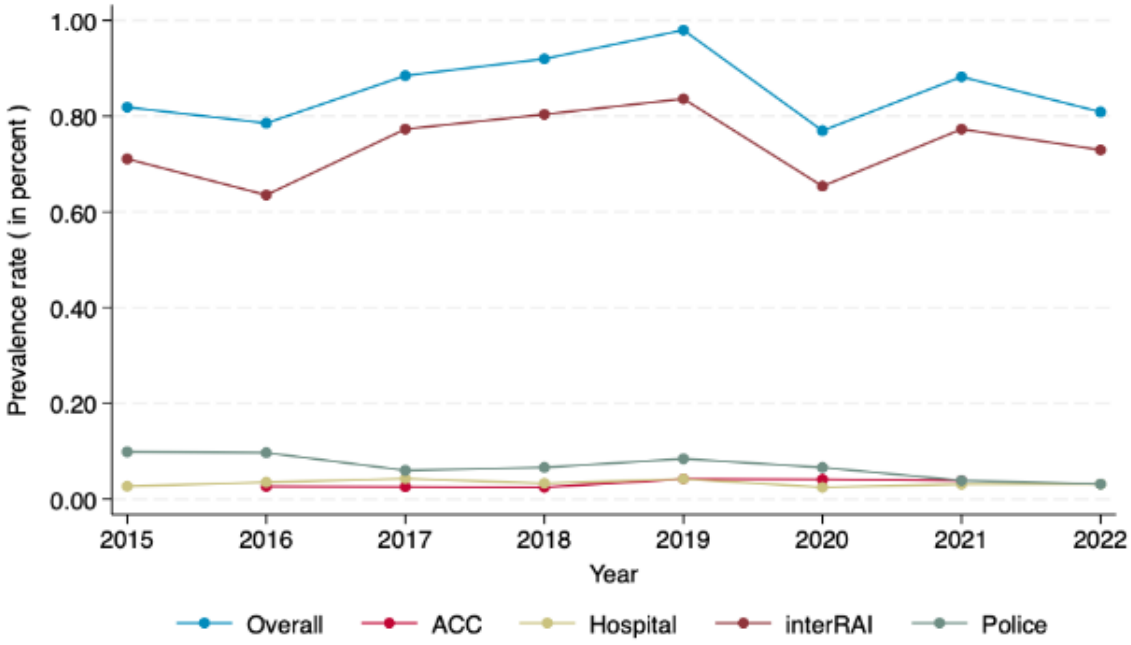
Table 3: Population characteristics

Variable	Group	Group share (%) (N=286,518 person-years)
Sex	Male	35.4
	Female	64.5
Rainbow (86.4% non-missing)	Non-Rainbow	99.5
	Rainbow	0.4
Ethnicity (total response)	Māori	5.6
	Pacific peoples	2.0
	Asian	3.3
	MELAA & other	0.9
	European	90.2
Age	55–60	3.4
	60–65	3.9
	65–70	4.9
	70–75	7.5
	75+	80.1
NZ birth status (96.3% non-missing)	Born in NZ	80.2
	Not born in NZ	19.7
Qualification (85.5% non-missing)	No qualification	47.1
	Levels 1-4	38.0
	Levels 5–6	8.2
	Level 7 and above	6.6
Disability status	Disabled	80.8
	Not disabled	19.1
Home ownership status (58.3% non-missing)	Home owners	24.5
	Non-homeowners	75.4

Figure 1 shows the overall prevalence across the study period, as well as the prevalence in each data source. The overall prevalence was between 0.8% and 1.0% throughout the period, with the vast majority of cases being from the interRAI data. Prevalence in ACC data was around 0.05% throughout, while the prevalence in the police data was around 0.1% at the start of the period and declined to around 0.05% by 2022. The declining trend in prevalence from the police data was also observed in the community-dwelling population (see the main *IDI report*), but in the residential care population this trend better matches the timing of COVID-19 containment policies. As discussed in the main *IDI report*, this illustrates a more general limitation of administrative data; observed changes over time may reflect shifts in policies or recording practices rather than true changes in the underlying prevalence of harm.

The interRAI trend fluctuates across the period, and it is unclear why this is the case. As noted above, interRAI is also not detecting cases of AOP within ARC facilities. Rather, it is assessing the risk of AOP for individuals at a point in time when they are living in the community (i.e. before they move to an ARC facility).

Figure 1: AOP prevalence, overall and by data source, 2015–2022



Note: Prevalence in ACC data in 2015 is suppressed due to small numbers, in accordance with Stats NZ requirements.

AOP prevalence in administrative data, by gender

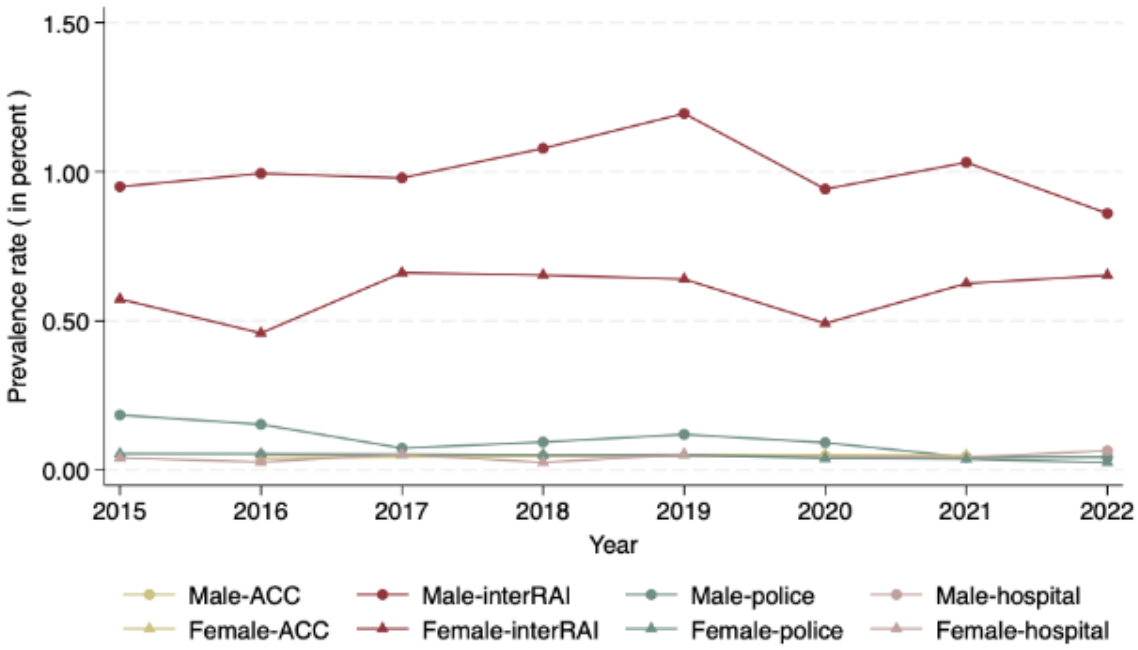
Figure 2 shows the prevalence of AOP by gender. Across the period men experience a higher prevalence of AOP than women (1.0%–1.4% for men compared to around 0.6%–0.75% for women). This contrasts with the main *IDI report* on community-dwelling older people (Chen et al., 2026), which found little difference in prevalence by gender. The difference likely reflects the data sources; in the ARC population, most cases come from interRAI home care assessments, whereas in the community population a larger share came from police, hospital, and ACC records. This suggests the gender pattern seen here may be a feature of how interRAI captures risk rather than a true difference in AOP prevalence.

Figure 2: AOP prevalence by gender, 2015–2022



Reinforcing this point, Figure 3 shows this difference comes largely from the interRAI data. For police, ACC, and hospital data, there is generally little difference in prevalence between men and women.

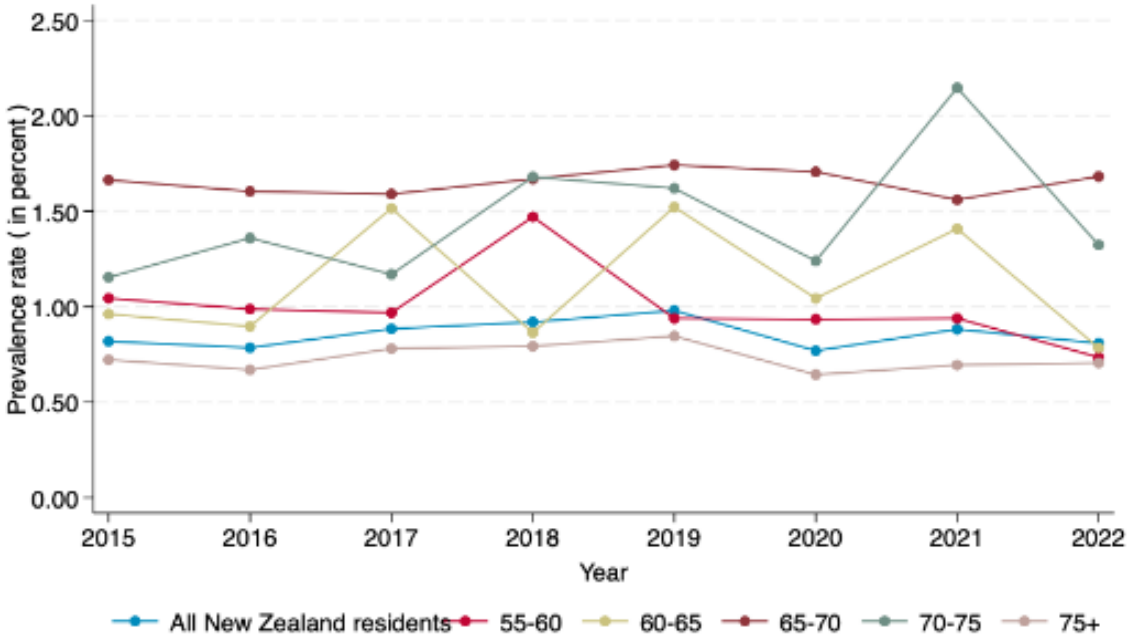
Figure 3: AOP prevalence by data source and gender, 2015–2022



AOP prevalence in administrative data, by age group

Figure 4 shows the prevalence of AOP by age group. While the group aged 75 years and older consistently had the lowest AOP prevalence, trends for other age groups were quite noisy, with no clear relationship between age and prevalence. This differs from the main *IDI report* on community-dwelling older people, which showed a clearer decline in prevalence with increasing age (Chen et al., 2026). The noisy pattern in ARC likely reflects the relatively small number of residents in the younger age groups, which makes estimates less stable. The *Prevalence Survey* also found that prevalence falls with age (23.3% at ages 55–64 compared with 7.9% for those aged 75 and over; Meehan et al., 2026).

Figure 4: AOP prevalence by age, 2015–2022

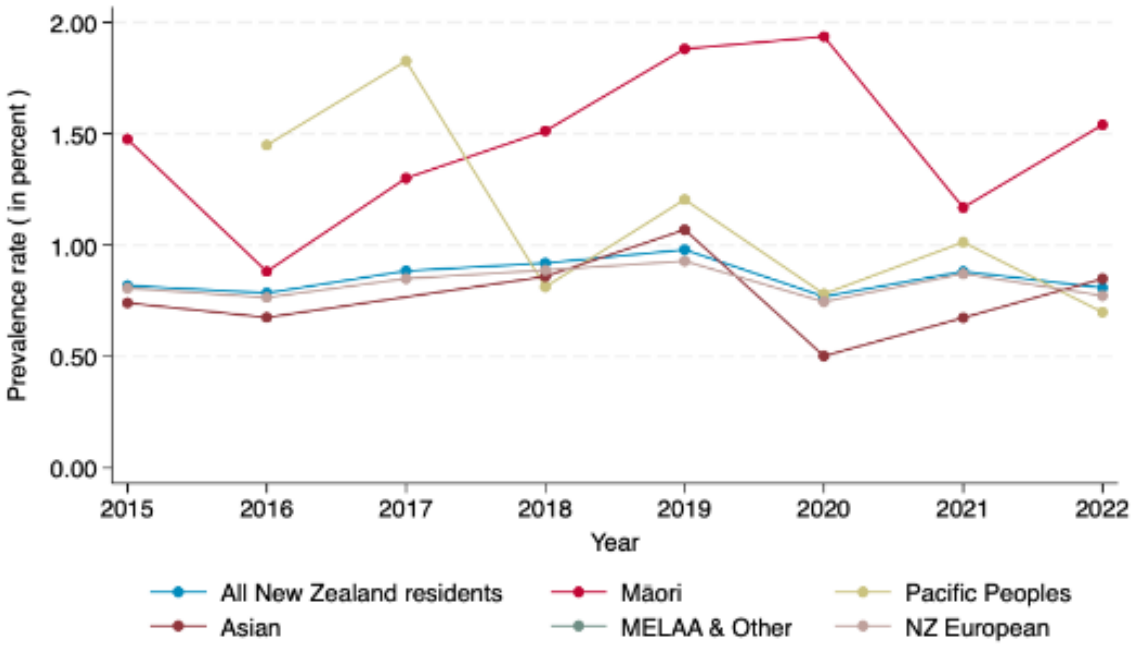


AOP prevalence in administrative data, by ethnicity

As can be seen in Figure 5, Māori consistently experienced AOP at a rate greater than the wider population, fluctuating between a low of 0.88% in 2016 and a high of 1.94% in 2020. For all but two years studied Māori had the highest absolute prevalence of AOP. This pattern is consistent with the *main IDI* report on community-dwelling older people, which also found the highest prevalence among Māori and the lowest among Asian older people across all data sources (Chen et al., 2026). In the community population, this was most pronounced in police data, where Māori prevalence was more than double that of the next group. While some of these differences may reflect patterns of service use or reporting, the *Prevalence Survey* also found the highest overall prevalence for Māori (22.6%) and the lowest for

Asian older people (9.5%) (Meehan et al., 2026). This suggests that the higher prevalence observed for Māori in administrative data reflects a genuine inequity, not only differences in data capture.

Figure 5: AOP prevalence by ethnicity, 2015–2022



Note: Prevalence for Pacific peoples in 2015 and for MELAA & Other in all years are suppressed due to small numbers, in accordance with Stats NZ requirements.

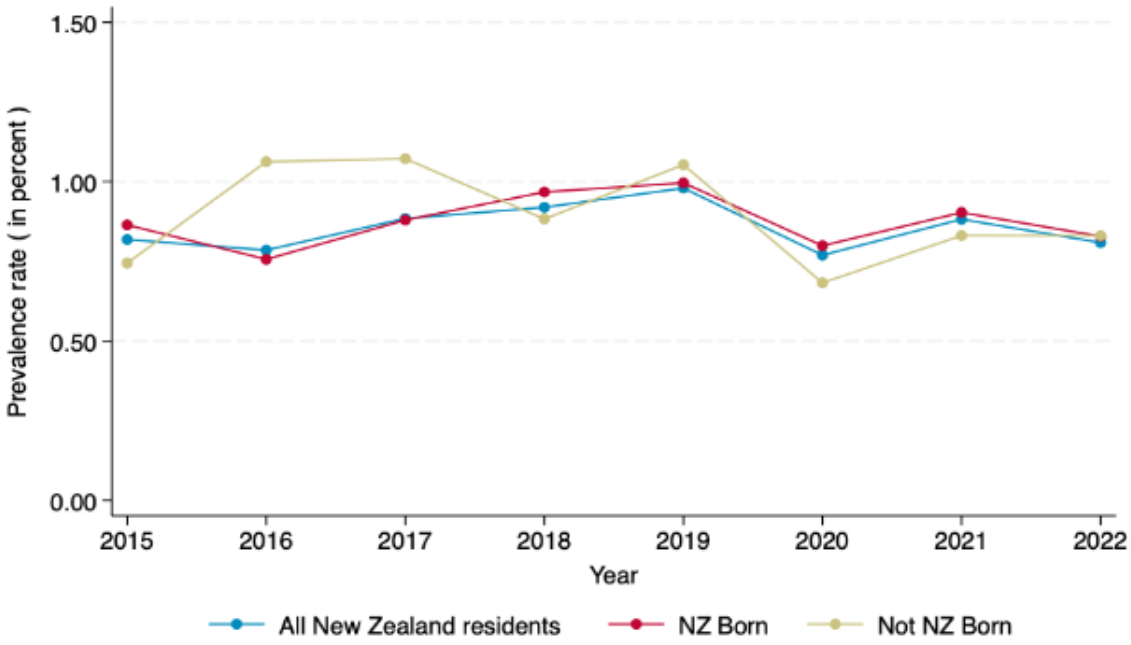
AOP prevalence in administrative data, by Rainbow identity

We are unable to report the prevalence of AOP by Rainbow identity because there are small numbers of people identifying as Rainbow in our study population, resulting in suppression of the data output in compliance with Stats NZ requirements.

AOP prevalence in administrative data, by NZ birth status

Figure 6 shows little difference in prevalence by NZ birth status for most of the period. However, in 2016 and 2017, prevalence was higher among those born outside of NZ (>1% versus approximately 0.85%). This contrasts with the main *IDI report* on community-dwelling older people, which found consistently lower prevalence among people born abroad than among those born in NZ (Chen et al., 2026). As noted there, this pattern may, at least partly, reflect different levels of interaction with the public services that generate administrative data rather than actual differences in experiences of AOP.

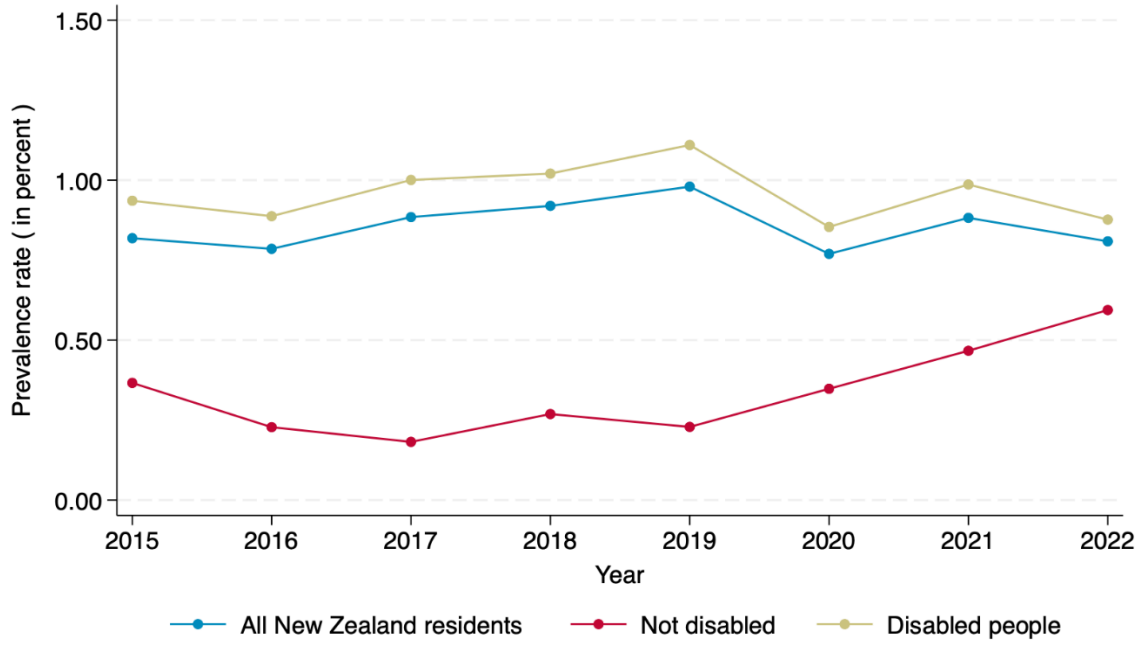
Figure 6: AOP prevalence by NZ birth status, 2015–2022



AOP prevalence in administrative data, by disability status

Figure 7 shows that people with disability had a higher prevalence of AOP than people without disability. This pattern is consistent with the main *IDI report* on community-dwelling older people (Chen et al., 2026). Although the prevalence rates in administrative data are much lower than those found in the *Prevalence Survey*, the pattern is the same: in the survey, 27.7% of older disabled people reported experiencing AOP compared with 14.9% of non-disabled older people (Meehan et al., 2026).

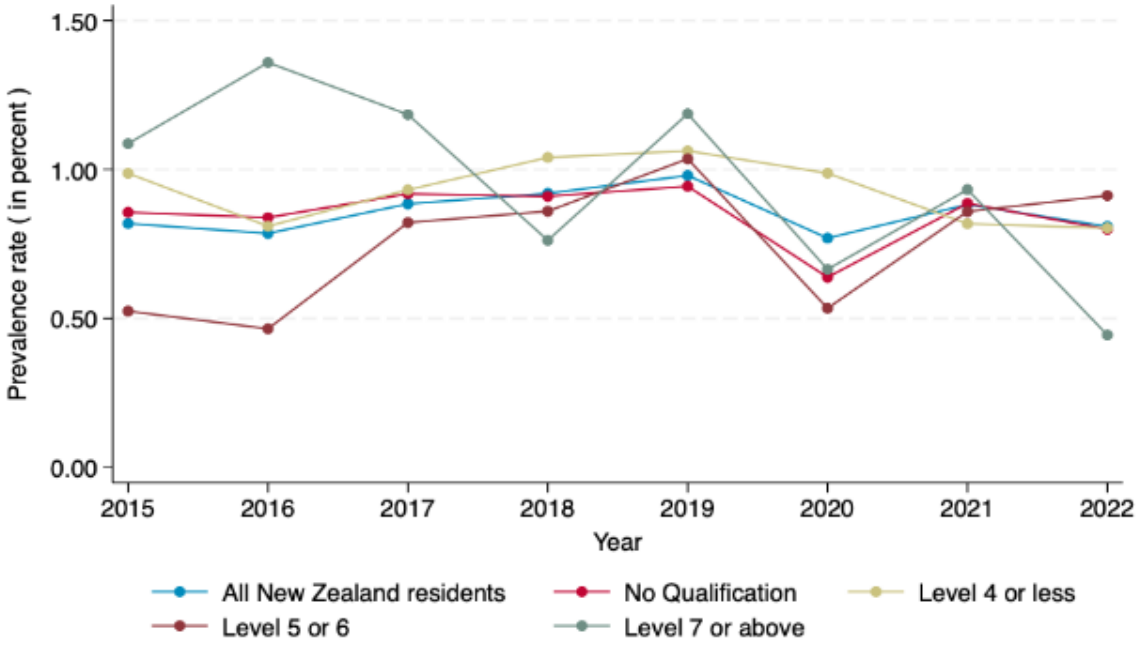
Figure 7: AOP prevalence by disability status, 2015–2022



AOP prevalence in administrative data, by qualification

In Figure 8, there is no clear pattern of differences in AOP prevalence by qualification. In many years there is little variation between different qualification levels, and the ordering changes year on year. In 2016, however, there is a noticeable gap between the highest prevalence of AOP (about 1.4% among those with qualifications at level 7 or higher) and the lowest prevalence (about 0.5% among people with qualifications equivalent to level 5 or 6). Given the absence of a consistent pattern over time, and the relatively small numbers involved, we consider it unlikely that this gap reflects a meaningful relationship. Also, this contrasts with the main *IDI report* on community-dwelling older people, which showed a clearer relationship; those with no qualifications had the highest prevalence of AOP, while those with a bachelor's degree or higher had the lowest prevalence (Chen et al., 2015).

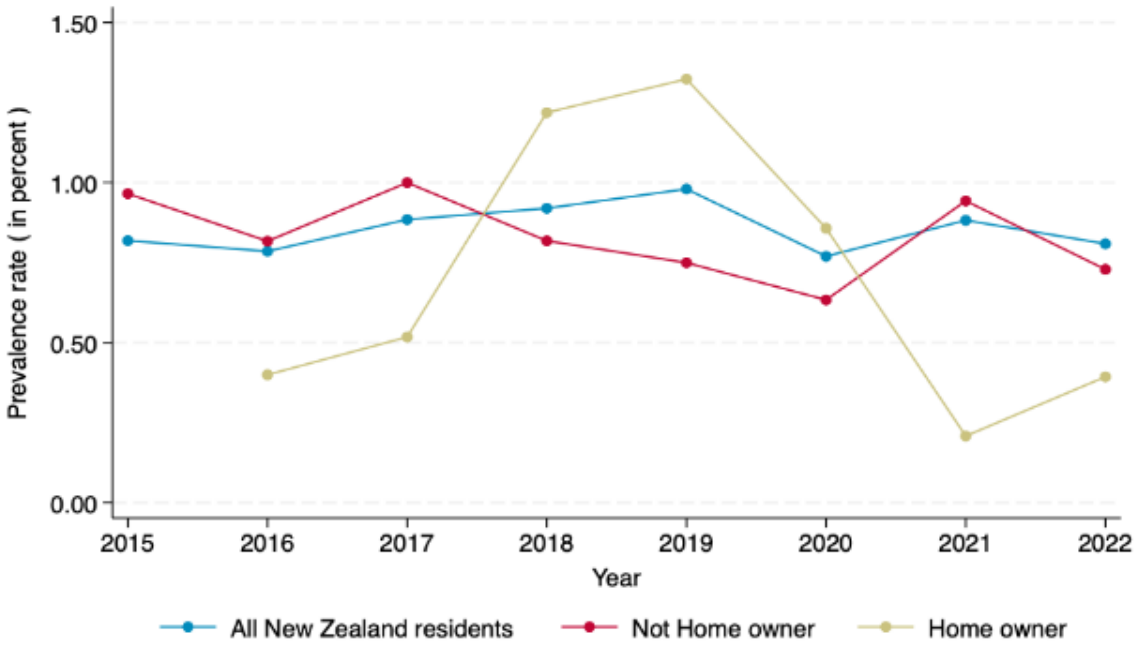
Figure 8: AOP prevalence by qualification, 2015–2022



AOP prevalence in administrative data, by home ownership

The majority of our sample are not home owners, which is why the full population prevalence tracks closely to the prevalence for non-homeowners across the period (see Figure 9). Among home owners, there is notable fluctuation, with prevalence ranging from about 0.2% to 1.3% across the period. However, information on home ownership is often incomplete for people in residential care (see Table 3: Population characteristics), so apparent differences between home owners and non-homeowners should be treated with caution. In the main *IDI report* on community-dwelling older people, prevalence was higher among non-homeowners than home owners (Chen et al., 2026), and a similar pattern was found in the *Prevalence Survey Report* (Meehan et al., 2026).

Figure 9: AOP prevalence by home ownership status, 2015–2022

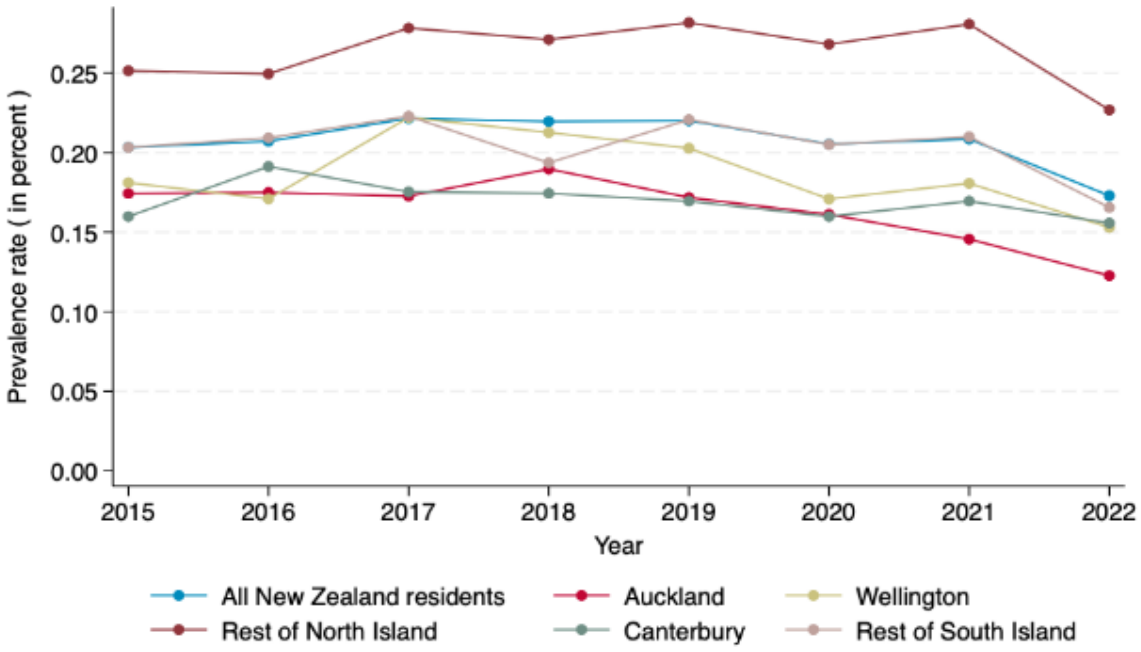


Note: Prevalence for home owners in 2015 is suppressed due to small numbers, in accordance with Stats NZ requirements.

AOP prevalence in administrative data, by region

Throughout our study period, the prevalence of AOP is highest in the North Island outside of the Auckland and Wellington regions. Other regions fluctuate such that there is no clear pattern in the relative prevalence (see Figure 10).

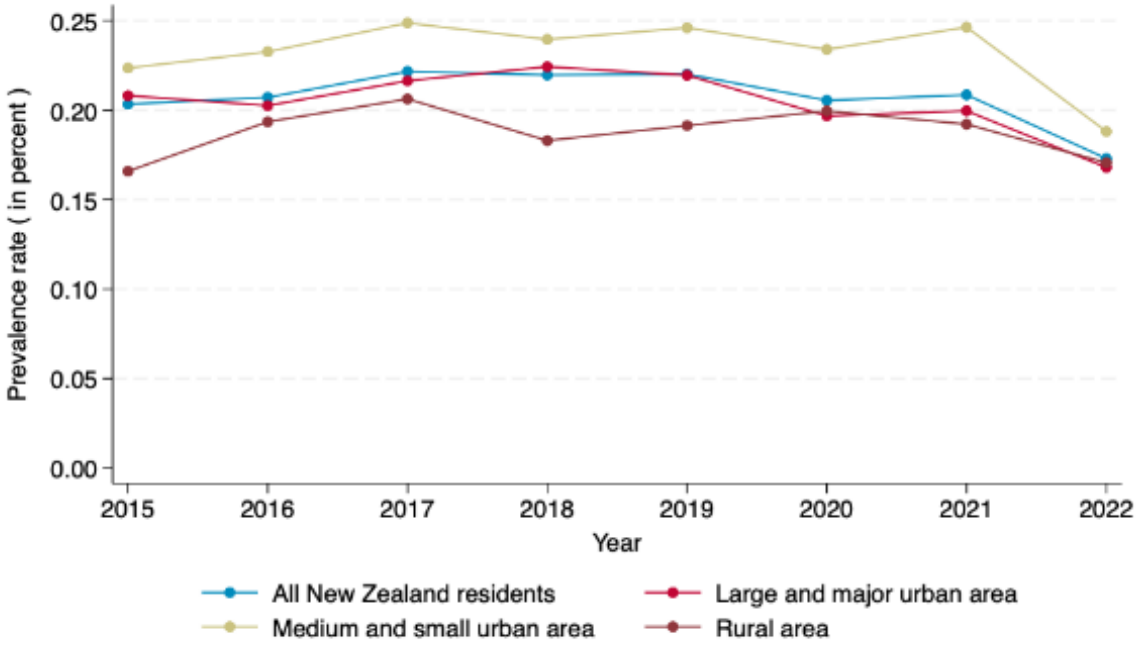
Figure 10: AOP prevalence by region, 2015–2022



AOP prevalence in administrative data, by urban-rural status

Figure 11 shows that AOP prevalence in the residential care population is highest among those living in medium and small urban areas, and lowest across most years among those in rural areas.

Figure 11: AOP prevalence by urban-rural status, 2015–2022



4 EXPLORING THE RELATIONSHIP BETWEEN AOP AND ARC

We use the interRAI Home Care (HC) and long-term care facility (LTCF) assessment data described in Section 2. Since July 2015, every newly admitted ARC resident is required to have an LTCF assessment within 21 days of moving into ARC. After the first assessment, assessments should be done in six-month intervals. This means the LTCF data give us a reliable way to identify all older people who move into ARC.

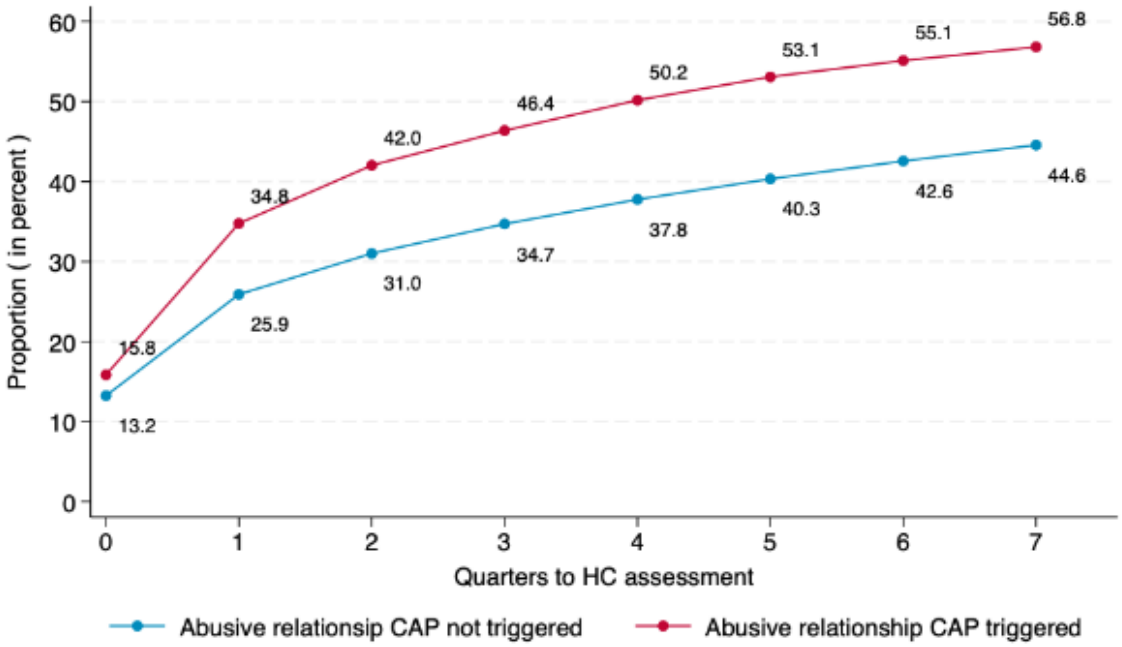
To link these ARC moves with earlier home circumstances, we focus on people who had an interRAI HC assessment before moving. Our sample selection follows two rules. First, we select HC assessments conducted on individuals aged 55 or older at the time of assessment. Second, we include HC assessments done between the first quarter in 2016 and the second quarter in 2022. We chose the first quarter in 2016 as the starting point because it may have taken time for ARC facilities to build up the capacity to adhere to the July 2015 mandate of having an LTCF assessment within 21 days of moving in. The end point is June 2022 because we aim to capture all ARC facility moving-in two years after the HC assessment and the LTCF data is updated to June 2024.

We also include the health measures in the HC assessment, and demographic variables from the personal details table.

Our final dataset is a panel dataset: each HC assessment (indexed by i) is tracked quarter by quarter (indexed by t) for up to two years. Thus, t takes values from 0 (the quarter of the HC assessment) to 7 (two years later). Some people had multiple HC assessments in this time, and we keep them all, so each assessment is treated as a separate starting point. Figure 12 shows the proportion of people who have moved into ARC facilities by each quarter since their HC assessment.[11] In the first quarter ($t = 0$), those with and without an abusive relationship trigger moved into ARC at about the same rate. Over time, however, the gap widened; by quarter 7, people with an abusive relationship trigger were 12.2 percentage points more likely to have moved into ARC.

[11] Note that this is not the same as the proportion of people currently living in ARC facilities. This is because we do not exclude people who die in the two months after their HC assessment, and because we do not know if or when a person moves out of ARC facilities. However, the data pattern suggests that most of the ARC residents stay in ARC until death.

Figure 12: Proportion of people moving to ARC following an HC assessment, with and without abusive relationships triggers



Older people with an abusive relationship trigger may differ from others in terms of demographics and/or health needs, which could explain this gap. To separate out these effects, we estimate a regression model that tracks the probability of moving into ARC over time, controlling for age, gender, ethnicity, deprivation, and a wide range of health measures. The equation is:

$$ARC_{it} = \beta_0 Abuse_i + \sum_{t=1}^{7} \alpha_t D_t + \sum_{t=1}^{7} \beta_t Abuse_i \cdot D_t + \gamma_0 X_i + \sum_{t=1}^{7} \gamma_t X_i \cdot D_t \delta_y + \delta_{TA} + \epsilon_{it}$$

Where $Abuse_i$ is a dummy variable equal to one if the abusive relationship CAP is triggered in the HC assessment i, otherwise 0. D_t are dummy variables equal to 1 if the quarter is t quarters after the HC assessment. X_i includes demographic variables of the assessed older person and health measures recorded in the HC assessment i.

The demographic variables include gender, prioritised ethnicity, 2018 deprivation decile of the neighbourhood the older people lived in when taking the HC assessment, age, and age-squared at the time of the HC assessment.

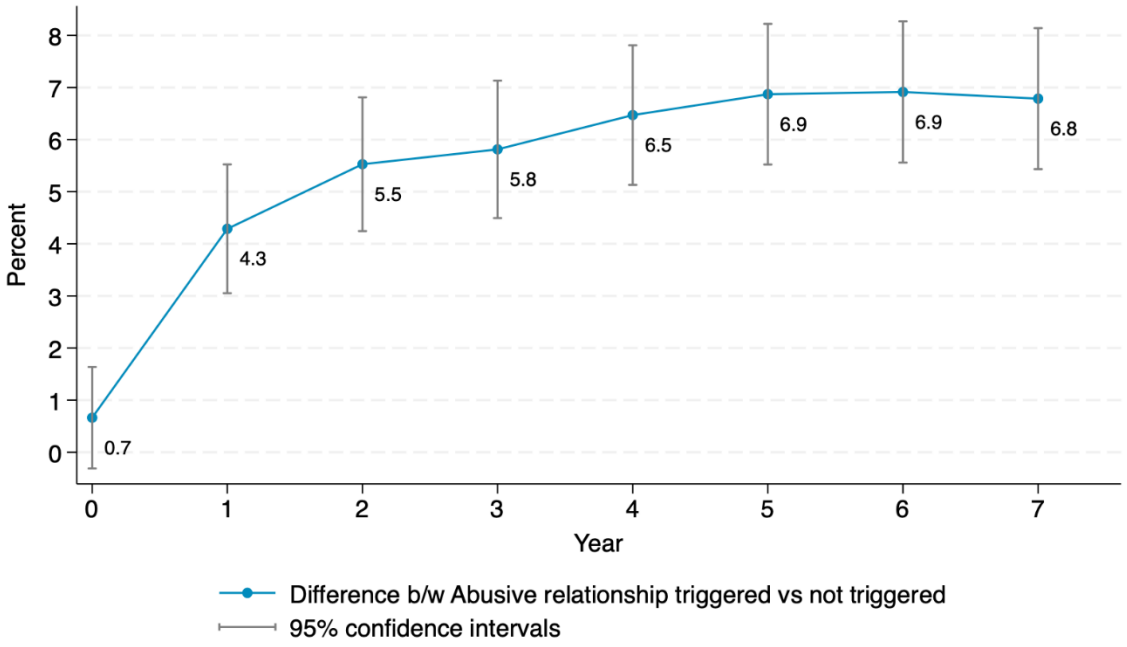
The health measures include two types of variables. First, outcome scales which cover both mental and physical health needs: Activities of Daily Living Hierarchy Scale (ADLH), Aggressive behaviour scale, Changes in Health, End-stage disease and Signs and Symptoms Scale (CHESS), Cognitive Performance Scale (CPS), Communication scale, Depression Rating Scale, Method for Assigning Priority Levels (MAPLe),

Pain scale, and Pressure Ulcer Risk Scale (PURS). We choose to include the outcome scales instead of the clinical assessment protocols (CAPs) in the health measures because they allow for finer categorisation, while CAPs only provide binary categorisation of the assessed older people. We modify the outcome scales based on the distribution of the number of HC assessments in each group. All modified outcome scales divide assessed older people into three to four groups. The second type of variable includes two easy-to-interpret variables not covered in the outcome scales: the location of the HC assessment (home or hospital) and self-rated health. More detail on the included health measures is in Appendix 1.

The coefficient γ_0 captures the association between demographic and health measures and the probability of moving into ARC during the quarter of HC assessment t. The coefficients of the interaction terms γ_t further capture such influences in later quarters.

To interpret the main coefficient of interest β_t, we must examine the components of the health measures and the abusive relationship CAP trigger. The included outcome scales and the abusive relationship CAP trigger share many inputs, such as the Depression Rating Scale, self-reported health, weight loss, and fluid intake. However, inputs to the abusive relationship CAP trigger regarding social relationships, such as being fearful of family member, neglected, abused, mistreated, anger, or conflict with family or friends, are not utilised in the derivation of the included health measures. The coefficient associated with the abusive relationship CAP trigger β_t therefore captures the association between the trigger and the probability of moving into ARC, after controlling for measured health and demographic characteristics. This association may partly reflect the social relationship factors captured by the trigger. We plot β_t in Figure 13.

Figure 13: Difference in probability of moving to ARC in a given quarter for people with an abusive relationship (CAP) trigger



In the quarter of the HC assessment, the gap as shown in Figure 12 was 2.6 pp. After controlling for health and demographics, the gap fell to 0.7 points, suggesting that about three-quarters of the difference can be explained by these factors. In later quarters, only about half of the gap is explained, leaving a persistent difference in the likelihood of moving into ARC for people with an abusive relationship trigger.

Overall, this shows that older people flagged as at risk of abuse are more likely to move into ARC than others, even after accounting for differences in health status and demographics. This suggests that experiences of harm may accelerate transitions into residential care.

5 INTERPRETATION

At face value, these results simultaneously suggest both that AOP is not a large problem in the residential care population (because prevalence is only around 1%) and that this population experiences much more AOP than the community-dwelling population (because the prevalence rate measured using IDI data is 1% compared to 0.2%). However, there are important limitations to the data, making the face value estimates problematic.

5.1 Data limitations in common with the community-dwelling population

The main *IDI report* on prevalence of AOP in the community-dwelling population described some of the limitations of IDI data sources (Chen et al., 2026). Chief amongst these is that abuse will only be captured in the data when it causes an interaction with certain public services, like the police or healthcare system. Some kinds of abuse – like physical abuse – are more likely than others to result in interaction with these services. Similarly, the data will be better at capturing severe instances of AOP, as these cases are more likely to require medical attention or motivate reporting to police.

Another important limitation is that changes in prevalence over time may not reflect true changes in harm. Instead, they may be driven by shifts in policies, recording practices, or service use patterns. This means that apparent increases or decreases in administrative data should be interpreted cautiously, as they may capture changes in systems rather than underlying prevalence.

5.2 Data limitations specific to the residential care population

InterRAI assessments, which assess the risk of abuse rather than definitively identifying abuse, can capture a broader range of abuse types than the other IDI data sources. In the community-dwelling population, a limitation of this data source is that not everyone is equally likely to undergo an interRAI assessment. In the residential care population this is not the case; all new residents are supposed to undergo an interRAI assessment soon after moving to residential care. However, that assessment does not include the abuse indicators contained in the full assessment given at home. Therefore, the contribution of interRAI risk of abuse indicators to the prevalence we report here is based on the risk identified *before* the person moved into residential care. In some cases, risk of abuse will be a reason for the move into residential care in the first place. This is consistent with our finding that older people who

had an abuse risk trigger in their HC assessment were more likely to move into ARC than those without such a trigger. Thus, the indicator is both biased and lacking in validity in terms of measuring AOP within residential care settings.

The issue of only extreme cases of abuse being captured in administrative data is exacerbated for the population living in residential care. Residential care facilities are likely to provide medical assessment and treatment on-site, so some incidents that would have been captured through hospital data in the community-living population will be missed in the residential care population. Similarly, institutions may have internal processes for dealing with incidents which would result in police complaints if they occurred in the community.

5.3 Estimating prevalence of AOP in this population

These limitations cannot easily be overcome. In the community-dwelling population, we concluded that IDI data could provide a window into some forms of abuse, including allowing the observation of change over time when calibrated with more robust data like a prevalence survey. This is not the case for the residential care population, not least because there is no equivalent to the *Prevalence Survey Report*.

The exclusion of people living in residential care from the *Prevalence Survey Report* has sound methodological reasoning, because the reasons for requiring residential care will in many cases make obtaining accurate survey data especially challenging (Meehan et al., 2026). However, this does leave a gap that needs to be filled. A mixed methods approach to collecting such data could include:

- Adding the abuse module to the existing universal interRAI assessments that occur soon after a person moves into residential care.
- Seeking records from residential care operators of complaints or incidents within their facilities.
- Interviews or focus groups with residents of care facilities who can engage in such research.
- Interviews and/or surveys with care workers and other staff of residential care facilities.
- Interviews and/or surveys with friends and family members of people living in residential care facilities.

None of these data sources alone provide a complete picture of AOP in residential care, but together they would offer valuable insights into the experiences of residents.

These limitations are consistent with international research. A systematic review and meta-analysis by Yon et al. (2019) found that abuse in institutional settings is widespread but often under-detected, with particularly high prevalence of psychological abuse and neglect. The review also highlighted the

methodological challenges of obtaining valid prevalence measures in residential care. Our findings reinforce this evidence; administrative data in NZ can provide some signals of risk but cannot deliver reliable prevalence estimates within ARC. As in the international literature, a mixed-methods approach – combining surveys of residents and staff, qualitative interviews, and systematic recording of incidents – will be required to fill this critical knowledge gap.

5.4 AOP is associated with moving to ARC

Health and demographic factors explain some of the increased probability of AOP victims moving to ARC. However, as time goes on, about half remains unexplained by these factors. This is consistent with the possibility that experiences of harm contribute to earlier transitions into ARC.

6 IMPLICATIONS AND CONCLUSION

As discussed in Section 5, the results presented in this report seem to suggest both that AOP is not a large problem in the residential care population (because prevalence is only around 1%) and that this population experiences much more AOP than the community-living population (because the prevalence rate is 1% compared to 0.2%). However, the limitations of the data mean these estimates are not reliable and cannot be used to determine the true prevalence of AOP in residential care. This exercise has been useful to test whether prevalence could be measured using IDI data, but we find that with current data sources this is not possible.

Across groups, Māori consistently showed higher prevalence than other ethnicities, and disabled people had higher prevalence than those without disability. Patterns by gender and age were less clear, and results for qualification and home ownership were inconsistent. These differences should be interpreted cautiously, given data limitations, but are generally consistent with findings for community-dwelling older people using data from the IDI (Chen et al., 2026) and the *Prevalence Survey Report* (Meehan et al., 2026).

Health and demographic factors explain some of the increased probability of moving to ARC for people with an abuse risk trigger in the interRAI home care assessment. However, over time, about half of the difference remains unexplained. Overall, this shows that older people flagged as at risk of abuse are more likely to move into ARC than others, even after accounting for health and demographic differences. This suggests that experiences of harm may accelerate transitions into residential care.

These findings align with international research showing that AOP in residential care is difficult to measure with administrative data alone. A systematic review and meta-analysis by Yon et al. (2019) found a high prevalence of abuse in institutional settings, especially psychological abuse and neglect, but also emphasised that such harms are frequently under-detected and under-reported. Our results reinforce this challenge; while administrative data in NZ can signal some risk factors for harm, it cannot provide valid prevalence estimates within ARC facilities. This supports calls in the international literature for mixed-method approaches (including resident and staff surveys, qualitative interviews, and systematic recording of incidents) to provide a fuller understanding of AOP in residential care.

In conclusion, upwards of 30,000 older adults live in residential care facilities in NZ. At present, it is impossible to estimate the degree to which these people are affected by AOP. Given the vulnerability of this population, this is a critical knowledge gap which must urgently be filled.

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Appendix 1: Health variables

Appendix Table 1 provides detail on the health measures included in the regression described in Section 4 of this report.

Appendix Table 1: Health measures included in regression equation (interRAI New Zealand, 2025)

Measure	Derivation	Original groups	Modified groups
Self-rated health	In general, how would you rate your health?	Excellent, good, fair, poor, cannot respond	Four groups in total. Excellent and good are combined into one group.
Activities of Daily Living Hierarchy Scale (ADLH)	Functional capability of daily living tasks: personal hygiene, bed mobility, toilet use, eating	Independent, Supervision required, Limited impairment, Extensive assistance required-1, Extensive assistance required-2, Dependent, Total dependence	Four groups in total: Extensive assistance required-1, Extensive assistance required-2, Dependent, Total dependence are combined into one group
Aggressive behaviour	Presence of the following behaviour: verbal abuse, physical abuse, socially inappropriate or disruptive behaviour, resisting care	None, moderate, severe, very severe	Three groups in total. Severe and very severe are combined into one group
Changes in Health, End-stage disease and Signs and Symptoms Scale (CHESS)	Derived from (1) change in decision-making as compared to 90 days ago, (2) change in ADL (activities of daily living) status as compared to 90 days ago, (3) presence of end-stage disease, 6 or fewer months to live, (3) presence of vomiting in last three days, (4) presence of peripheral edema in last three days, (5) presence of dyspnea, (6) weight loss of 10% or more in last 30 days, or 10% or more in last 180 days, (7) fluid intake less than 1,000 ml per day, (8) dehydrated, (9) ate one or fewer meals on at least two of last three days, (10) decrease in amount of food or fluid usually consumed, (11) fluid output exceeds input	No symptoms, Minimal health instability, Low health instability, Moderate health instability, High health instability, Highest level of instability	Four groups in total: Moderate health instability, High health instability, Highest level of instability are combined into one group

Measure	Derivation	Original groups	Modified groups
Cognitive Performance Scale (CPS)	Derived from (1) cognitive skills for daily decision-making, (2) short-term (recall after five minutes), (3) abilities in making self understood, (4) independent level of eating	Intact, Borderline intact, Mild impairment, Moderate impairment, Moderately severe impairment, Severe impairment, Very severe impairment	Three groups in total. Intact and Borderline intact are combined into a group; Mild impairment is itself a group; all others are combined into a group
Communication scale	Derived from abilities in (1) making self understood, (2) understanding others	Intact, Borderline intact, Mild impairment, Mild-to-Moderate impairment, Moderate impairment, Moderate-to-severe impairment, Severe impairment, Severe-to-very severe impairment, Very severe impairment	Four groups in total. Intact, Borderline intact, Mild impairment, and all others
Depression Rating Scale	Derived from the following behaviours observed in the last three days (1) made negative statements, (2) persistent anger with self/others, (3) expression (including non-verbal) of what appear to be unrealistic fears, (4) repetitive health complaints, (5) Repetitive anxious complaints/concerns (non-health-related), (6) sad, pained, or worried facial expressions, (7) crying, tearfulness	Each behaviour can score 0, 1, or 2, based on the frequencies. The range of the score is therefore 0–14	Four groups in total: score 0, 1, 2, and above 3
Method for Assigning Priority Levels (MAPLe)	Derived from decision trees based on (1) residential history in the last five years, (2) cognitive skills for daily decision-making, (3) acute change in mental status from a person's usual functioning, (4) change in decision-making compared to 90 days ago, (5) presence of wandering, (6) presence of verbal abuse, (7) presence of physical abuse, (8) presence of socially inappropriate or disruptive behaviours, (9) presence of inappropriate public	Low priority: no service or light home care services required, Mild priority: personal care and home care services required, Moderate priority: range of home care services required, High priority: risk of adverse outcomes; may need respite (such as respite at	Three groups in total: low priority, mild priority and moderate priority are combined into one group

Measure	Derivation	Original groups	Modified groups
	sexual behaviour or public disrobing, (10) presence of resists care, (11) independence level of meal preparation, (12) performance of meal preparation, (13) capacity of meal preparation, (14) capacity of ordinary work, (15) capacity of managing medications, (16) performance of shopping, (17) capacity of transportation, (18) performance of bathing, (19) performance of personal hygiene, (20) performance of dressing upper body, (21) performance of dressing lower body, (22) total hours of exercise or physical activity in the last three days, (23) number of days went out of the place where resides in last three days, (24) bladder continence, (25) diagnosis of Alzhemer's disease, (26) diagnosis of dementia other than Alzheimer's disease, (27) diagnosis of multiple sclerosis, (28) number of falls in last 30 days, (29) number of falls in 31 to 90 days ago, (30) ate one or fewer meals on at least two of the last three days, (31) mode of nutrition intake, (32) most severe pressure ulcer, (33) disrepair of the home, (34) squalid condition of home, (35) home with inadequate heating or cooling, (35) feel of lack of personal safety at home, (36) limited access to home or rooms in home, (37) overall self-sufficiency has changed significantly compared with 90 days ago, (38) ADLH scale, (39) cognitive performance scale, (40) geriatric screener, (41) institutional Risk CAP count	home, residential respite, or a day programme) due to reliance on an informal helper, Very high priority: 24-hour care or residential respite required	
Pain scale	Derived from (1) frequency with which person complains or shows evidence of pain, (2) intensity of highest level of pain present	No pain, Less than daily pain, Daily pain but not severe, daily severe pain, Daily excruciating pain	Four groups in total: daily severe pain and daily excruciating pain are combined into one group
Pressure Ulcer Risk Scale (PURS) (Poss et al., 2010)	Derived from (1) performance of walking, (2) performance of bed mobility, (3) bowel continence, (4)	Score range between 0–8. Prior pressure ulcer counts as two	Four groups in total. Scores above 3 are

Measure	Derivation	Original groups	Modified groups
	presence of dyspnoea, (5) frequency with which person complains or shows evidence of pain, (6) weight loss of 10% or more in last 30 days, or 10% or more in last 180 days, (7) prior pressure ulcer	points; other items count as one point each	combined into one group



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