emerald PUBLISHING

International Journal of Migration, Health and Soci

Health and Healthcare in Australian Immigration Detention: A Comparison between Onshore and Offshore Data

Journal:	*International Journal of Migration, Health and Social Care*
Manuscript ID	IJMHSC-03-2023-0031.R1
Manuscript Type:	Academic Paper
Keywords:	health, immigration detention, offshore detention, Australia, health care, refugee

Health and Healthcare in Australian Immigration Detention: A Comparison between Onshore and Offshore Data

Abstract

This study examined 3 years of adult health data from Australian onshore and offshore immigration detention, quantifying healthcare encounters and comparing rates of consultations by health profession, reason(s) for presentation, prescribed medication, referrals and hospitalisations, and suicide and self-harm risk between onshore and offshore detention. Data were extracted from the Australian government's quarterly immigration detention health reports from 2014-2017 obtained through FOI requests. To compare onshore and offshore health data, we calculated the median rate of the aforementioned health events per quarter against the estimated quarterly onshore and offshore adult detention population, and then we ran a series of two-proportion z-tests for each matched quarter to assess whether the observed differences between onshore and offshore events were statistically significant. Our results suggest that adults detained onshore and offshore have substantial health needs, however, almost all rates were far higher in offshore detention, with people more likely to raise a health-related complaint, access health services and be prescribed medications, often at two to three times the rate of those onshore. This study is one of the first to directly compare onshore and offshore immigration detention, adding weight to observations that offshore detention is far more harmful. It also has relevance beyond Australia and should serve as a warning for countries seeking to set up offshore asylum processing centres.

Keywords

Health, immigration detention, offshore detention, Australia, healthcare, refugee, asylum seeker

Introduction

The Australian immigration detention system has been a subject of significant debate and controversy over the past decades (Essex, 2020). Since 1992, the country's migration law requires the detention of all non-citizens who are in Australia without a valid visa, including those who overstay, have their visa cancelled or arrive in Australia without a visa and are seeking asylum. Once a person (adult or child) has been moved to immigration detention, they must remain in detention until they have been granted a valid visa enabling them to remain lawfully in Australia or they choose to leave/are removed from the country (Kaldor Centre for International Refugee Law, 2021). This in practice means that a person can be held in detention for a prolonged and indefinite period.

The detention can take place both onshore and offshore. Onshore immigration detention refers to the detention of individuals within Australian territory. The majority of non-citizens onshore are held in closed, high security immigration detention centres (IDCs) and immigration transit accommodations (ITAs). Detainees may also be held temporarily in alternative places of detention (APODs) such as hotels and correctional centres, and a small number of individuals have also been approved to live in set housing within the community. Australia's laws also enable the transfer of individuals who arrived by boat/are intercepted at sea and wish to apply for asylum to regional processing centres (RPCs) offshore on Nauru and Manus Island in Papua New Guinea

(Australian Human Rights Commission, 2004). Those detained offshore are given no opportunity to resettle in Australia and are barred from entering the country on a permanent basis. All asylum seekers who have arrived by boat since August 2012 have been liable to offshore processing, with thousands detained for over a decade with little news about safety or resettlement as the Australian government continues to negotiate for their third country resettlement.

The detention environment, and particularly the offshore environment, have been widely criticised from a health and human rights standpoint. Singling out offshore detention specifically the International Criminal Court (ICC) labelled these policies as "cruel, inhuman, or degrading treatment" which were unlawful under international law (Doherty, 2020). The United Nations (UN) special rapporteur on torture also accused the Australian government of failing to provide adequate detention conditions on Manus Island and Nauru by "violating the right of asylum seekers, including children, to be free from torture or cruel, inhuman or degrading treatment" (UN Human Rights Council, 2015), whilst Amnesty International (2016) similarly concluded that offshore detention and processing policies "amount to torture".

Offshore detention policies have also been shown to have a devastating impact on health and wellbeing. For example, the Médecins Sans Frontières (2020) Indefinite Despair Report found that amongst 208 refugees and asylum seekers detained on Nauru, 129 (62%) were diagnosed with moderate to severe depression, 25% were diagnosed with anxiety disorder, 18% with post-traumatic stress disorder (PTSD) and 11% with complex trauma, amongst a range of other diagnoses. This report also details a deterioration of over time: of those who had consistent contact with health services (n = 74), 15 (20%) remained stable, while 51 (69%) deteriorated and only 8

(11%) showed improvement in their daily functioning. In a study utilising data collected during the 2014 Australian Human Rights Commission Inquiry into Children in Immigration Detention, Mares (2016) found extremely high rates of mental disorder in both adults and children detained on Christmas Island, offering further evidence of the profound negative consequences of prolonged immigration detention for health. A recent cross-sectional analysis of a cohort of children and young people subjected to detention on Nauru (n = 62) have also shown that the vast majority of the cohort had physical health (89%) and mental health (79%) concerns, including self-harm or suicidal ideation/attempt (45%); as per the study's findings, mental health concerns were also more likely in children and young people who had been held in detention for a year or longer (Amarasena et al., 2023). Gleeson (2016) has also documented cases of self-harm and suicide attempts by offshore detainees, highlighting the psychological toll of prolonged detention and the harsh living conditions in RPCs on Manus and Nauru.

While such reports begin to give insight into the life of those detained offshore, only recently have we been able to directly compare conditions in onshore and offshore immigration detention. In two recent articles that utilised Australian government data related to health in immigration detention a number of stark results were found. [Redacted to maintain anonymity – Reference A] utilised the Kessler Psychological Distress Scale (K10)[1] data from these reports. The mean overall K10 score onshore was 18.85, while offshore it was 24.37. These scores are significantly higher than those recorded by Slade, Borg, and Burgess (2011) in the Australian community (14.05), suggesting that detainees often struggle with moderate to severe mental health problems; these

[1] K10 is a psychological screening tool designed to measure psychological distress based on questions about levels of nervousness, agitation, psychological fatigue, and depression (Kessler, Barker, Colpe et al., 2003). K10 total scores range from 10 to 50 with higher scores indicating greater distress.

scores are also higher if detained longer and offshore. A further study examined other data contained within these reports to gauge the impact of offshore detention on detained children ([redacted to maintain anonymity – Reference B]). These results suggest that in offshore detention children presented to general practitioners (GPs) far more frequently about a range of complaints, including digestive, skin, musculoskeletal, respiratory, eye, ear and urological complaints when compared to those held onshore. Children detained offshore were also significantly more likely to see mental health staff (psychologists, counsellors, and mental health nurses), generally at two to three times the frequency of those onshore. These results reflect those of Tosif et al. (2023) who also found based on retrospective audit of medical records that parents and children detained on Nauru had a significantly higher prevalence of mental health concerns compared with those held in IDCs on the Australian mainland or territories.

This paper has been informed by the literature that details the impact that Australian immigration detention has on the health of those who are detained. This study seeks to add to this literature by comparing the impact of Australian onshore and offshore immigration detention centres. It has two overarching aims. First, we intend on quantifying the health and healthcare encounters of the onshore and offshore adult populations in Australian immigration detention centres, outlining incidence as it relates to healthcare access, prescriptions, and other key health events. Second, we compare the incidence of health events between onshore and offshore detention to explore the impact of offshore detention on health and healthcare events.

Materials and methods

Data Sources

In this study we utilised the Australian government's Quarterly Immigration Detention Health Reports over a period of 3 years (from Quarter 3, 2014, to Quarter 2 2017) for onshore and offshore detention[2]. The reports were either already publicly available[3] or obtained through Freedom of Information Requests sent to the Australian Department of Home Affairs. They contain data about the health and wellbeing of detainees, including complaints/presenting symptoms and number of appointments and hospitalisations, among other variables. For onshore detention, the reports covered detention centres (IDCs and ITAs) on mainland Australia and Christmas Island; other forms of onshore detention such as APODs and community detention are therefore not investigated in this paper.

Measures, Data Transformation and Analysis

Data were entered manually by two authors (<redacted>), screened, and cleaned. To compare onshore and offshore datasets, the data were transformed. To do this, we first had to estimate the quarterly detention populations. The estimates were informed by the monthly Australian immigration detention population statistics, (which are publicly available and published by the Australian government)[4] and the quarterly health reports. For those detained onshore, the

[2] These reports are not available any earlier than these dates and the Australian government has not yet released reports beyond Q4 2017 offshore and Q4 2018 onshore.
[3] https://www.homeaffairs.gov.au/access-and-accountability/freedom-of-information/disclosure-logs
[4] https://www.homeaffairs.gov.au/research-and-statistics/statistics/visa-statistics/live/immigration-detention

Department of Home Affairs publishes monthly, cross-sectional statistical reports on the immigration detention population; this data set alone is however not suitable for determining the number of new and released detainees onshore on a quarter by quarter basis, because the statistics for each month include hundreds of people who have been detained for less than 3 months as well as individuals who are detained for multiple quarters. Hence, a more accurate quarterly detention population needed to be calculated for onshore detention. This was done on the basis of the quarterly health reports, by using the percentage of the population and number of individuals who were for instance prescribed medication for a given quarter, and from this, we estimated the total number against which this figure was reached. To calculate the offshore population, we utilised the cross-sectional population of adults. This was possible because after mid-2014 to mid-2017 the offshore population was largely static; that is, few people would have moved in and out within a quarter. We did explore whether the method that was applied to onshore data would make any significant difference to our results for the offshore calculations, and we found that cross sectional data was generally representative of the percentages reported in the offshore quarterly health reports (accurate to within 1-2 percent). The total numbers of adults and children by detention category and quarter are reported in Table 1. A more detailed explanation of our methodology is contained in the supplementary material.

After calculating the detention population for both onshore and offshore data, we estimated the rate of health events per quarter against the quarterly onshore and offshore adult detention population. Health related events were converted to rates or proportions per 100 detainees per quarter (i.e., $p = \frac{e}{n} \times 100$). We have relied on data reporting 'unique individuals' as opposed to 'unique appointments' per quarter; that is, the rates reported below reflect the number of adults

per quarter that (on average) accessed services or were prescribed medication. Raw data from which these rates were calculated are detailed in our supplementary material. Because quarter by quarter many of the same adults were detained, data violated assumptions for independence of observations, limiting the significance tests that could be carried out. We opted therefore to run a series of two-proportion z-tests for each matched quarter. After calculating a z and p value for each quarter, we calculated median z and p values for all quarters and utilised this as an indicator as to whether the observed differences between onshore and offshore events were statistically significant.

This study included five variables: the reasons why adults presented to General Practitioners (GPs) and Psychiatrists, the number of consultations by health profession, prescribed medication, referrals and hospitalisations and the number of individuals being observed because of suicide and self-harm risk. A detailed description of these variables is included in the supplementary material.

Ethical approval

Ethics approval for this study was granted by the University of Greenwich, Human Research Ethics Committee (UREC/20.1.5.6).

Results

Reasons for presentation to GP and Psychiatrist

Over the three years there were a total of 95,968 onshore and 66,358 offshore appointments with GPs or Psychiatrists. The number of health events and totals are reported in the supplementary

material in table 9. Rates varied quite substantially, however in almost all cases, rates were higher amongst the offshore population. Presentations related to general/unspecified issues (Md[5] = 68 offshore, Md = 45 onshore), digestive complaints (Md = 44 offshore, Md = 23 onshore), skin complaints (Md = 37 offshore, Md = 18 onshore), musculoskeletal complaints (Md = 44 offshore, Md = 27 onshore), respiratory complaints (Md = 33 offshore, Md = 11 onshore), eye complaints (Md = 9 offshore, Md = 4 onshore), social complaints (Md = 17 offshore, Md = 8 onshore), neurological complaints (Md = 13 offshore, Md = 7 onshore), ear complaints (Md = 11 offshore, Md = 4 onshore) and urological complaints (Md = 19 offshore, Md = 4 onshore) and injuries (Md = 10 offshore, Md = 5 offshore) were all, on average across all quarters, higher offshore. The only exceptions here were psychological complaints (Md = 36 offshore, Md = 48 onshore) and pregnancy (Md = 1 offshore (0.59), Md = 1 offshore (1.11)) which were both higher onshore. A summary along with z and p values are reported in table 2. As presentations may have been recorded more than once in these data, it makes it somewhat difficult to interpret. Looking at the number of presentations for unique adults helps in this respect. The number of unique adults who presented for various issues mirrors the results above in that offshore rates were far higher in almost all categories, including presentations in relation to general/unspecified issues (Md = 35 offshore, Md = 25 onshore), digestive complaints (Md = 21 offshore, Md = 13 onshore), skin complaints (Md = 20 offshore, Md = 10 onshore), musculoskeletal complaints (Md = 24 offshore, Md = 14 onshore), respiratory complaints (Md = 16 offshore, Md = 6 onshore), eye complaints (Md = 5 offshore, Md = 3 onshore), neurological issues (Md = 10 offshore, Md = 6 onshore), ear complaints (Md = 5 offshore, Md = 2 onshore), urological complaints (Md = 11 offshore, Md = 3 onshore) and injuries (Md = 8 offshore, Md = 4 onshore). Again, the only exception here was

[5] median rate per 100 detainees

psychological complaints, with rates higher onshore (Md = 20 offshore, Md = 16 onshore). A summary along with z and p values are reported in table 3 and Figures 1 and 2. Together these results suggest that more adults more frequently sought assistance for a range of complaints offshore compared to those onshore.

Number of consultations by health profession

Over 3 years there were a total of 442,800 appointments onshore and 205,095 appointments with healthcare professionals offshore. The number of health events and totals are reported in appendix 1. Rates varied quite substantially, however in almost all cases, rates were higher amongst the offshore population. While we didn't run significance tests on the unique appointments as totals exceeded the detention population across most quarters, rates were higher offshore in all categories except Nurse appointments, which were higher onshore. These results are summarised in table 4 in supplementary material. As presentations may have been recorded more than once in these data, it makes it somewhat difficult to interpret; looking at the number of presentations for unique adults helps in this respect. The number of unique adults who presented for various issues mirrors the results above in that offshore rates were far higher in almost all categories. GP appointments (Md = 61 offshore, Md = 52 onshore), Mental Health Nurse appointments (Md = 65 offshore, Md = 43 onshore), Psychologist appointments (Md = 26 offshore, Md = 12 onshore) and Counsellor appointments (Md = 44 offshore, Md = 9 onshore) were all, on average across all quarters, higher offshore. The only exception here were Nurse appointments which were significantly higher onshore (Md = 68 offshore, Md = 81 onshore). A summary along with z and p values are reported in table 5 in supplementary material and in Figures 3 and 4. Together these results suggest that

more adults more frequently sought assistance for a range of complaints offshore compared to those onshore.

Prescribed medications

Rates of prescriptions per quarter presented a more mixed picture. Offshore prescriptions for nonsteroidal anti-inflammatory drugs (NSAIDs) (Md = 37 offshore, Md = 24 onshore), hyperacidity, reflux or ulcers (Md = 17 offshore, Md = 9 onshore), penicillin (Md = 19 offshore, Md = 5 onshore), antihistamines (Md = 21 offshore, Md = 9 onshore), rubefacients (Md = 7 offshore, Md = 3 onshore) and anti-anxiolytics (Md = 4 offshore, Md = 2 onshore) were all, on average across all quarters, higher offshore. Prescriptions for anti-psychotics (Md = 4 offshore, Md = 7 onshore), combination analgesics (Md = 10 offshore, Md = 14 onshore), and all psychotropic prescriptions (Md = 18 offshore, Md = 22 onshore) were all, on average across all quarters, higher onshore. A summary along with z and p values are reported in table 6 in supplementary material and in Figures 5 and 6.

Referrals and hospitalisations

Rates of referrals and hospitalisations were all higher onshore, with pathology referrals (Md = 82 offshore, Md = 138 onshore) allied health referrals (Md = 28 offshore, Md = 64 onshore), radiology referrals (Md = 18 offshore, Md = 28 onshore), specialist referrals (Md = 2 offshore, Md = 8 onshore) and hospital admissions (Md = 2 offshore, Md = 6 onshore), on average across all quarters, higher onshore. A summary along with z and p values are reported in table 7 in supplementary material.

Number of individuals being observed because of suicide or self-harm risk

Data regarding observations related to suicide and self-harm were available from 2015 Q3. Rates were significantly higher onshore in almost all categories. Ongoing commencements (Md = 1 offshore, Md = 2 onshore), moderate commencements (Md = 1 offshore, Md = 2 offshore), high commencements (Md = 1 offshore and Md = 2 onshore) on observations and unique individuals (Md = 2 offshore, Md = 3 onshore) were all, on average across all quarters, higher onshore. A summary along with z and p values are reported in table 8 in supplementary material.

Discussion

The above results suggest detainees both onshore and offshore have substantial health needs and that a significant number both on and offshore are likely to have had particularly poor health while detained. On almost every measure, incidence of healthcare events in offshore detention were either on par or significantly worse than onshore detention. Both the number of individuals and number of presentations per 100 detainees per quarter were higher for a range of healthcare professions offshore, suggesting that individuals offshore accessed health services at far higher rates than those onshore. Those offshore were generally also prescribed medications at a far higher rate than those onshore. While there were some health events that were significantly higher onshore, these were few and are arguably best explained by there being a lack of availability and/or access to health services offshore (de Boer, 2013; Gleeson, 2016). This is arguably the case for referrals and hospitalisations. Services on Manus Island and Nauru are not only limited, but there

have also been multiple public cases where the Australian government has refused specialist treatment for those offshore (Essex, 2015).

Previous studies have suggested that those detained for protracted periods more closely resembled a clinical sample (e.g., Mares, 2016; Young & Gordon, 2016; Zwi et al., 2018). On this point it is worth comparing some of results reported in this study to health service utilisation and events in the broader Australian community. In 2016-17, 87.8% of the Australian population visited their GP at least once each year (RACGP, 2018). In comparison, our data suggests that about 50% of the detention population saw a GP every quarter onshore, and almost 61% per quarter offshore. During the same period, at least once in 12 months 68% of the Australian population were prescribed medication (RACGP, 2018). In detention, if we sum the number of individuals prescribed medication per quarter, 151% of individuals onshore and 250% of individuals offshore were prescribed a medication per quarter, meaning that on average there were 1.5 and 2.5 prescriptions written per person per quarter. Perhaps the most alarming figure is related to mental health. In 2019-20 on average, 10.7% of Australians accessed mental health specific services (i.e., psychologists, psychiatrists, and GPs) (Australian Institute of Health and Welfare, 2020). In detention rates were far higher: per quarter, rates of accessing mental health professionals ranged from 8% of the population per quarter (individuals who accessed a psychologist onshore) to 65% of the population per quarter (individuals who accessed a mental health nurse offshore).

Surprisingly, the results also show that observations related to risk of suicide and self-harm were significantly higher onshore. It is somewhat difficult to interpret these results; however, there appear to be at least four plausible explanations. First, those onshore had significantly greater need

to be placed on observation, although, this is unlikely as significantly higher levels of distress - which are often associated with acts of self-harm and suicidal ideation - have long been reported offshore (e.g., reference redacted to maintain anonymity; Tosif et al., 2023). Second, those onshore had far greater access to services and therefore access to support if at risk. Third, detainees offshore who engaged in self-harming behaviour and/or communicated thoughts of suicide may not have been taken seriously by staff and referred to medical care. Finally, there is also ample evidence to suggest that IHMS and healthcare professionals offshore were not trusted and were not accessed, which may well explain why fewer individuals were placed on suicide and self-harm observations offshore.

This study has several limitations that should be noted. First, a degree of selection bias is acknowledged in the IHMS quarterly health reports, namely, those who had been detained for protracted periods or those with more acute grievances were less likely to engage with health services. Similarly, the reports acknowledge that they may not have offered a true reflection of healthcare use and events occurring in the offshore RPCs, given the exclusion of clinical activities related to transferees who were designated as refugees following 2016. These two factors likely led to an underestimation of the offshore rates reported in this study. Second, the data collected in the health reports were in many ways piecemeal and inconsistent, and we cannot comment on how accurately data was recorded. This suggests caution in interpreting the results. Third, while our data overwhelmingly suggests that immigration detention and particularly offshore detention is harmful, we cannot rule out other potential confounders and state conclusively a cause-and-effect relationship regarding the impact of detention. Fourth, because of the nature of the data contained in the reports, we were constrained in the statistical analyses we could utilise to examine these

data. While we have taken a relatively conservative approach, caution is still warranted in interpreting our findings. A final limitation relates to the quarterly health reports themselves, given that the data reported in them can only be used as a proxy for the health of those detained onshore and offshore (e.g., variables such as appointment numbers are both an indicator of disease burden as well as of quality of care and access to care). Better reporting of health information should be made a priority into the future, particularly given the fairly dire results reported here.

Overall, the results of this study suggest that men and women detained in Australian immigration detention centres have far greater health needs than those in the Australian community: they access healthcare services at high rates, are prescribed medication at high rates, and present with a substantial range of physical and emotional problems, including injuries, respiratory infections, digestive and skin problems, and acute mental health episodes. The results also appear to support claims about the (lack of) availability of healthcare services offshore. While on many measures those offshore had far greater health needs, their significantly lower referrals to external and specialist services arguably indicate that referrals were either denied or unavailable offshore. There is ample anecdotal evidence to support this point and the Australian government's reluctance to transfer unwell immigration detainees has been well documented too (Reilly, 2019).

The results reported in this study, which almost unequivocally suggest that offshore detention results in far worse health outcomes for detainees, have broader, global relevance. As several high-income countries continue to externalise migration controls and explore/turn to the use of offshore detention (Essex *et al*., 2021), our findings support those advocating for an end to offshore and even all immigration detention.

New Contribution to the Literature

This paper adds to a modest body of literature that explains the health of people detained in Australian immigration detention centres. It is the first paper to our knowledge to explore health service utilisation by adult immigration detainees and a range of other variables found in the Australian government's quarterly health reports. The findings bolster the evidence which suggests that detention, and particularly offshore detention is particularly harmful to health. The results should also serve as a warning for governments which are modelling Australia's approach and are implementing offshore detention policies as a measure to stop unauthorised migration and people smuggling.

Competing interests

The authors declare no conflicts of interest.

References

Amarasena, L., Samir, N., Sealy, L., Hu, N., Rostami, M. R., Isaacs, D., ... & Zwi, K. (2023). "Offshore detention: cross-sectional analysis of the health of children and young people seeking asylum in Australia", *Archives of Disease in Childhood*, Vol. 108 No. 3, pp. 185-191. doi: 10.1136/archdischild-2023-325385

Amnesty International (2016), "Island of despair: Australia's "processing" of refugees on Nauru", available at: https://www.amnesty.org/en/documents/asa12/4934/2016/en/ (accessed 12 March 2023)

Australian Human Rights Commission (2004) "Australia's immigration detention policy and practice", available at: https://humanrights.gov.au/our-work/projects/6-australias-immigration-detention-policy-and-practice (accessed 01 September 2023)

Australian Institute of Health and Welfare (2020), "Medicare-subsidised mental health-specific services", available at: https://www.aihw.gov.au/getmedia/78aad118-149e-49e3-bacf-6be3cf8d1734/Medicare-subsidised-mental-health-related-services-2019-20.pdf (accessed 14 September 2023)

de Boer, R. (2013), "Health care for asylum seekers on Nauru and Manus Island", available at: https://apo.org.au/sites/default/files/resource-files/2013-06/apo-nid34717.pdf (accessed 14 September 2023)

Doherty, B. (2020), "Australia's offshore detention is unlawful, says international criminal court prosecutor", *The Guardian*, February 15, available at: https://www.theguardian.com/australia-news/2020/feb/15/australias-offshore-detention-is-unlawful-says-international-criminal-court-prosecutor (accessed 12 March 2023)

Essex, R. (2020), *The healthcare community and Australian immigration detention: The case for non-violent resistance*, Palgrave MacMillan/Springer Nature, Singapore.

Essex, R. (2015) "Ethics, foreseeability, and tragedy in Australian immigration detention", *Journal of Bioethical Inquiry,* Vol. 12 No. 4, pp. 537-539. doi: 10.1007/s11673-015-9676-y

Essex, R., Kalocsányiová, E., Timberlake, F. and Welander, M. (2021) "UK offshore immigration detention: why the medical community should act now", *Journal of the Royal Society of Medicine*, Vol. 114 No. 7, pp. 344-346. doi: 10.1177/0141076821994271.

Gleeson, M. (2016) Offshore: Behind the wire on Manus and Nauru. NewSouth.

Kaldor Centre for International Refugee Law (2021) "Immigration detention in Australia", available at: https://www.kaldorcentre.unsw.edu.au/sites/kaldorcentre.unsw.edu.au/files/Factsheet_Immigration%20Detention_Apr2019.pdf (accessed 01 September 2023).

Kessler, R. C., Barker, P.R., Colpe. L.J., Epstein, J.F., Gfroerer, J.C., Hiripi, E., et al. (2003) "Screening for serious mental illness in the general population", *Archives of General Psychiatry*, Vol. 60 No. 2, pp. 184-89.

Mares, S. (2016) "The mental health of children and parents detained on Christmas Island: secondary analysis of an Australian human rights commission data set", *Health and Human rights*, Vol. 18 No. 2, pp. 219-232.

Médecins Sans Frontières (2020) "Indefinite despair: The tragic mental health consequences of offshore processing on Nauru" Médecins Sans Frontières, available at:

https://www.msf.org/indefinite-despair-report-and-executive-summary-nauru (accessed 12 March 2023)

RACGP (2018) "Health of the nation" Royal Australian College of General Practitioners, available at: https://www.racgp.org.au/download/Documents/Publications/Health-of-the-Nation-2018-Report.pdf (accessed 12 March 2023)

Reference A: redacted to maintain anonymity

Reference B: redacted to maintain anonymity

Reilly, A. (2019) "Explainer: The medevac repeal and what it means for asylum seekers on Manus Island and Nauru." *The Conversation*, December 4, available at: https://theconversation.com/explainer-the-medevac-repeal-and-what-it-means-for-asylum-seekers-on-manus-island-and-nauru-128118 (accessed 12 March 2023)

Slade, T., Grove, R. and Burgess, P. (2011) "Kessler psychological distress scale: Normative data from the 2007 Australian national survey of mental health and wellbeing." *Australian & New Zealand Journal of Psychiatry*, Vol. 45 No. 4, pp. 308-316. doi:10.3109/00048674.2010.543653.

Tosif, S., Graham, H., Kiang, K., Laemmle-Ruff, I., Heenan, R., Smith, A., et al. (2023) "Health of children who experienced Australian immigration detention", *PLoS ONE* Vol. 18 No. 3, art. e0282798. doi: 10.1371/journal.pone.0282798

UN Human Rights Council (2015) "Report of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, Juan E. Méndez", available at: https://static.guim.co.uk/ni/1425873116713/Mendez-report.pdf (accessed 31 August 2023)

Young, P., & Gordon, M. S. (2016), "Mental health screening in immigration detention: A fresh look at Australian government data", *Australasian Psychiatry* Vol. 24 No. 1, pp. 19-22. doi: 10.1177/1039856215624247

Zwi, K., Mares, S., Nathanson, D., Tay, A. K., & Silove, D. (2018), "The impact of detention on the social–emotional wellbeing of children seeking asylum: a comparison with community-based children", *European Child & Adolescent Psychiatry* Vol. 27, pp. 411-422. doi: 10.1007/s00787-017-1082-z

Table 1. Total number of adults and children by detention category and quarter

	Onshore Adult population	Onshore Child population	Total onshore population	Offshore adult population	Offshore child population	Total offshore population
2014 Q3	3602	700	4302	2014	186	2200
2014 Q4	4414	622	5036	1795	135	1930
2015 Q1	3862	455	4317	1604	103	1707
2015 Q2	3218	173	3391	1512	88	1600
2015 Q3	3449	153	3602	1473	92	1565
2015 Q4	3264	132	3396	1391	68	1459
2016 Q1	2970	110	3080	1346	54	1400
2016 Q2	2994	32	3026	1247	49	1296
2016 Q3	3055	13	3068	1224	45	1269
2016 Q4	2467	13	2480	1201	45	1246
2017 Q1	2834	33	2867	1196	45	1241
2017 Q2	3024	18	3042	1220	42	1262

Note. The figures represent the total number of people detained throughout the quarter. Children in the detainee population refers to those aged 18 years and under.

Table 2. Rate per quarter, median z and p values: Reasons for presentation to GP/Psychiatrist – Unique appointments

Onshore	General unspecified	Psychological	Digestive	Skin	Musculoskeletal	Respiratory	Endocrine	Cardiovascular	Eye	Social	Neurological	Blood	Ear	Urological	Pregnancy	Genital	Injury
2014 Q3	56.65	71.50	40.66	27.68	38.54	24.64	20.34	7.74	9.51	19.71	12.02	3.51	9.16	11.48	5.16	10.51	10.48
2014 Q4	60.29	61.66	33.80	21.92	30.74	13.24	14.97	5.62	6.53	18.71	8.88	2.96	5.34	8.72	5.52	8.58	6.27
2015 Q1	42.78	46.14	23.07	19.16	25.60	10.49	10.49	4.01	5.65	9.24	6.86	1.76	2.94	5.70	4.91	5.98	4.66
2015 Q2	46.53	42.17	22.85	14.77	21.70	7.70	8.96	4.84	4.51	7.31	7.25	1.50	3.57	4.34	2.89	4.07	4.78
2015 Q3	62.16	50.33	25.35	17.49	24.99	13.60	10.27	6.55	4.66	10.63	7.36	1.08	2.58	4.69	1.78	4.08	4.61
2015 Q4	67.58	44.55	22.79	21.55	23.06	8.95	12.04	5.59	4.00	10.92	5.51	0.91	3.12	4.24	1.09	4.36	5.33
2016 Q1	62.47	52.95	21.88	21.49	28.83	7.56	10.84	5.16	3.93	12.66	7.11	1.20	4.68	5.32	0.97	4.71	3.80
2016 Q2	36.05	42.70	19.76	15.80	24.82	8.92	8.96	6.94	3.80	5.82	6.54	1.35	3.21	2.74	0.13	2.68	4.46
2016 Q3	12.81	43.22	22.91	16.40	27.93	12.81	8.64	6.03	3.94	1.08	7.89	1.01	3.03	3.62	0.36	4.14	4.82
2016 Q4	11.61	51.85	21.05	18.51	36.17	12.34	8.31	5.40	3.95	0.65	8.75	0.60	4.03	3.35	1.13	2.66	4.11
2017 Q1	11.16	51.73	18.77	18.14	31.29	9.77	9.14	6.03	3.87	0.77	8.72	0.59	4.57	2.06	0.10	2.72	4.71
2017 Q2	14.17	45.13	18.70	15.98	26.73	12.33	8.35	6.05	3.42	0.56	6.61	0.95	4.17	2.24	0.53	1.81	3.55
Offshore	General unspecified	Psychological	Digestive	Skin	Musculoskeletal	Respiratory	Endocrine	Cardiovascular	Eye	Social	Neurological	Blood	Ear	Urological	Pregnancy	Genital	Injury
2014 Q3	47.86	44.18	57.68	46.09	48.27	36.00	12.82	8.64	12.82	15.05	13.59	1.64	14.27	29.68	2.50	12.05	16.05
2014 Q4	88.08	62.33	78.19	54.92	68.50	39.02	20.88	12.18	13.58	21.92	18.86	2.49	19.17	28.55	2.02	12.38	20.00
2015 Q1	91.04	60.93	64.56	47.04	61.86	34.33	13.06	11.19	13.94	20.21	17.98	1.11	16.99	23.37	1.58	9.14	13.06
2015 Q2	99.94	61.19	70.06	47.88	64.25	36.94	13.06	8.31	11.88	21.50	21.44	1.56	19.44	21.25	0.75	6.75	12.88
2015 Q3	105.37	43.83	55.53	47.99	55.97	37.70	11.63	7.80	12.65	21.53	16.36	1.28	15.85	20.13	1.21	11.31	10.54
2015 Q4	105.14	33.10	44.62	36.05	46.40	32.63	9.25	6.10	6.92	18.78	12.20	1.17	10.76	21.86	1.51	4.93	8.64

2016 Q1	86.00	35.14	30.64	37.86	42.36	20.57	10.14	5.86	8.21	20.93	10.57	0.50	10.50	17.36	0.43	2.79	7.86
2016 Q2	49.61	36.73	40.20	33.95	40.90	33.26	7.48	6.48	8.26	9.10	13.12	0.93	7.87	6.87	0.00	3.78	10.11
2016 Q3	20.65	30.02	43.89	36.96	42.08	31.84	9.46	6.86	9.30	0.63	14.74	1.10	10.01	9.06	0.08	3.70	11.58
2016 Q4	12.28	25.76	22.79	20.71	27.85	18.14	2.01	2.65	3.21	0.48	9.39	0.56	4.57	5.54	0.00	3.29	4.74
2017 Q1	13.94	14.99	19.90	17.89	19.50	10.80	6.45	2.66	2.10	0.08	7.90	0.24	3.71	4.67	0.08	2.10	3.55
2017 Q2	6.97	13.31	11.89	7.69	12.20	7.61	4.44	2.22	2.93	0.24	3.25	0.16	4.20	3.96	0.08	0.55	1.82
Median onshore rate	44.66	**48.24**	22.82	18.32	27.33	11.41	9.71	5.82	3.98	8.28	7.31	1.14	3.80	4.29	**1.11**	4.11	4.68
Median offshore rate	**67.81**	35.94	**44.26**	**37.41**	**44.38**	**32.94**	9.80	6.67	**8.78**	**16.91**	**13.35**	1.11	**10.63**	**18.74**	0.59	4.36	**10.33**
Z (median)	**-12.12**	**7.76**	**-13.95**	**-14.07**	**-9.84**	**-17.15**	1.15	-0.99	**-6.02**	**-3.48**	**-6.98**	1.12	**-8.43**	**-15.24**	**2.01**	-1.48	**-6.76**
P (median)	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**	p=.004	p = .05	**p<.001**	**p<.001**	**p<.001**	0.26411	**p<.001**	**p<.001**	**p<.001**	0.02709	**P<.001**

Note: The above figures represent rates or proportions per 100 detainees.

Table 3. Rate per quarter, median z and p values: Reasons for presentation to GP/Psychiatrist – Unique adults

Onshore	General unspecified	Psychological	Digestive	Skin	Musculoskeletal	Respiratory	Endocrine	Cardiovascular	Eye	Social	Neurological	Blood	Ear	Urological	Pregnancy	Genital	Injury
2014 Q3	31.07	26.87	21.79	15.74	22.49	11.91	9.94	7.02	6.94	13.85	9.77	1.94	4.47	7.19	3.86	7.22	6.47
2014 Q4	30.04	21.05	17.94	11.96	16.36	7.14	8.90	4.40	4.17	13.21	7.16	2.06	2.74	5.14	3.38	5.75	4.17
2015 Q1	23.95	19.73	12.95	11.44	13.98	8.21	7.09	2.10	4.56	5.20	5.62	1.40	1.97	3.94	4.04	3.96	3.06
2015 Q2	25.79	18.43	12.49	9.32	12.87	4.75	6.28	4.20	3.11	5.56	5.53	1.21	1.99	3.23	1.68	3.14	3.92
2015 Q3	32.53	20.79	14.38	10.09	13.69	7.31	6.64	4.84	2.96	9.02	5.77	1.07	1.42	2.93	1.13	3.22	3.62
2015 Q4	33.70	20.22	13.24	11.55	13.54	5.39	7.75	4.66	2.88	8.76	4.56	0.80	1.59	2.94	0.70	3.09	4.17
2016 Q1	31.65	22.90	13.60	12.09	15.89	4.58	7.54	4.18	2.79	9.87	5.49	0.88	2.29	3.20	0.71	3.33	4.21
2016 Q2	23.08	21.44	13.03	10.22	13.99	5.41	6.38	5.14	2.74	5.28	5.18	1.20	2.00	1.84	0.10	2.07	3.41
2016 Q3	9.75	18.13	13.09	9.66	14.57	7.10	5.63	4.68	2.36	1.01	6.09	0.95	1.70	2.45	0.16	2.65	3.83
2016 Q4	8.19	17.11	10.62	9.93	15.36	5.76	5.19	3.49	2.88	0.61	5.19	0.45	1.91	2.15	0.36	1.58	3.36
2017 Q1	8.29	19.55	11.01	9.60	14.68	5.61	6.03	4.13	2.51	0.74	5.65	0.49	2.12	1.34	0.11	1.91	3.63
2017 Q2	9.92	18.35	9.82	8.37	12.04	6.51	5.52	4.27	2.41	0.53	4.23	0.79	2.05	1.36	0.17	1.55	2.71
Offshore	General unspecified	Psychological	Digestive	Skin	Musculoskeletal	Respiratory	Endocrine	Cardiovascular	Eye	Social	Neurological	Blood	Ear	Urological	Pregnancy	Genital	Injury
2014 Q3	29.69	21.55	32.03	27.86	25.97	21.30	9.38	7.15	9.58	11.42	10.77	1.39	7.80	18.12	1.74	8.14	10.13
2014 Q4	41.73	24.85	37.72	30.92	34.09	20.11	13.76	8.64	9.03	14.76	13.31	1.50	8.52	16.88	1.50	7.41	12.48

2015 Q1	48.57	22.51	28.99	25.06	29.74	15.77	8.85	8.29	7.79	14.65	13.47	0.94	7.36	13.28	1.18	5.61	9.54
2015 Q2	50.60	23.81	28.04	24.54	31.08	16.73	8.99	6.02	7.14	15.67	15.21	1.46	7.80	12.50	0.73	4.37	10.19
2015 Q3	47.11	19.62	24.30	23.69	27.63	16.56	8.62	5.70	7.74	16.16	11.54	1.09	6.72	12.70	0.75	6.45	8.42
2015 Q4	45.72	16.61	22.07	19.34	23.94	15.96	7.26	4.46	4.67	13.66	9.35	0.86	5.39	14.31	0.65	3.59	5.90
2016 Q1	39.75	15.60	16.34	18.20	21.77	9.51	7.06	4.38	4.83	14.49	8.02	0.52	4.09	9.36	0.30	2.38	6.69
2016 Q2	29.03	15.80	19.81	16.92	21.33	15.48	6.09	5.45	4.65	6.90	9.62	0.00	4.09	3.93	0.00	2.65	7.94
2016 Q3	14.13	12.42	19.44	19.93	23.53	14.30	6.78	5.64	5.47	0.57	11.19	0.98	4.33	4.98	0.08	2.61	8.66
2016 Q4	7.49	7.83	8.33	9.24	11.32	5.91	2.66	1.58	2.00	0.50	5.41	0.50	1.92	2.58	0.00	1.92	2.83
2017 Q1	5.94	5.35	6.69	6.10	7.27	4.26	2.76	1.84	1.25	0.08	4.01	0.17	1.17	1.67	0.08	1.34	2.26
2017 Q2	4.02	4.43	4.18	3.20	5.16	2.79	2.13	1.23	1.39	0.25	1.97	0.16	0.74	1.07	0.16	0.49	0.98
Median onshore rate	24.87	**19.98**	13.06	10.16	14.28	6.14	6.51	4.33	2.88	5.42	5.58	1.01	2.00	2.93	0.71	3.12	3.73
Median offshore rate	**34.72**	16.20	**20.94**	**19.64**	**23.73**	**15.63**	7.16	5.55	**5.15**	12.54	**10.20**	0.90	**4.86**	**10.93**	0.47	3.12	**8.18**
Z (median)	**-4.67**	**4.31**	**-6.59**	**-8.10**	**-6.47**	**-8.86**	0.46	-0.36	**-3.46**	-1.84	**-5.53**	1.32	**-5.10**	**-10.42**	1.44	-1.02	**-5.62**
P (median)	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**	p=.02	p=.099	**p<.001**	p=.009	**p<.001**	p=0.19	**p<.001**	**p<.001**	0.1594	p =0.15	**p<.001**

Note: The above figures represent rates or proportions per 100 detainees.

Figure 1. Rate per quarter: Reasons for presentation to GP/Psychiatrist – Unique adults

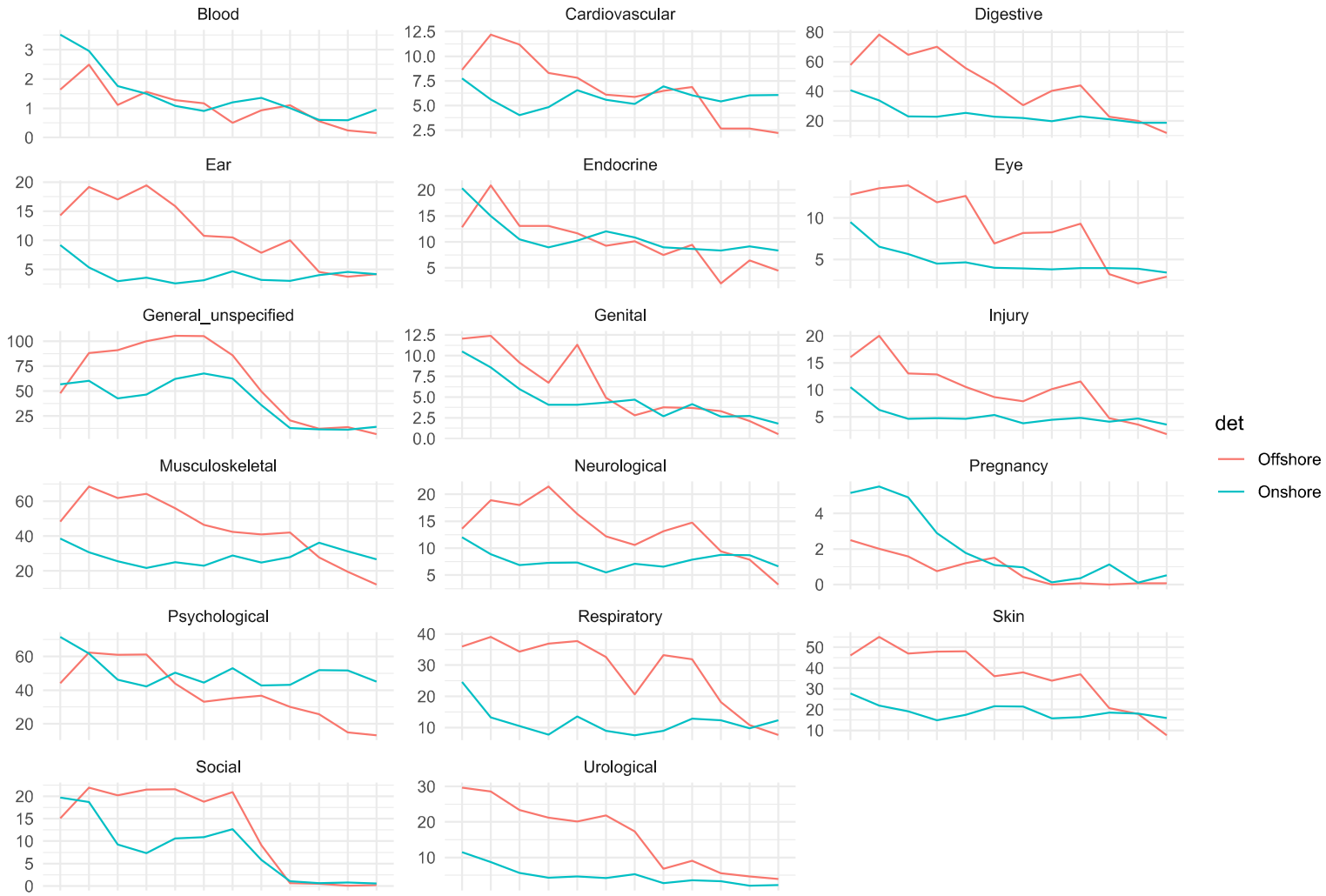


Figure 2. Mean rate: Reasons for presentation to GP/Psychiatrist – Unique adults

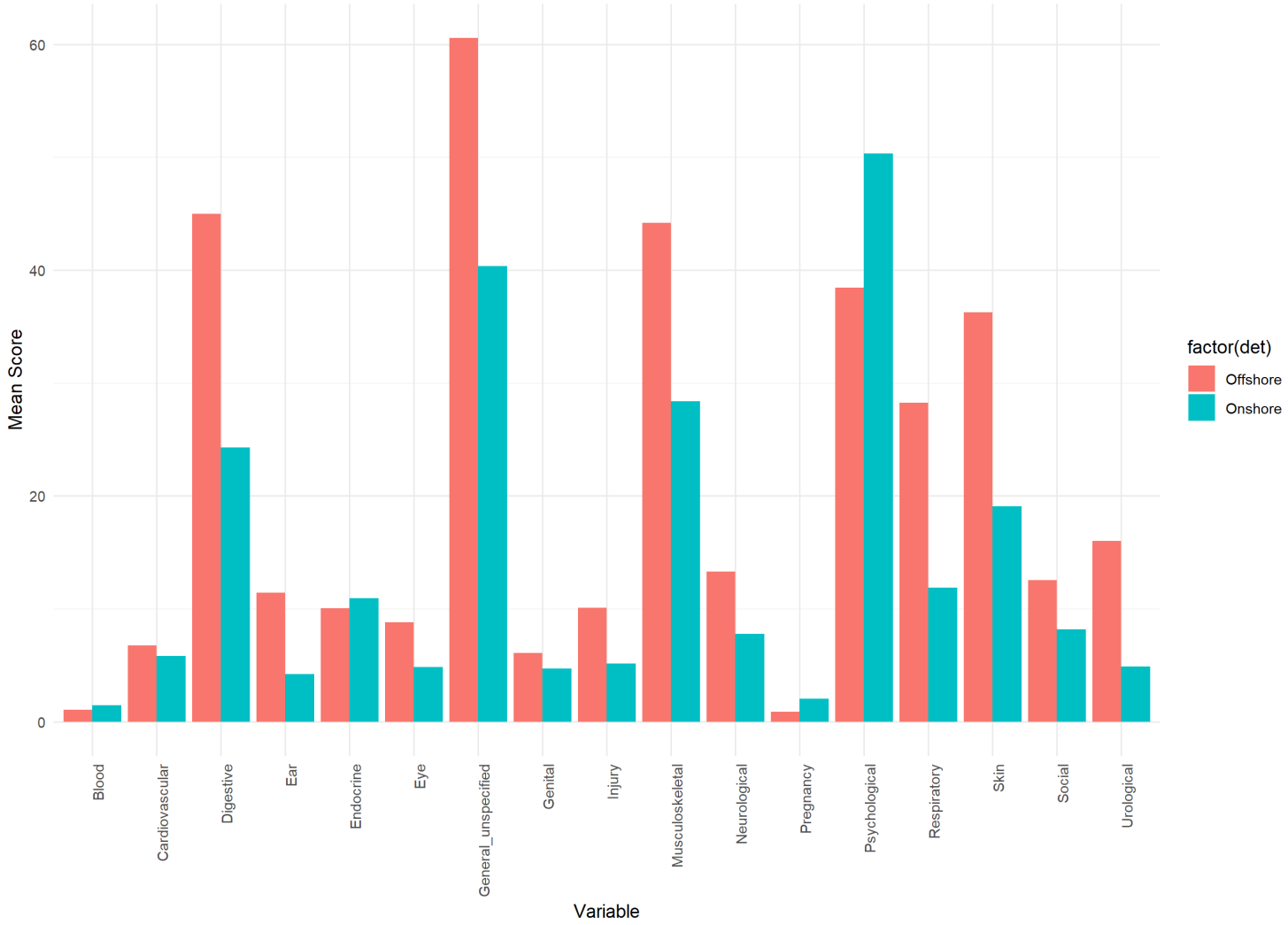


Figure 3. Rate per quarter: Appointments by health professional – Unique appointments

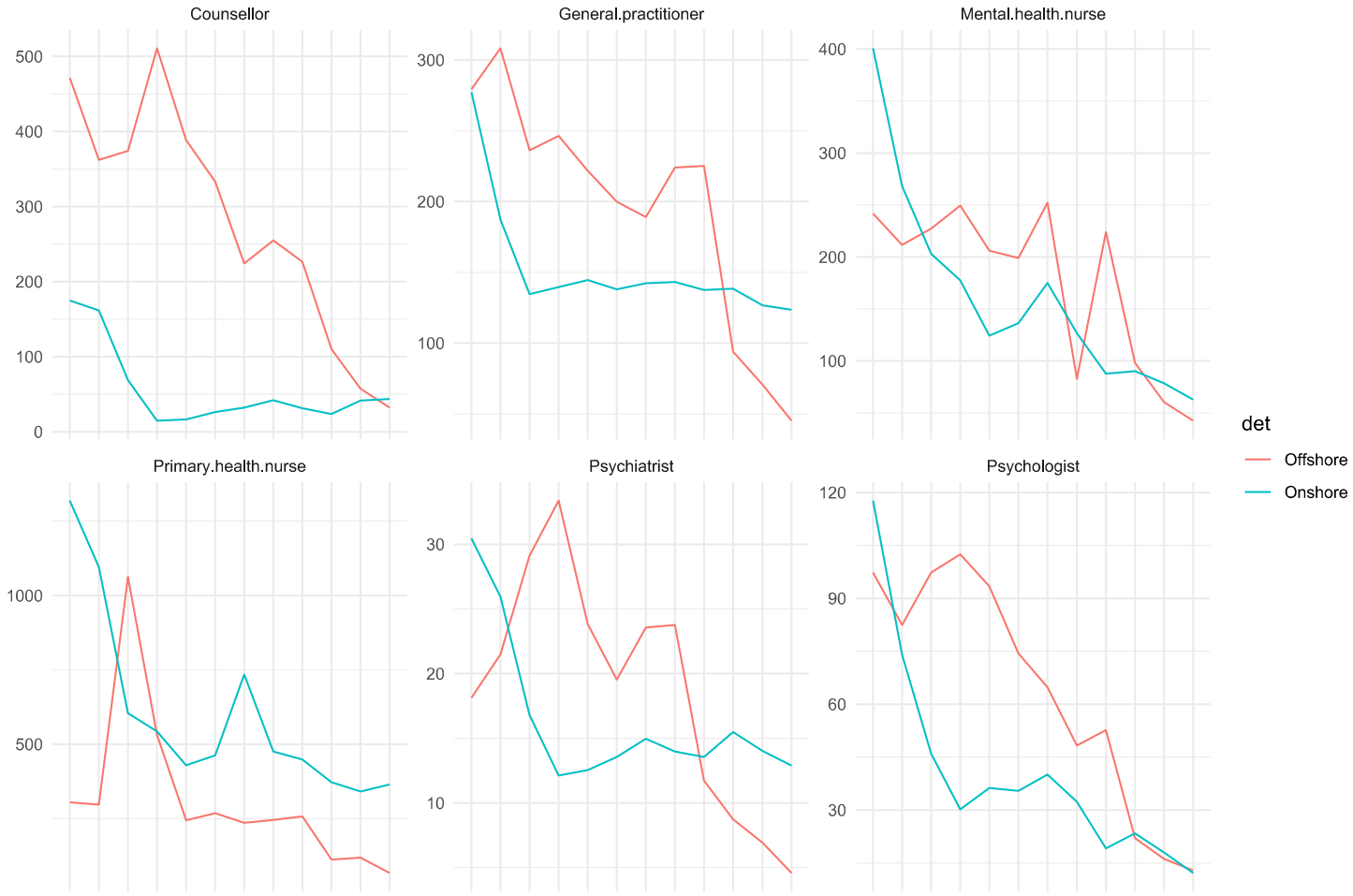


Figure 4. Mean rate: Appointments by health professional – Unique appointments

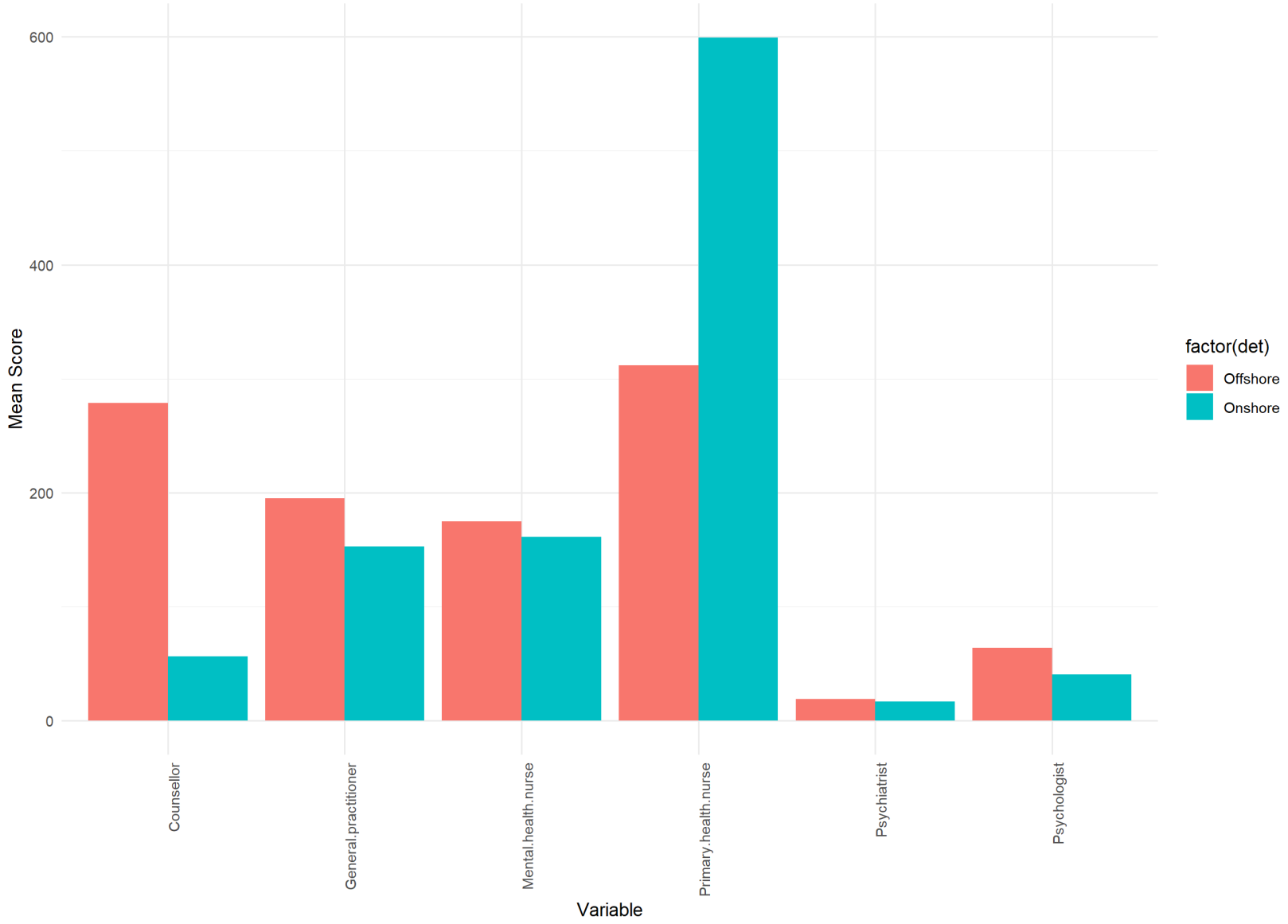


Figure 5. Rate per quarter: Number of adults who were prescribed medication

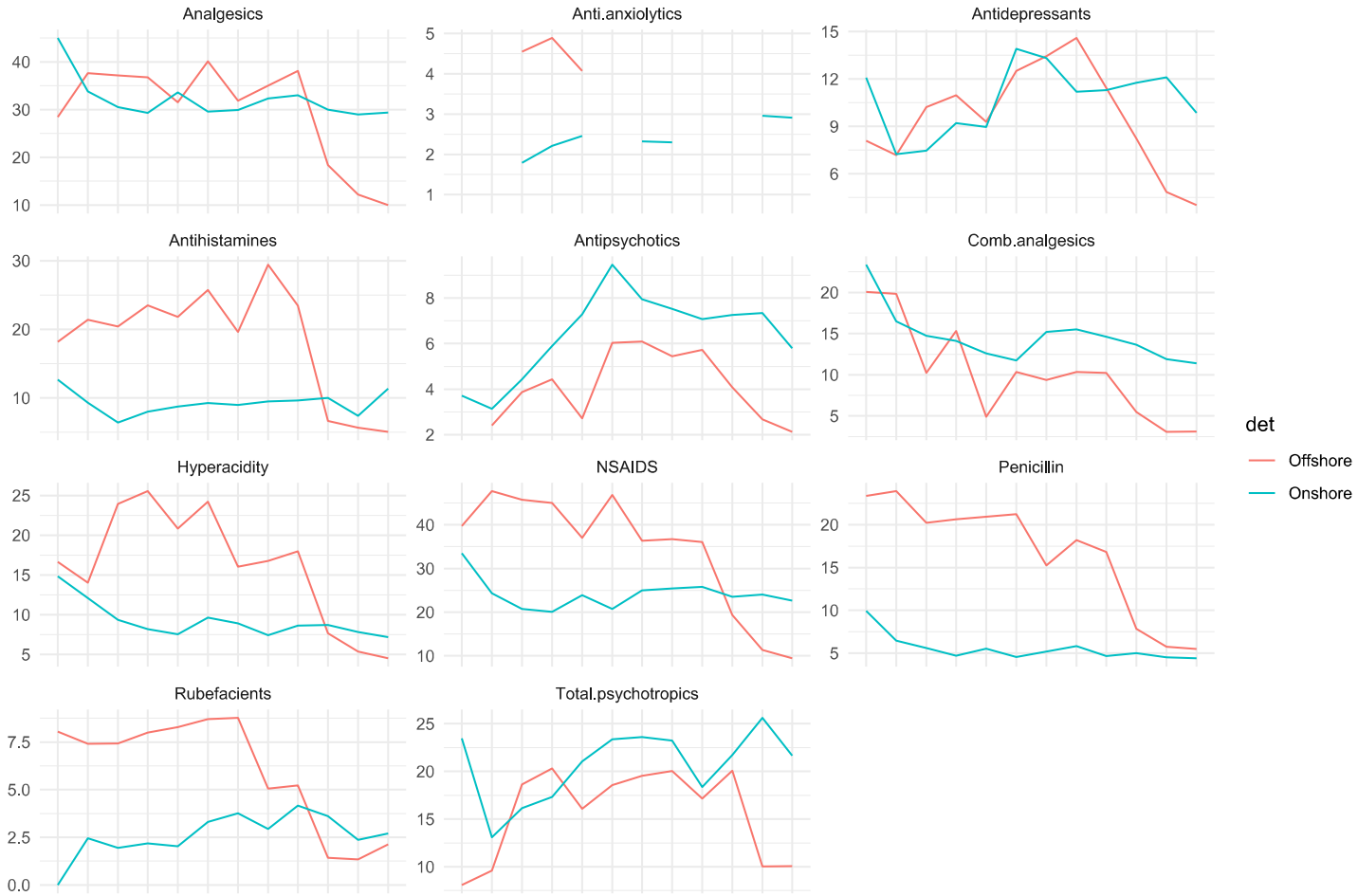
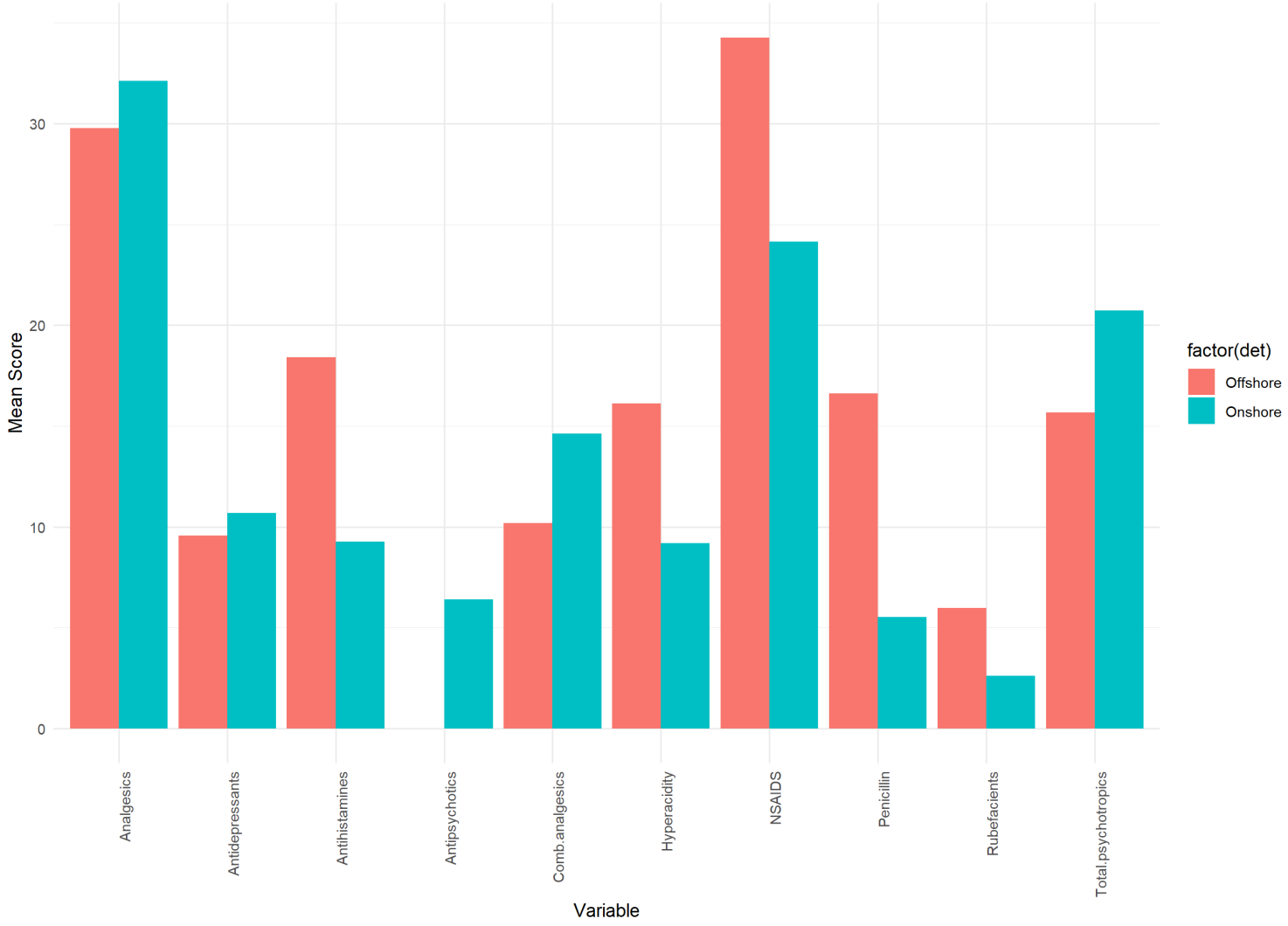


Figure 6. Mean rate: Number of adults who were prescribed medication



Detailed Methodology

Data Sources

In this study we utilised the Australian government's Quarterly Immigration Detention Health Reports over a period of 3 years (from Quarter 3, 2014 to Quarter 2, 2017; 22 quarters). These reports are produced by the immigration detention healthcare provider, International Health and Medical Services (IHMS) and provided to the Australian government quarterly. These reports contain a range of data about the health and wellbeing of detainees, including complaints/presenting symptoms and number of appointments and hospitalisations, among other data. These reports were either already publicly available or obtained through Freedom of Information Requests sent to the Australian Department of Home Affairs.

Data entry, transformation and the detention population

Data was entered manually by the two authors (RE and EK), screened and cleaned. A number of issues were noted where data was recorded inconsistently in the quarterly reports, where possible mistakes and omissions were recalculated by the authors and data was replaced. If this was not possible data was excluded from further analysis.

The detention population

To compare onshore and offshore datasets, the data was transformed. To do this, we first had to estimate the quarterly detention population. The detention population was informed by the monthly Australian immigration detention population statistics, (again publicly available and

published by the Australian government)[1] and the above quarterly health reports. For those detained onshore, while the Department of Home Affairs publishes monthly statistical reports on the immigration detention population, this data is cross sectional; it remains difficult to determine the number of new and released detainees on a quarter by quarter basis. Every month, statistics reveal that in onshore detention, hundreds of people are detained for less than 3 months, many also remain detained for multiple quarters. This means relying solely on monthly (cross-sectional) immigration detention reports therefore would lead to significant overestimates in the number of appointments, diagnoses or events per person in onshore detention centres. A more accurate figure was calculated by using the quarterly health reports. For example, a number of tables in the quarterly health reports indicated what percentage of the population (% reported) and number of individuals (n) was prescribed medication for the quarter, and from this, we estimated the total number against which this figure was reached (i.e. $\frac{n \times 100}{\%\ reported}$). To calculate the offshore population we utilised the cross-sectional population of adults, this is because after mid 2014 the population was largely static, that is, few people would have moved in and out within the quarter. We did explore whether the above method (that was applied to onshore data) would make any significant difference to our results, and we found that cross sectional data was generally representative of the percentages reported in the offshore quarterly health reports accurate to within 1-2 percent in most cases. The calculated total populations in onshore and offshore detention centres per quarter are reported below in table 1 along with the number of health events that were contained in the quarterly reports.

[1] https://www.homeaffairs.gov.au/research-and-statistics/statistics/visa-statistics/live/immigration-detention

Rates for onshore and offshore detention

After calculating the detention population for both onshore and offshore populations, we estimated the rate of health events per quarter against the quarterly onshore or offshore detention population. Health related events were converted to rates or proportions per 100 detainees per quarter (i.e. $p = \frac{e}{n} \times 100$). These rates allowed us to make a more direct comparison between onshore and offshore health events.

Comparing onshore and offshore events

Given the detention population, and because quarter by quarter many of the same individuals were detained, particularly for the offshore population, this data violated assumptions for independence of observations, substantially limiting the significance tests that could be carried out. To overcome this, we opted to run a series of two-proportion z-tests for each matched quarter between onshore and offshore data (2014 Q3 to 2017 Q2). To do this we used the below formula where n_A and n_B = the detention population; pA and pB = the number of health events; and where p and q = the overall proportions (i.e. $p = (pA + pB)/(n_A + n_B)$ and $q = 1 - p$).

$$z = \frac{pA - pB}{\sqrt{pq\ /\ n_A + pq\ /\ n_B}}$$

After calculating a z and p value for each quarter, we calculated median z and p values for all quarters and utilised this as an indicator as to whether the observed differences between onshore and offshore events were statistically significant. We opted to use median scores because of the relatively small sample size (i.e. 12 quarters) and because of the skew of some of these variables. Furthermore, as we were using median scores and in taking a relatively

conservative approach, we have only considered a result significant when both $z = \pm 1.96$ and $p < .05$.

Variables

A variety of health events are reported in the quarterly health reports. These are generally reported as unique appointments or unique individuals (or occasionally, both). Variables where unique events are reported generally report the raw number of events that quarter, that is, if an individual returned multiple times for the same issue, this would have been recorded multiple times. Variables where unique individuals were reported provided the number of individuals who presented that quarter. If an individual presented multiple times for the same issues, this would have only been recorded once. Also these reports differ in whether they present data about the entire detention population, the adult population or child population. As data on children has been reported elsewhere (<redacted to maintain anonymity>, Manuscript in preparation) in this paper we have only included data on the total and adult detention populations. We have specified below which variables only refer to the adult population and calculated rates using the estimated adult population below. Each of the variables included in this study will be briefly introduced below.

Reasons for presentation to GP and psychiatrist

The reasons why people presented to GPs and psychiatrists were recorded in almost all reports. This data cannot be considered as diagnoses, but more as presenting complaints or symptoms. These presentations also represent a wide range of symptoms. For example, cases captured under the "psychological" grouping for example range from recognised psychiatric diagnoses, to psychologically related consults as such smoking cessation activities. We calculated two

different rates related to this variable. The first related to the total number of presentations or unique presentations. That is, the total number of appointments that quarter by reason for presentation. This rate included presentations if individuals had returned more than once. The second rate that was calculated related to the number of unique adult presentations or unique individuals. This rate only included the number of individuals who attended: if an adult attended twice for the same issue, it would have only been recorded once.

Number of consultations by health profession

The number of individuals who presented to a range of healthcare professionals (GPs, psychiatrists, nurses, psychologists and counsellors) were also reported across a number of years. Like the above variables, reasons for presentation, we calculated two different rates related to this variable. The first related to the total number of presentations or unique presentations. The second rate that was calculated related to the number of unique adult presentations or unique individuals.

Prescribed medications

The twenty most commonly prescribed medications were recorded in all reports. This variable reported the number of unique adults who were prescribed medication per quarter. We have only included commonly prescribed medication in our analysis and where we could make a comparison between onshore and offshore prescribing.

Referrals and hospital admissions

The number of individuals who were referred for a range of services were reported, including pathology, allied health, radiology, specialist referrals, hospital admissions and psychiatric

hospital admissions. Each of these reported the number of unique referrals, that is, somebody could have been referred or admitted twice within a quarter.

Number of individuals being observed because of suicide or self harm risk.

The number of individuals being observed because of concerns about their risk of self harm and suicide was reported. Within the reports three variables were reported: the number of individuals on ongoing (3 hourly observations), moderate (30 minute observations) or high (constant observations) were reported. These numbers reflect the number of commencements per quarter on each level. For example, an individual may have been commenced on high observation because of his or her suicide risk, (s)he may have then been commenced on ongoing observation because risk decreased; later that month s(he) may have again been commenced on high observation. Each commencement in the quarter was counted. The total number of commencements was also reported, as were the total number of unique individuals who had been observed in that quarter.

Below are all tables that include raw figures and totals for each of the variables above. We would be happy for these to be included as part of the manuscript/as online supplementary material or excluded entirely. As we have taken a less than conventional approach to our analysis, we thought we would include this here for peer reviewers. We also believe readers may be interested in this data and running their own analyses.

Table 4. Rate per quarter, median z and p values: Appointments by health professional – Unique appointments

Onshore	General practitioner	Primary health nurse	Mental health nurse	Psychologist	Counsellor	Psychiatrist
2014 Q3	277.24	1319.46	400.65	117.71	174.66	30.45
2014 Q4	187.19	1096.03	268.11	74.05	161.44	25.93
2015 Q1	134.65	604.33	203.01	45.96	68.61	16.79
2015 Q2	139.58	543.32	177.44	30.23	14.77	12.12
2015 Q3	144.59	428.82	124.21	36.23	16.55	12.55
2015 Q4	138.07	462.81	136.28	35.45	26.15	13.55
2016 Q1	142.27	734.68	175.13	40.06	32.27	14.97
2016 Q2	143.19	475.61	126.64	32.35	41.80	13.98
2016 Q3	137.65	448.96	87.58	19.10	31.26	13.56
2016 Q4	138.43	372.26	90.28	23.43	23.59	15.48
2017 Q1	126.79	341.44	78.34	17.93	41.72	14.02
2017 Q2	123.50	365.06	62.89	12.20	43.49	12.89
Offshore	General practitioner	Primary health nurse	Mental health nurse	Psychologist	Counsellor	Psychiatrist
2014 Q3	279.32	304.82	241.73	97.36	471.59	18.14
2014 Q4	308.19	297.05	211.55	82.49	361.97	21.50
2015 Q1	236.26	1062.21	227.42	97.31	374.11	29.12
2015 Q2	246.38	531.63	249.50	102.50	510.69	33.38
2015 Q3	221.66	244.28	206.13	93.42	388.63	23.83
2015 Q4	199.86	267.31	199.04	74.43	333.24	19.53
2016 Q1	189.14	235.29	252.07	64.79	224.43	23.57
2016 Q2	224.07	245.29	82.64	48.30	254.78	23.77
2016 Q3	225.06	256.90	223.88	52.64	226.24	11.74
2016 Q4	94.06	111.80	98.15	22.07	110.19	8.75

2017 Q1	70.83	118.78	60.19	16.12	57.29	6.93
2017 Q2	45.25	67.27	42.55	12.92	32.17	4.60
Median onshore rate	139.00	**469.21**	131.46	33.90	36.99	14.00
Median offshore rate	**222.87**	251.09	**208.84**	**69.61**	**294.01**	**20.52**
Z (median)	-	-	-	-	-	-
P (median)	-	-	-	-	-	-

Note: z and p values were unable to be calculated for total appointments as in many quarters the total number of appointments exceeded the number of people detained.

Table 5. Rate per quarter, median z and p values: Appointments by health professional – Unique adults

Onshore	GP	Nurse	Metal health nurse	Psychologist	Counsellor	Psychiatrist
2014 Q3	69.63	95.34	71.40	24.40	35.23	15.82
2014 Q4	53.78	75.65	51.43	22.20	28.66	15.43
2015 Q1	46.94	76.54	47.23	16.24	20.97	10.64
2015 Q2	50.59	76.20	50.47	9.23	4.10	8.27
2015 Q3	53.20	80.40	43.69	12.21	4.61	7.68
2015 Q4	52.24	79.93	40.44	12.10	7.20	7.44
2016 Q1	53.30	86.23	45.96	12.22	8.01	10.00
2016 Q2	55.88	87.98	43.05	12.93	9.22	8.85
2016 Q3	50.25	85.47	34.89	8.38	9.62	8.67
2016 Q4	51.07	79.53	32.71	8.47	8.15	9.36
2017 Q1	50.32	82.07	31.65	8.15	13.16	9.32
2017 Q2	49.54	83.47	29.66	5.26	11.38	9.19
Offshore	GP	Nurse	Metal health nurse	Psychologist	Counsellor	Psychiatrist
2014 Q3	76.81	86.15	73.88	26.17	73.29	10.23
2014 Q4	82.28	87.08	64.90	26.63	78.55	11.31
2015 Q1	74.13	94.58	68.39	34.35	79.30	16.21
2015 Q2	71.83	88.62	74.27	33.99	83.20	16.53
2015 Q3	66.94	66.40	76.65	13.24	29.60	69.86
2015 Q4	61.47	88.79	65.06	33.29	58.59	10.35
2016 Q1	55.72	64.34	61.74	28.83	45.47	12.41
2016 Q2	60.06	68.00	64.55	22.29	43.30	12.03
2016 Q3	58.09	67.24	70.26	26.72	36.60	7.11

2016 Q4	23.90	24.23	27.73	6.74	14.99	4.75
2017 Q1	18.90	23.66	20.23	6.19	8.53	3.60
2017 Q2	13.61	19.75	14.51	3.52	7.62	2.79
Median onshore rate	51.66	**81.24**	43.37	12.15	9.42	9.25
Median offshore rate	**60.77**	67.62	**64.98**	**26.40**	**44.39**	10.83
Z (median)	**-5.20**	**12.87**	**-11.22**	**-5.69**	**-26.51**	-0.34
P (median)	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**

Table 6. Rate per quarter, median z and p values: Number of adults who were prescribed medication

	NSAIDS	Analgesics	Hyperacidity, reflux and ulcers	Antidepressants	Antipsychotics	Penicillin	Antihistamines	Rubefacients	Combination analgesics	Anti anxiolytics	Total psychotropics
2014 Q3	33.48	45.00	14.83	12.08	3.72	9.94	12.66	0.00	23.38	3.78	23.46
2014 Q4	24.35	33.80	12.08	7.25	3.13	6.48	9.29	2.45	16.49		13.09
2015 Q1	20.74	30.50	9.35	7.46	4.43	5.59	6.42	1.94	14.73	1.79	16.13
2015 Q2	20.11	29.30	8.17	9.20	5.90	4.69	8.02	2.18	14.11	2.21	17.31
2015 Q3	23.86	33.60	7.54	8.96	7.28	5.54	8.73	2.03	12.61	2.46	21.05
2015 Q4	20.77	29.60	9.62	13.91	9.47	4.56	9.25	3.31	11.76		23.38
2016 Q1	25.02	29.90	8.92	13.33	7.95	5.19	8.99	3.77	15.22	2.32	23.60
2016 Q2	25.42	32.30	7.41	11.19	7.52	5.81	9.49	2.94	15.53	2.30	23.25
2016 Q3	25.76	33.00	8.61	11.29	7.07	4.68	9.62	4.16	14.63		18.36
2016 Q4	23.51	30.00	8.72	11.76	7.26	4.99	10.01	3.61	13.66		21.73
2017 Q1	24.03	29.00	7.83	12.10	7.34	4.52	7.41	2.36	11.89	2.96	25.62
2017 Q2	22.62	29.40	7.18	9.85	5.79	4.40	11.34	2.71	11.41	2.91	21.66
	NSAIDS	Analgesics	Hyperacidity, reflux and ulcers	Antidepressants	Antipsychotics	Penicillin	Antihistamines	Rubefacients	Combination analgesics	Anti anxiolytics	Total psychotropics
2014 Q3	39.72	28.45	16.63	8.09		23.34	18.17	8.04	20.06		8.09
2014 Q4	47.69	37.60	14.04	7.19	2.40	23.90	21.39	7.41	19.83		9.58
2015 Q1	45.76	37.16	23.94	10.22	3.87	20.20	20.39	7.42	10.22	4.55	18.64
2015 Q2	45.04	36.77	25.53	10.98	4.43	20.63	23.48	8.00	15.34	4.89	20.30
2015 Q3	37.00	31.50	20.84	9.30	2.72	20.91	21.79	8.28	4.89	4.07	16.09
2015 Q4	46.87	40.12	24.23	12.51	6.04	21.21	25.74	8.70	10.35		18.55
2016 Q1	36.33	31.87	16.05	13.45	6.09	15.23	19.61	8.77	9.36		19.54
2016 Q2	36.73	35.04	16.76	14.60	5.45	18.20	29.43	5.05	10.34		20.05
2016 Q3	36.03	38.07	17.97	11.44	5.72	16.83	23.45	5.23	10.21		17.16

2016 Q4	19.32	18.40	7.66	8.24	4.08	7.83	6.66	1.42	5.50	1.75	20.07
2017 Q1	11.37	12.21	5.35	4.85	2.68	5.77	5.69	1.34	3.09		10.03
2017 Q2	9.43	10.00	4.51	4.02	2.13	5.49	5.08	2.13	3.11	0.74	10.08
Median onshore rate	23.95	30.25	8.66	11.24	**7.16**	5.09	9.27	2.58	**14.37**	2.39	**21.69**
Median offshore rate	**36.86**	33.46	**16.70**	9.76	4.08	**19.20**	**20.89**	**7.41**	10.22	**4.07**	17.85
Z (median)	**-7.52**	-1.52	**-7.82**	-0.01	**3.08**	**-13.35**	**-12.28**	**-7.28**	**4.44**	**4.29**	**3.31**
P (median)	**p<.001**	**p<.001**	**p<.001**	p=0.03	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**	**p<.001**

Note. In reporting the number of prescriptions, quarterly reports only contained the 'top 20' prescribed medications per quarter. Thus, where prescriptions were not reported therefore did not mean it was not prescribed that quarter. We opted to record this as missing as opposed to nil, which may have resulted in slight over-reporting of the mean and median rates of prescriptions.

Table 7. Rate per quarter, median z and p values: Number of referrals and admissions per quarter - Unique appointments

Onshore	Pathology	Allied health	Radiology	Specialist	Hospital admissions	Psychiatric admissions
2014 Q3	138.54	19.62	32.33	13.32	7.65	0.79
2014 Q4	85.56	79.63	22.70	8.76	5.34	0.26
2015 Q1	121.03	127.26	29.95	4.98	5.74	0.67
2015 Q2	164.20	23.80	30.08	6.75	9.50	0.35
2015 Q3	128.96	212.13	26.37	8.55	8.75	0.36
2015 Q4	114.99	79.12	21.50	7.48	8.10	0.24
2016 Q1	137.11	77.40	25.36	8.25	6.30	0.39
2016 Q2	142.00	64.90	33.11	9.88	6.31	0.20
2016 Q3	128.06	62.78	32.07	9.16	4.53	0.16
2016 Q4	165.40	63.47	36.61	7.58	4.68	0.65
2017 Q1	143.95	63.97	24.21	6.03	4.22	0.56
2017 Q2	147.34	58.61	23.27	7.89	4.50	0.53
Offshore	Pathology	Allied health	Radiology	Specialist	Hospital admissions	Psychiatric admissions
2014 Q3	39.41	2.77	14.41	2.64	2.14	0.18
2014 Q4	73.73	11.66	18.81	2.28	0.98	0.21
2015 Q1	115.64	40.19	29.58	2.34	1.82	0.18
2015 Q2	114.88	20.63	24.38	2.81	1.88	0.19
2015 Q3	99.04	71.63	10.61	4.66	3.19	0.19
2015 Q4	89.65	43.52	8.84	2.88	3.29	0.07
2016 Q1	81.79	42.93	33.29	1.00	1.50	0.07
2016 Q2	89.43	49.46	31.48	6.79	1.62	0.08
2016 Q3	83.85	34.75	31.13	1.73	2.21	0.00
2016 Q4	43.34	14.21	17.26	1.61	1.12	0.00
2017 Q1	38.44	10.07	11.44	1.13	1.21	0.00
2017 Q2	26.23	4.28	9.11	1.03	0.71	0.00
Median onshore rate	137.83	**64.44**	**28.16**	**8.07**	**6.02**	0.38
Median offshore rate	82.82	27.69	18.03	2.31	1.72	0.07
Z (median)		**23.57**	**6.75**	**7.21**	**6.54**	1.64
P (median)		**p<.001**	**p<.001**	**p<.001**	**p<.001**	p=.11

Note: z and p values were unable to be calculated for pathology referrals as in many quarters the total number of appointments exceeded the number of people detained.

Table 8. Rate per quarter, median z and p values: Number of individuals being observed because of suicide or self harm risk.

Onshore	Ongoing commencements	Moderate commencements	High commencements	All commencements	Unique individuals
2014 Q3					
2014 Q4					
2015 Q1					
2015 Q2					
2015 Q3	2.58	2.17	2.44	7.19	3.78
2015 Q4	2.33	2.15	2.24	6.71	3.74
2016 Q1	2.69	2.37	1.98	7.05	4.03
2016 Q2	1.62	1.35	1.45	4.43	2.54
2016 Q3	1.50	1.34	1.21	4.04	2.12
2016 Q4	2.14	1.90	2.18	6.21	3.27
2017 Q1	1.60	1.74	1.46	4.81	2.20
2017 Q2	1.35	1.51	1.78	4.64	2.33
Offshore	Ongoing commencements	Moderate commencements	High commencements	All commencements	Unique individuals
2014 Q3					
2014 Q4					
2015 Q1					
2015 Q2					
2015 Q3	1.85	1.34	1.60	4.79	2.49
2015 Q4	1.17	1.30	0.89	6.72	1.85
2016 Q1	1.21	1.21	1.14	7.14	2.00
2016 Q2	1.23	1.47	1.93	9.26	2.39
2016 Q3	1.18	1.65	1.89	9.38	2.60
2016 Q4	0.96	0.80	0.96	5.46	1.52
2017 Q1	0.64	0.89	0.73	4.51	1.21
2017 Q2	0.24	0.32	0.48	2.06	0.55
Median onshore rate	**1.88**	**1.82**	**1.88**	5.51	**2.91**

Median offshore rate	1.17	1.26	1.05	6.09	1.93
Z (median)	**2.53**	**2.04**	**1.98**	0.21	**2.72**
P (median)	**p<.001**	**p<.001**	**p<.001**	0.1807	**p<.001**

Table 9. Number of events per quarter: Reasons for presentation to GP/Psychiatrist – Unique appointments

Onshore	General unspecified	Psychological	Digestive	Skin	Musculoskeletal	Respiratory	Endocrine	Cardiovascular	Eye	Social	Neurological	Blood	Ear	Urological	Pregnancy	Genital	Injury	Total
2014 Q3	2437	3076	1749	1191	1658	1060	875	333	409	848	517	151	394	494	222	452	451	16317
2014 Q4	3036	3105	1702	1104	1548	667	754	283	329	942	447	149	269	439	278	432	316	15800
2015 Q1	1847	1992	996	827	1105	453	453	173	244	399	296	76	127	246	212	258	201	9905
2015 Q2	1578	1430	775	501	736	261	304	164	153	248	246	51	121	147	98	138	162	7113
2015 Q3	2239	1813	913	630	900	490	370	236	168	383	265	39	93	169	64	147	166	9085
2015 Q4	2295	1513	774	732	783	304	409	190	136	371	187	31	106	144	37	148	181	8341
2016 Q1	1924	1631	674	662	888	233	334	159	121	390	219	37	144	164	30	145	117	7872
2016 Q2	1091	1292	598	478	751	270	271	210	115	176	198	41	97	83	4	81	135	5891
2016 Q3	393	1326	703	503	857	393	265	185	121	33	242	31	93	111	11	127	148	5542
2016 Q4	288	1286	522	459	897	306	206	134	98	16	217	15	100	83	28	66	102	4823
2017 Q1	320	1483	538	520	897	280	262	173	111	22	250	17	131	59	3	78	135	5279

2017 Q2	431	1373	569	486	813	375	254	184	104	17	201	29	127	68	16	55	108	5210
Total	17448	19947	9944	7607	11020	4717	4503	2240	2005	3828	3084	638	1675	2139	987	2072	2114	95968
Offshore	General unspecified	Psychological	Digestive	Skin	Musculoskeletal	Respiratory	Endocrine	Cardiovascular	Eye	Social	Neurological	Blood	Ear	Urological	Pregnancy	Genital	Injury	Total
2014 Q3	1053	972	1269	1014	1062	792	282	190	282	331	299	36	314	653	55	265	353	9222
2014 Q4	1700	1203	1509	1060	1322	753	403	235	262	423	364	48	370	551	39	239	386	10867
2015 Q1	1554	1040	1102	803	1056	586	223	191	238	345	307	19	290	399	27	156	223	8559
2015 Q2	1599	979	1121	766	1028	591	209	133	190	344	343	25	311	340	12	108	206	8305
2015 Q3	1649	686	869	751	876	590	182	122	198	337	256	20	248	315	19	177	165	7460
2015 Q4	1534	483	651	526	677	476	135	89	101	274	178	17	157	319	22	72	126	5837
2016 Q1	1204	492	429	530	593	288	142	82	115	293	148	7	147	243	6	39	110	4868
2016 Q2	643	476	521	440	530	431	97	84	107	118	170	12	102	89	0	49	131	4000
2016 Q3	262	381	557	469	534	404	120	87	118	8	187	14	127	115	1	47	147	3577
2016 Q4	153	321	284	258	347	226	25	33	40	6	117	7	57	69	0	41	59	2043
2017 Q1	173	186	247	222	242	134	80	33	26	1	98	3	46	58	1	26	44	1620
2017 Q2	88	168	150	97	154	96	56	28	37	3	41	2	53	50	1	7	23	1054
Total	11524	7219	8559	6839	8267	5271	1898	1279	1677	2480	2467	208	2169	3151	182	1219	1950	66358

Table 10. Number of events per quarter: Reasons for presentation to GP/Psychiatrist – Unique adults

Onshore	General unspecified	Psychological	Digestive	Skin	Musculoskeletal	Respiratory	Endocrine	Cardiovascular	Eye	Social	Neurological	Blood	Ear	Urological	Pregnancy	Genital	Injury	Total
2014 Q3	1119	968	785	567	810	429	358	253	250	499	352	70	161	259	139	260	233	7512
2014 Q4	1326	929	792	528	722	315	393	194	184	583	316	91	121	227	149	254	184	7308
2015 Q1	925	762	500	442	540	317	274	81	176	201	217	54	76	152	156	153	118	5144
2015 Q2	830	593	402	300	414	153	202	135	100	179	178	39	64	104	54	101	126	3974
2015 Q3	1122	717	496	348	472	252	229	167	102	311	199	37	49	101	39	111	125	4877
2015 Q4	1100	660	432	377	442	176	253	152	94	286	149	26	52	96	23	101	136	4555
2016 Q1	940	680	404	359	472	136	224	124	83	293	163	26	68	95	21	99	125	4312
2016 Q2	691	642	390	306	419	162	191	154	82	158	155	36	60	55	3	62	102	3668
2016 Q3	298	554	400	295	445	217	172	143	72	31	186	29	52	75	5	81	117	3172
2016 Q4	202	422	262	245	379	142	128	86	71	15	128	11	47	53	9	39	83	2322
2017 Q1	235	554	312	272	416	159	171	117	71	21	160	14	60	38	3	54	103	2760
2017 Q2	300	555	297	253	364	197	167	129	73	16	128	24	62	41	5	47	82	2740
Total	8788	7481	5175	4039	5531	2458	2595	1606	1285	2577	2203	433	810	1255	601	1315	1452	49604
Offshore	General unspecified	Psychological	Digestive	Skin	Musculoskeletal	Respiratory	Endocrine	Cardiovascular	Eye	Social	Neurological	Blood	Ear	Urological	Pregnancy	Genital	Injury	Total

2014 Q3	598	434	645	561	523	429	189	144	193	230	217	28	157	365	35	164	204	5116
2014 Q4	749	446	677	555	612	361	247	155	162	265	239	27	153	303	27	133	224	5335
2015 Q1	779	361	465	402	477	253	142	133	125	235	216	15	118	213	19	90	153	4196
2015 Q2	765	360	424	371	470	253	136	91	108	237	230	22	118	189	11	66	154	4005
2015 Q3	694	289	358	349	407	244	127	84	114	238	170	16	99	187	11	95	124	3606
2015 Q4	636	231	307	269	333	222	101	62	65	190	130	12	75	199	9	50	82	2973
2016 Q1	535	210	220	245	293	128	95	59	65	195	108	7	55	126	4	32	90	2467
2016 Q2	362	197	247	211	266	193	76	68	58	86	120	0	51	49	0	33	99	2116
2016 Q3	173	152	238	244	288	175	83	69	67	7	137	12	53	61	1	32	106	1898
2016 Q4	90	94	100	111	136	71	32	19	24	6	65	6	23	31	0	23	34	865
2017 Q1	71	64	80	73	87	51	33	22	15	1	48	2	14	20	1	16	27	625
2017 Q2	49	54	51	39	63	34	26	15	17	3	24	2	9	13	2	6	12	419
Total	5452	2838	3761	3391	3892	2380	1261	906	996	1690	1680	147	916	1743	118	734	1297	33202

Table 11 Number of events per quarter: Appointments by health professional – Unique appointments

Onshore	GP	RN	MHN	Psychologist	Counsellor	Psychiatrist	Total
2014 Q3	11927	56763	17236	5064	7514	1310	100790
2014 Q4	9427	55196	13502	3729	8130	1306	91869
2015 Q1	5813	26089	8764	1984	2962	725	46571
2015 Q2	4733	18424	6017	1025	501	411	31111
2015 Q3	5208	15446	4474	1305	596	452	27481
2015 Q4	4689	15717	4628	1204	888	460	27586
2016 Q1	4382	22628	5394	1234	994	461	35093
2016 Q2	4333	14392	3832	979	1265	423	25224
2016 Q3	4223	13774	2687	586	959	416	22645
2016 Q4	3433	9232	2239	581	585	384	16454
2017 Q1	3635	9789	2246	514	1196	402	17976
2017 Q2	3757	11105	1913	371	1323	392	19083
Total	61803	257450	71019	18205	25590	6750	442800
Offshore	GP	RN	MHN	Psychologist	Counsellor	Psychiatrist	Total
2014 Q3	6145	6706	5318	2142	10375	399	31592
2014 Q4	5948	5733	4083	1592	6986	415	25519
2015 Q1	4033	18132	3882	1661	6386	497	37284
2015 Q2	3942	8506	3992	1640	8171	534	26785
2015 Q3	3469	3823	3226	1462	6082	373	18435
2015 Q4	2916	3900	2904	1086	4862	285	15953
2016 Q1	2648	3294	3529	907	3142	330	13850

2016 Q2	2904	3179	1071	626	3302	308	13390
2016 Q3	2856	3260	2841	668	2871	149	12645
2016 Q4	1172	1393	1223	275	1373	109	5545
2017 Q1	879	1474	747	200	711	86	4097
2017 Q2	571	849	537	163	406	58	2584
Total	36912	59400	32816	12259	54261	3485	205095

Note. Total does not reflect the numbers presented in this table as this table only presents the most commonly prescribed medication. Total numbers also include physiotherapy and paramedic appointments from Q3 2014-Q1 2015 – these were not included in the above analysis as this was only reported over three quarters.

Table 12. Number of events per quarter: Appointments by health professional – Unique adults

Onshore	GP	RN	MHN	Psychologist	Counsellor	Psychiatrist
2014 Q3	2508	3434	2572	879	1269	570
2014 Q4	2374	3339	2270	980	1265	681
2015 Q1	1813	2956	1824	627	810	411
2015 Q2	1628	2452	1624	297	132	266
2015 Q3	1835	2773	1507	421	159	265
2015 Q4	1705	2609	1320	395	235	243
2016 Q1	1583	2561	1365	363	238	297
2016 Q2	1673	2634	1289	387	276	265
2016 Q3	1535	2611	1066	256	294	265
2016 Q4	1260	1962	807	209	201	231
2017 Q1	1426	2326	897	231	373	264
2017 Q2	1498	2524	897	159	344	278
Total	19340	29657	16541	5045	5252	3758
Offshore	GP	RN	MHN	Psychologist	Counsellor	Psychiatrist
2014 Q3	1547	1735	1488	527	1476	206
2014 Q4	1477	1563	1165	478	1410	203
2015 Q1	1189	1517	1097	551	1272	260
2015 Q2	1086	1340	1123	514	1258	250
2015 Q3	986	978	1129	195	436	1029
2015 Q4	855	1235	905	463	815	144
2016 Q1	750	866	831	388	612	167

2016 Q2	749	848	805	278	540	150
2016 Q3	711	823	860	327	448	87
2016 Q4	287	291	333	81	180	57
2017 Q1	226	283	242	74	102	43
2017 Q2	166	241	177	43	93	34
Total	9863	11479	9978	3876	8549	2596

Table 13. Number of referrals and admissions per quarter - Unique appointments

Onshore	Pathology	Allied health	Radiology	Specialist	Hospital admissions	Psychiatric admissions
2014 Q3	5960	844	1391	573	329	34
2014 Q4	4309	4010	1143	441	269	13
2015 Q1	5225	5494	1293	215	248	29
2015 Q2	5568	807	1020	229	322	12
2015 Q3	4645	7641	950	308	315	13
2015 Q4	3905	2687	730	254	275	8
2016 Q1	4223	2384	781	254	194	12
2016 Q2	4297	1964	1002	299	191	6
2016 Q3	3929	1926	984	281	139	5
2016 Q4	4102	1574	908	188	116	16
2017 Q1	4127	1834	694	173	121	16
2017 Q2	4482	1783	708	240	137	16
Total	50290	31165	10896	3215	2519	164
Offshore	Pathology	Allied health	Radiology	Specialist	Hospital admissions	Psychiatric admissions
2014 Q3	867	61	317	58	47	4
2014 Q4	1423	225	363	44	19	4
2015 Q1	1974	686	505	40	31	3
2015 Q2	1838	330	390	45	30	3
2015 Q3	1550	1121	166	73	50	3
2015 Q4	1308	635	129	42	48	1
2016 Q1	1145	601	466	14	21	1
2016 Q2	1159	641	408	88	21	1
2016 Q3	1064	441	395	22	28	0
2016 Q4	540	177	215	20	14	0
2017 Q1	477	125	142	14	15	0
2017 Q2	331	54	115	13	9	0
Total	13345	5043	3496	460	324	20

Table 14. Number of individuals being observed because of suicide or self harm risk.

Onshore	Ongoing commence ments	Moderate commence ments	High commence ments	All commence ments	Unique individuals
2014 Q3					
2014 Q4					
2015 Q1					
2015 Q2					
2015 Q3	93	78	88	259	136
2015 Q4	79	73	76	228	127
2016 Q1	83	73	61	217	124
2016 Q2	49	41	44	134	77
2016 Q3	46	41	37	124	65
2016 Q4	53	47	54	154	81
2017 Q1	46	50	42	138	63
2017 Q2	41	46	54	141	71
Total	449	403	402	1254	673
Offshore	Ongoing commence ments	Moderate commence ments	High commence ments	All commence ments	Unique individuals
2014 Q3					
2014 Q4					
2015 Q1					
2015 Q2					
2015 Q3	29	21	25	75	39
2015 Q4	17	19	13	98	27
2016 Q1	17	17	16	100	28
2016 Q2	16	19	25	120	31
2016 Q3	15	21	24	119	33
2016 Q4	12	10	12	68	19
2017 Q1	8	11	9	56	15
2017 Q2	3	4	6	26	7
Total	114	118	124	636	192

Table 15. Number of events per quarter – Unique adults

	NSAIDS	Analgesics	Hyperacidity, reflux and ulcers	Antidepressants	Antipsychotics	Penicillin	Antihistamines	Rubefacients	Combination analgesics	Anti anxiolytics	Total psychotropics
2014 Q3	1206	1621	534	435	134	358	456		842	136	845
2014 Q4	1075	1492	533	320	138	286	410	108	728		578
2015 Q1	801	1178	361	288	171	216	248	75	569	69	623
2015 Q2	647	943	263	296	190	151	258	70	454	71	557
2015 Q3	823	1159	260	309	251	191	301	70	435	85	726
2015 Q4	678	966	314	454	309	149	302	108	384		763
2016 Q1	743	888	265	396	236	154	267	112	452	69	701
2016 Q2	761	967	222	335	225	174	284	88	465	69	696
2016 Q3	787	1008	263	345	216	143	294	127	447		561
2016 Q4	580	740	215	290	179	123	247	89	337		536
2017 Q1	681	822	222	343	208	128	210	67	337	84	726
2017 Q2	684	889	217	298	175	133	343	82	345	88	655
Total	8782	11784	3452	3811	2257	2073	3277	914	5450	583	7312
	NSAIDS	Analgesics	Hyperacidity, reflux and ulcers	Antidepressants	Antipsychotics	Penicillin	Antihistamines	Rubefacients	Combination analgesics	Anti anxiolytics	Total psychotropics
2014 Q3	800	573	335	163		470	366	162	404		163
2014 Q4	856	675	252	129	43	429	384	133	356		172
2015 Q1	734	596	384	164	62	324	327	119	164	73	299
2015 Q2	681	556	386	166	67	312	355	121	232	74	307
2015 Q3	545	464	307	137	40	308	321	122	72	60	237
2015 Q4	652	558	337	174	84	295	358	121	144		258
2016 Q1	489	429	216	181	82	205	264	118	126		263
2016 Q2	458	437	209	182	68	227	367	63	129		250
2016 Q3	441	466	220	140	70	206	287	64	125		210
2016 Q4	232	221	92	99	49	94	80	17	66	21	241
2017 Q1	136	146	64	58	32	69	68	16	37		120
2017 Q2	115	122	55	49	26	67	62	26	38	9	123
Total	6024	5121	2802	1593	597	2939	3177	1056	1855	228	2520

Note. This table reflects the most commonly prescribed medication across all quarters. Total does not reflect the numbers presented in this table as this table only presents the most commonly prescribed medication. In reporting the number of prescriptions, quarterly reports only contained the 'top 20' prescribed medications per quarter. Thus, where medication was not reported therefore did not mean it was not prescribed that quarter. We opted to record this as missing as opposed to nil, which may have resulted in slight over-reporting of the mean and median rates of prescriptions.