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## Changing age profile of NSW offenders

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**Aim:** To report on the age profile of the NSW offender population with particular attention given to older offenders.

**Method:** This is a descriptive study utilising criminal court data from BOCSAR's Reoffending Database and inmate census data from Corrective Services NSW.

**Results:** Older offenders increasingly contributed to the NSW offender population and those sentenced to custody at finalisation. The largest increases in the proportion of older offenders were for drug, other traffic offences, PCA / DUI and violent offences.

**Conclusion:** The ageing population cannot be given as the main reason for the increase in older offenders and inmates in NSW. Future research should focus on the reasons for older people offending. Corrective services should prepare infrastructure for the estimated increase in the older inmate population which adequately services the physical and psychosocial needs of older people.

**Keywords:** Older offenders, prisoners, inmates

### Introduction

Previous research by the NSW Bureau of Crime Statistics and Research (BOCSAR) has found notable declines in juvenile involvement in crime over the past two decades. Offending by older offenders however has remained relatively stable over the same period (Weatherburn, Freeman, & Holmes, 2014).

Similar trends have been observed in the NSW custodial population. Admissions to juvenile justice centres have fallen dramatically in NSW over the last 5 years from 5,343 offenders in 2010/2011 to 2,847 in 2015/2016 (Juvenile Justice NSW, 2016). The adult prison population, on the other hand, continues to rise and is now at a record high (NSW Bureau of Crime Statistics and Research, 2016).

Although representing only a minority of prisoners (approx. 13%; Angus, 2015; Baidawi et al., 2011), those aged 50 years or over are contributing disproportionately to the increase in custody numbers. In the 10 years to 2010, the number of prisoners aged 50 or above rose by 76% in NSW. Broadening the definition of an older offender to include those aged 45 years or over and examining long term trends, almost a 200% increase in older prisoners from 7.2% in 1982 to 21.1% in 2014 is noted (Angus, 2015; Corrective Services NSW, 2014). These estimates are much higher than would be expected based on demographic changes in the Australian population, suggesting

that an ageing population is not the sole explanation (Australian Bureau of Statistics, 2010a). In addition, there is an overrepresentation of older Indigenous prisoners in Australia (Australian Bureau of Statistics, 2013) and in NSW, when the broader definition of older prisoners of 45 years and older is used (Leach & Neto, 2011).

The implications of an ageing inmate population for government agencies responsible for correctional facilities are significant. Older prisoners raise special concerns with regard to health care, psychosocial and physical support, as well as increased vulnerability. The additional resources required to meet these special needs carry significant financial costs for the agencies involved.

It is therefore surprising that, to date, very little work has examined this segment of the offender population. It is currently not known, for example, whether the observed increase in the proportion of older inmates in custody is due to an increase in the number of older offenders receiving custodial sentences or whether older offenders who are sentenced to prison are staying longer. Accordingly, this brief set out to examine trends in the age of male and female offenders coming before the courts, with a particular focus on the age of male and female offenders sent to prison. The contribution of older Indigenous and non-Indigenous offenders were also examined.

## Aim

The aim of this descriptive study was to examine the age profile trends of the offender population in NSW from 2000 - 2015. Specifically, we examined:

- Temporal changes in the age profile of offenders appearing before the court by gender
- Temporal changes in the offence profile of older offenders appearing before the court
- Temporal changes in the age profile of offenders sentenced to prison by gender
- Temporal changes in the offence profile of older offenders sentenced to prison

## Method

### Data Sources

Data for this study were extracted from BOCSAR's Reoffending Database (ROD) (Hua & Fitzgerald, 2006). All court appearances (in Local, District and Supreme Courts) with at least one proven offence that occurred between 1 Jan 2000 – 31 Dec 2015 and finalised in court by 31 March 2016 were included in the dataset. ABS age-group gender population estimates for 2000 to 2015 were used to calculate age-specific rates (Australian Bureau of Statistics, 2015). Inmate census data in NSW were obtained from Corrective Services NSW.

The principal offence at finalisation was categorized according to the Australian and New Zealand Standard Offence Classification (ANZSOC; (Australian Bureau of Statistics, 2011)) as:

- Violent / Sexual (01,02, 03, 06)
- Property / Theft (07, 08, 09)
- PCA / DUI (0411 , 1431)
- Drug (10)
- Other traffic (14, not 1431)
- Against justice procedures (15)
- Other (05, 11, 12, 16, 412, 049).

For this report, an older offender was defined as an offender aged 50 years and above. The definition of an older offender employed by different studies has ranged from 45 years and above to 65 years and above, although the most common definition was 50 years and older (Kerbs & Jolley, 2007; Stojkovic, 2007; Yorston & Taylor, 2006). This slightly lower age has been used by researchers as it has been found that prisoners prematurely age in custody and that there is a "10 year differential" between chronological and functional age when compared with that of the general public (Grant, 1999).

The projection method applied to the data in order to forecast future prisoner numbers and the proportion of older offenders in NSW by 2020 was a generalized linear model with exponential smoothing, run in SAS. The exponential smoothing method produces a time trend forecast, where the parameters are allowed to change gradually over time and earlier observations are given exponentially declining weights. The limitation with this projection method is that it does not take into account changes in the age structure of the population.

## Results

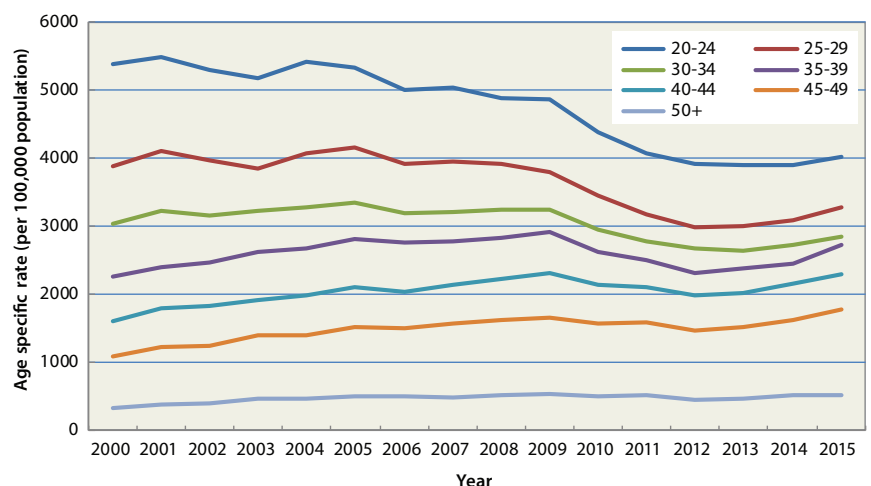
### Proven court appearances

#### Age specific rates and average age of offenders

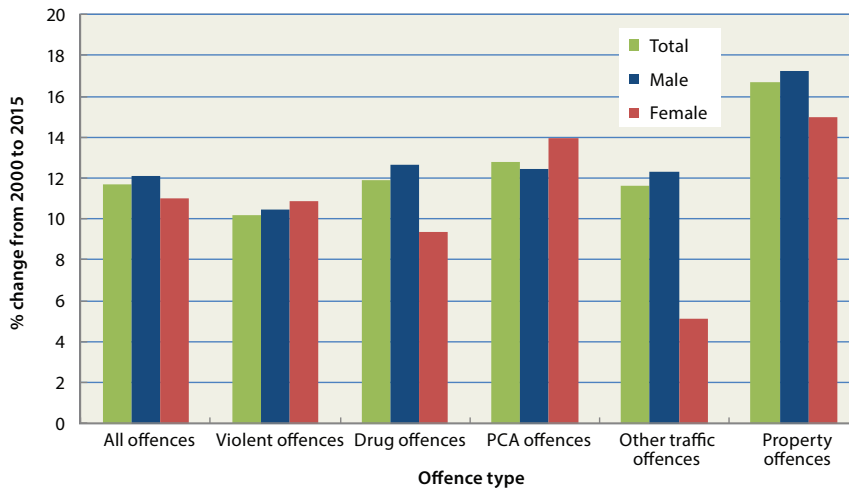
The age profile of offenders who were found guilty of at least one offence between 2000 and 2015 is shown in Figure 1. It can be seen that since 2000 the age-specific offence rate for younger cohorts has declined dramatically, whereas the offending rate for those aged 40-44 years and 45-49 years has increased. In 2000, the age-specific rate for persons aged 20-24 was 5,377 per 100,000. By 2015 this had dropped to 4,023 per 100,000. On the other hand, the rate for 45-49 years rose from 1,091 to 1,772 per 100,000 (up 62%). The offending rate for those aged 50 years and older has also risen over the same time period from 333 offenders to 519 offenders per 100,000 population (an increase of 56%).

Figure 2 describes the change in the average age of persons found guilty over the 16-year study period by gender. These same data are also shown for five major offence categories (violent offences, property offences, drug offences, PCA/DUI offences and other traffic offences). Here it can be seen that average offender age increased by around the same amount (11-12%) for both men and women. The average age of female offenders rose from 30.9 years in 2000 to 34.3 in 2015 and the average age of male offenders increased from 30.6 years in

**Figure 1. Age-specific rates per 100,000 population for persons found guilty, NSW, 2000-2015**



**Figure 2. Percentage change in average age of persons found guilty by gender and offence type, NSW, 2000 to 2015**

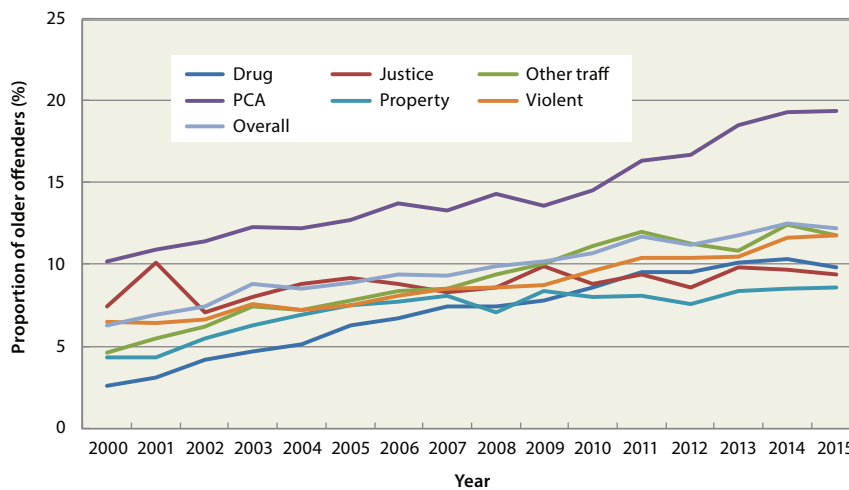


2000 to 34.3 in 2015. When examining the average age of offenders across different offence types, we see the largest increase in average age occurring amongst property offenders (16.2%). There were also gender differences across different offences. Whereas there was a 12 percentage point increase in male age for other traffic offences, there was only a five point increase in the average age of female offenders.

**Older offenders**

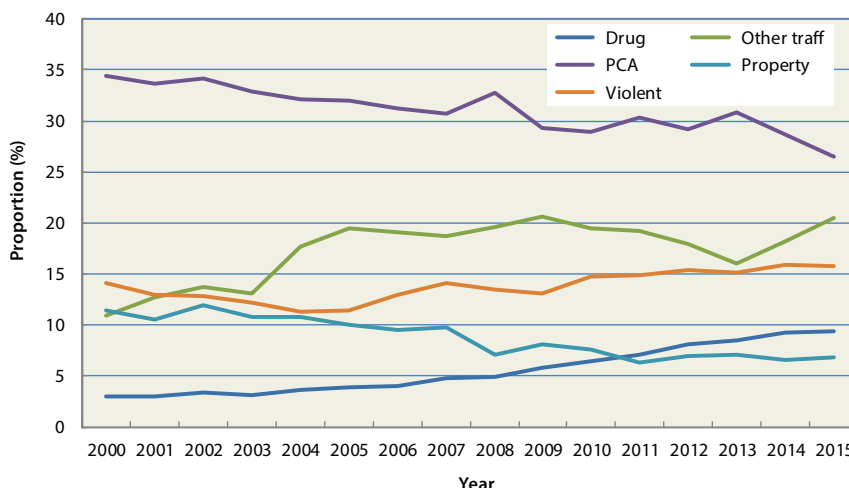
Examining the contribution of older offenders specifically, we see that the proportion of all persons found guilty who were aged 50 years and above increased from 6.3% (n=6,174) in 2000 to 12.2%(n=13,422) in 2015; a 94% increase in 16 years. This increasing contribution of older offenders to the overall offender population was similar for both males and females; increasing from 6.5% to 12.5% for males and from 5.5% to 11.1% for females. Notably, the change in rates for older Indigenous offenders (which rose from 1.8% to 5.9%, a 228% increase) was considerably greater than for older non-Indigenous offenders (which rose from 6.0% to 11.7%, an increase of 95%).<sup>1</sup>

**Figure 3. Proportion of offenders aged 50+ by offence type, NSW, 2000-2015**



From Figure 3 it can also be seen that older offenders are increasingly contributing to all offence types. However, the most notable increases over time in the proportion of older offenders were observed for drug offences (277%), other traffic offences (157%), PCA /DUI (90.2%) and violent/sexual offences (81.5%). By 2015, nearly one in five PCA / DUI offenders were aged 50+ while around one in ten persons found guilty of a traffic; violent; or drug offence were aged 50 years or more.

**Figure 4. Proportion of index offences for those aged 50 years and above by type of offence, NSW, 2000-2015**



When older offenders were examined as a specific sub-group of their own, other notable temporal changes emerged. For example, the proportion of offenders aged 50+ years with a proven court appearance that had previously been found guilty of an offence (within 5 years prior) rose from 25.9% in 2000 to 36.5% in 2015. Similarly, the proportion of offenders aged 50 years and older

who reoffended within two years of their index offence also increased from 13.8% in 2000 to 17.6% in 2013.

The type of index offence committed by older offenders appears to have changed over time as well (Figure 4). Although the most common index offence committed by an older offender in 2015 was PCA/DUI, the proportion of older offenders found guilty of this offence has fallen over time; dropping from 34.5% of all offences in 2000 to 26.5% in 2015. 'Other traffic offences' increased from 10.9% in 2000 to 20.5% in 2015 (though most of the growth in this offence type occurred between 2000 and 2005). The proportion of offenders aged 50 years and older convicted of drug offences also increased from 3.1% in 2000 to 9.4% in 2015, whereas the corresponding percentage for persons convicted of property offences declined from 11.4% to 6.8%.

## Custodial sentences

### Age specific rates and average age of offenders

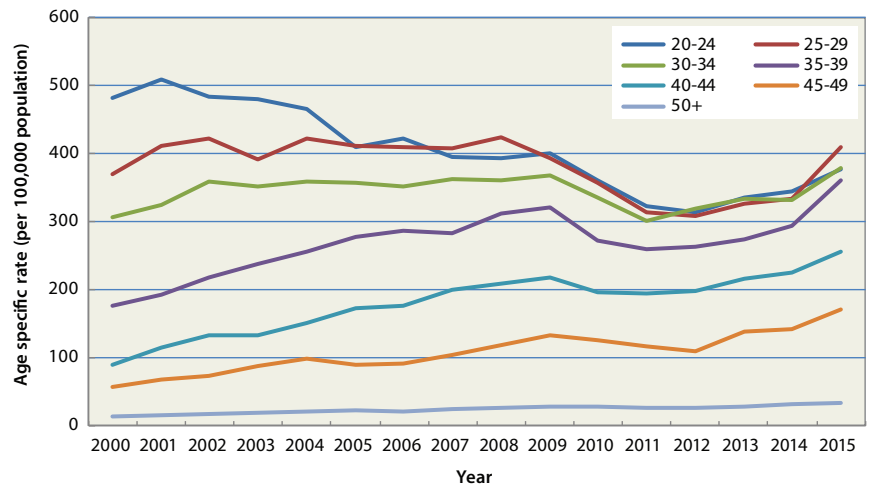
Figure 5 displays the age-specific rates per 100,000 population since 2000, for offenders who received a custodial sentence at court finalisation. In contrast to younger cohorts, the rates for those aged 35-39, 40-44 and 45-49 years increased with time, with the largest rise occurring for the 45-49 year age group. The rate for those aged 50 years and above doubled from 15.2 in 2000 to 33.9 per 100,000 population in 2015.

Not surprisingly, the average age of offenders who received custodial sentences also increased, from 29.6 years in 2000 to 33.7 years in 2015; an increase of 13.9%. The average age of female offenders sentenced to prison increased from 29.1 years in 2000 to 34.1 years in 2015 (17.2%), while the average age of males rose from 29.6 years to 33.7 years (13.8%).

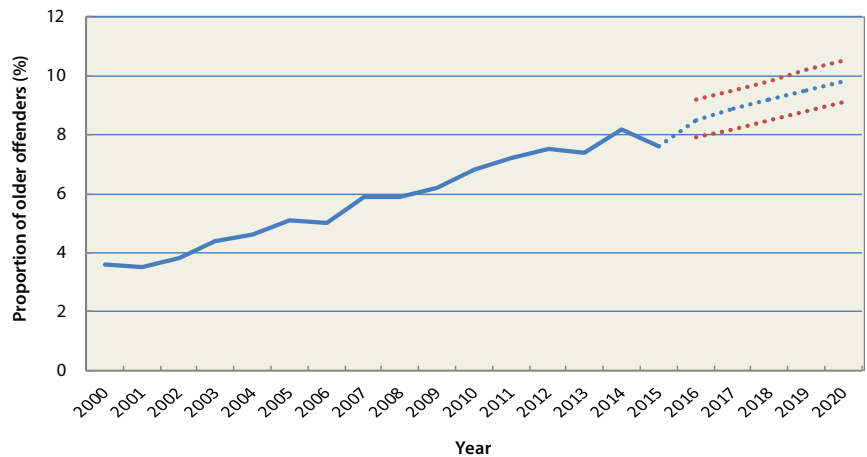
### Older offenders

Examining the contribution of those aged 50 years and above to all sentenced prisoners (see Figure 6), it can be seen that the proportion of offenders who

**Figure 5. Age-specific rates per 100,000 population for offences where a custodial sentence was imposed, NSW, 2000-2015**

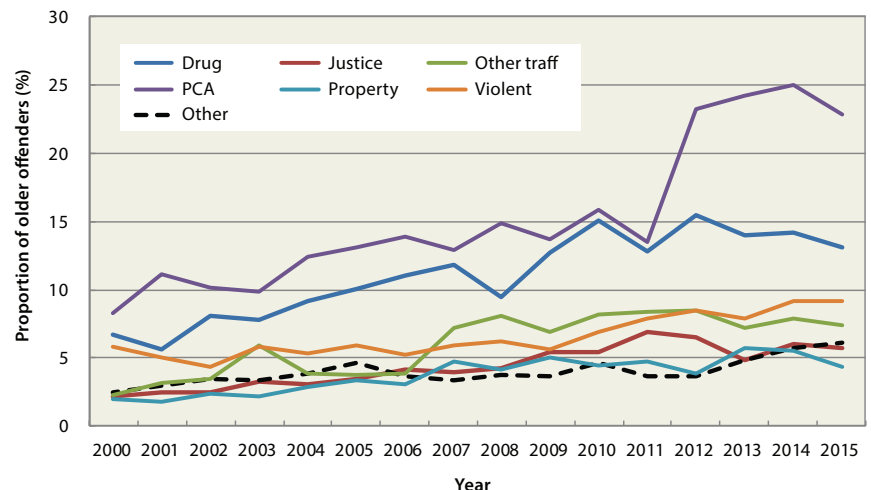


**Figure 6. Proportion of offenders receiving and estimated to receive custodial sentences, where the offenders are 50 years and older, NSW, 2000-2020**

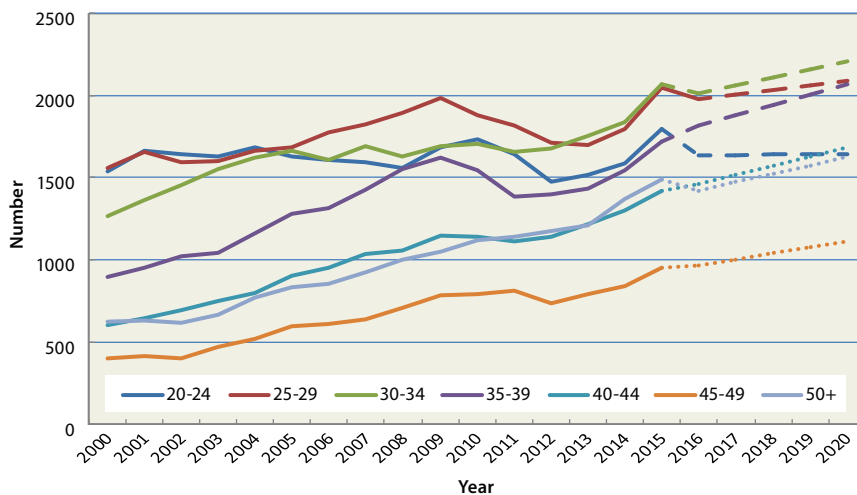


Note: \*\*\* indicates estimated proportion \*\*\* indicates lower and upper confidence limits of estimated proportion

**Figure 7. Proportion of offenders sentenced to custody aged 50+ by offence type, NSW, 2000-2015**



**Figure 8. Number (and estimated predicted number) of prisoners in custody in NSW by age-group, NSW, 2000-2020**



in the 5 years prior to the index court finalisation was 30.1% (n=264) in 2015. This proportion has been fairly stable since 2005.

Finally, Figure 8 displays the number of prisoners in NSW custody since 2000 and the number predicted (based on Corrective Services NSW inmate census data) to be in custody by 2020, stratified by age-group. The number of middle-aged (40-49 years) and older offenders (50+ years) in custody has increased since 2000, with the number of older offenders increasing by 139% from 2000 to 2015 and predicted to be over 1,600 inmates by 2020.

received a custodial penalty that were aged 50+ years rose from 3.6% (n=282) in 2000 to 7.6% (n=877) in 2015; an increase of 111%. If we assume that the 16-year trend was to continue unabated, we estimate that, by 2020, one in ten offenders sentenced to prison will be aged 50 years or older. In addition, the median custodial sentence length received by older offenders at index finalisation decreased from 12 months (IQR 4, 24) in 2000 to 7 months (IQR 4, 18) in 2015 indicating that older offenders are not receiving longer sentences with time.

The number of female offenders aged 50 years or older who received a custodial sentence increased from 27 in 2000 to 79 in 2015; an increase of 193%. A similar trend was seen for men aged 50 years and older, with the number sentenced to prison increasing from 255 in 2000 to 798 in 2015; an increase of 213%. The number of non-Indigenous older offenders sentenced to custody between 2000 and 2015 rose from 230 to 669; an increase of 191%. However, the number of older Indigenous offenders sentenced to prison over the same period rose from 29 to 160 offenders; a 452% increase.

Figure 7 shows the proportion of offenders receiving a custodial sentence who were aged 50+ years by index offence type. In 2015, the proportion of older offenders sentenced to custody was greatest for PCA/DUI offences at 22.8%, followed by drug offences (13.1%) and violent/sexual offences (9.2%). These proportions had risen from 8.3%, 6.7% and 5.8%, respectively, in 2000.

When considering only older offenders who were sentenced to custody, the most common offences for which older offenders were imprisoned in 2015 were violent/sexual offences (36.1%), drug offences (14.5%), justice procedure offences (13.8%) and property offences (13.0%). This pattern has remained fairly stable over the past 16 years, with the exception of property offences (declining from 20.0% in 2000 to 13.0% in 2015) and justice procedure offences (rising from 6.7% in 2000 to 13.8% in 2015). The proportion who had received a prison penalty

## Summary

This brief set out to describe trends in the age profile of offenders appearing in NSW courts and offenders sentenced to custody since 2000 and to explore the contribution of older people to the offender and inmate populations. We also sought to determine whether trends in age-specific offending rates vary by gender or offence type.

Over the last 16 years there have been substantial changes in the age profile of offenders appearing in court. The age-specific offending rates of younger adult cohorts (20-24 years) have decreased by 25% since 2000, whilst rates for those in their late-40s have increased over the same period by 62%. Offending rates for persons aged 50+ years have also increased since 2000. Older offenders increasingly contributed to all types of offences, with the most notable increases occurring amongst PCA/DUI offences, other traffic offences, drug offences and violent/sexual offences. By 2015, nearly one in five PCA / DUI offenders were aged 50+ while around one in ten persons found guilty of a traffic; violent; or drug offence were aged 50 years or more.

Similar trends were observed amongst persons receiving custodial penalties. Our study found an increase in the proportion of older offenders receiving a custodial sentence of 111% over the last 16 years. If this trend was to continue it is estimated that by 2020 one in ten of all custodial sentences imposed in NSW will be for offences committed by persons aged 50 years or older. The number of older inmates in NSW custody is estimated to exceed 1,600 by 2020. Noteworthy also was the increased proportion of older offenders amongst those sentenced to custody for committing a PCA / DUI offence or a drug offence, which rose by 175% and 96% respectively since 2000. This may reflect the more general decline in risk-taking behaviours by younger adults in recent years (Australian Bureau of Statistics, 2016).

Age-specific trends were comparable for male and female offenders with regard to both proven court appearances and prison penalties but, variations by Indigenous status were observed. The growth in the contribution of older offenders amongst Indigenous persons was estimated at 228% over the 16-year period examined. This was more than double the increase seen amongst non-Indigenous offenders over the same period (which increased by 95%). Similarly, while the number of older non-Indigenous offenders sentenced to custody increased by 191%, the corresponding number of older Indigenous offenders increased by 452%. These results are consistent with recent trends in the number of older Indigenous prisoners (i.e. inmates already in custody) in Australian prisons (Australian Bureau of Statistics, 2013).

Further contributing to the increased proportion of older offenders and those sentenced to custody was that older offenders increasingly presented with a prior proven offence and / or reoffended within two years of their index offence. The increase in recidivism amongst older offenders supports findings from Leach and Neto (2011) who found that the proportion of older inmates in custody with a history of prior imprisonment had increased in the 10 years to 2009. These results, combined with the fact that the median prison sentence length for older offenders decreased over the last 16 years from 12 months to 7 months, suggests that the increased number of older offenders in custody is more likely due to new offences being committed by older offenders or police targeting of older offenders rather than because those in custody are ageing.

Many older offenders who appeared in court had no recent offending history or no prior prison penalties. In 2015, nearly two in three older offenders had no proven offences in the 5 years prior to their index offence and 70% of older offenders sentenced to prison had no custodial penalties in the 5 years prior. However this had decreased from three in four older offenders in 2000 with no prior proven offence (the proportion of older offenders with a previous custodial sentence has remained stable). Further research is therefore required to assess the reasons why older people are appearing in court more often than in the past. Possible reasons include that older offenders are being convicted of historical offences (mostly sexual offences (Baidawi et al, 2011; especially as findings emerge from the Royal Commission into Child Abuse)) or that, due to adverse social living conditions or a decline in cognitive health (Alzheimer's Australia, 2014) older people are committing more crime.

Regardless of the reasons why an older person offends, the current results highlight the importance of putting strategies in place to adequately deal with the specific requirements of older offenders, especially Indigenous Australians, who are in custody. The main concerns for older inmates include poor physical and mental health, the prison infrastructure (e.g.

multi-level buildings, stairs, bunk beds, limited ramps and hand rails), their vulnerability to victimization, lack of appropriate rehabilitation programs, isolation and the associated costs of housing an older prisoner (Baidawi et al., 2011; Trotter & Baidawi, 2015; Turner & Trotter, 2010). Specifically, older inmates report difficulty in the use of beds and bunks, bathroom facilities and mobility in the prison and increased need of health services due to chronic diseases and impairments (e.g. vision, hearing, mobility, incontinence and general frailty) and institutional adjustment difficulties causing depression and psychological disorders (Trotter & Baidawi, 2015).

## Notes

1. Unknown Indigenous status not reported

## References

- Alzheimer's Australia. (2014). *Dementia in Prison* (Discussion Paper no 9). Retrieved 2 Dec 2016 from Alzheimer's Australia <https://www.fightdementia.org.au/sites/default/files/20140318-NSW-REP-DementiaInPrison.pdf>
- Angus, C. (2015). *Older prisoners: trends and challenges* (eBrief 14/2015). Retrieved 28 Nov 2016 from NSW Parliamentary Research Service <https://www.parliament.nsw.gov.au/researchpapers/Documents/older-prisoners-trends-and-challenges/Older%20prisoners%20-%20trends%20and%20challenges.pdf>.
- Australian Bureau of Statistics. (2010a). *Australian demographic statistics 2010. cat no 4517.0*. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2011). *Australian and New Zealand Standard Offence Classification (ANZSOC) (Third edition)*. Retrieved 27 May 2016 from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1234.02011?OpenDocument>.
- Australian Bureau of Statistics. (2013). *Life tables for Aboriginal and Torres Strait Islander Australians. cat no. 3302.0.55.003*. Retrieved 1 Dec 2016 from Australian Bureau of Statistics. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3302.0.55.0032010-2012?OpenDocument>.
- Australian Bureau of Statistics. (2015). *Population by age and sex, Regions of Australia, 2015 cat no 3235.0*. Retrieved 28 Nov 2016 from Australian Bureau of Statistics <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3235.02015?OpenDocument>.
- Australian Bureau of Statistics. (2016). *Prisoners in Australia, 2016 cat no 4517.0*. Retrieved 2 Dec 2016 from Australian Bureau of Statistics <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4517.02015?OpenDocument>.
- Baidawi, S., Turner, S., Trotter, C., Browning, C., Collier, P., O'Connor, D., & Sheehan, R. (2011). *Older prisoners - A challenge for Australian corrections*. (Trends and Issues in Crime and

- Criminal Justice No. 426). Retrieved 2 Dec 2016 from Australian Institute of Criminology <http://www.aic.gov.au/publications/current%20series/tandi/421-440/tandi426.html>.
- Corrective Services NSW. (2014). *NSW Inmate Census 2014: Summary of characteristics*. Retrieved 21 Nov 2016 from <http://www.correctiveservices.justice.nsw.gov.au/Documents/SP42-NSW-Inmate-Census-2014.pdf>.
- Grant, A. (1999). *Elderly inmates: Issues for Australia*. (Trends and Issues in Crime and Criminal Justice No 115). Retrieved 2 Dec 2016 from Australian Institute of Criminology [http://aic.gov.au/media\\_library/publications/tandi\\_pdf/tandi115.pdf](http://aic.gov.au/media_library/publications/tandi_pdf/tandi115.pdf).
- Hua, J., & Fitzgerald, J. (2006). *Matching court records to measure re-offending*. (Crime and Justice Bulletin No. 95). Retrieved 30 May 2016 from NSW Bureau of Crime Statistics and Research <http://www.bocsar.nsw.gov.au/Documents/CJB/cjb95.pdf>.
- Juvenile Justice NSW (2016). *Key services measures for 2014-2015*. Retrieved 1 Dec 2016 from Juvenile Justice NSW [http://www.juvenile.justice.nsw.gov.au/Pages/Juvenile%20Justice/aboutdjj/statistics\\_custody.aspx#custodyKeyMeasures](http://www.juvenile.justice.nsw.gov.au/Pages/Juvenile%20Justice/aboutdjj/statistics_custody.aspx#custodyKeyMeasures).
- Kerbs, J., & Jolley, J. (2007). Inmate-on-inmate violence among older male prisoners. *Crime and Delinquency*, 53, 187-218.
- Leach, J., & Neto, A. (2011). *Offender Population Trends: Aged offenders in NSW* (Research Bulletin No 30). Retrieved 15 Nov 2016 from Corrective Services NSW <http://www.correctiveservices.justice.nsw.gov.au/Documents/2012-30.pdf>.
- NSW Bureau of Crime Statistics and Research (2016). *NSW Custody Statistics, Quarterly update December 2016*. Retrieved 16 Jan 2017 from NSW Bureau of Crime Statistics and Research [http://www.bocsar.nsw.gov.au/Documents/custody/NSW\\_Custody\\_Statistics\\_Dec2016.pdf](http://www.bocsar.nsw.gov.au/Documents/custody/NSW_Custody_Statistics_Dec2016.pdf)
- Stojkovic, S. (2007). Elderly prisoners: A growing and forgotten group within correctional systems vulnerable to elder abuse. *Journal of Elder Abuse and Neglect*, 19, 97-117.
- Trotter, C., & Baidawi, S. (2015). Older prisoners: Challenges for inmates and prison management. *Australian and New Zealand Journal of Criminology*, 48, 200-218.
- Turner, S., & Trotter, C. (2010). *Growing old in prison? A review of national and international research on Ageing Offenders*. Retrieved 15 Nov 2016 from Department of Justice [https://assets.justice.vic.gov.au/corrections/resources/747b26d2-675b-45a8-b3f9-ac6a069971e3/corrections\\_research\\_paper3\\_web2010.pdf](https://assets.justice.vic.gov.au/corrections/resources/747b26d2-675b-45a8-b3f9-ac6a069971e3/corrections_research_paper3_web2010.pdf).
- Weatherburn, D., Freeman, K., & Holmes, J. (2014). *Young but not so restless: Trends in the age-specific rate of offending*. Retrieved 1 Dec 2016 from NSW Bureau of Crime Statistics and Research <http://www.bocsar.nsw.gov.au/Documents/BB/bb98.pdf>.
- Yorston, G., & Taylor, P. (2006). Commentary: Older offenders - no place to go? *Journal of the American Academy of Psychiatry and Law*, 34, 333-337.