



ACI NSW Agency
for Clinical
Innovation

REPORT: Summary Analysis of **people** admitted with **Intellectual Disability** in the NSW Public Health System

Tuesday 23th June 2015

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Purpose

- Quantify the number of patients accessing acute inpatient services with an Intellectual Disability using administrative datasets. This is a preliminary helicopter analysis of the patient cohort.
- Provide an understanding of acute inpatient utilisation in terms of cost and activity
- Demonstrate and describe the difference in average length of stay for people with ID against the general hospital population by top 20 AR-DRG*



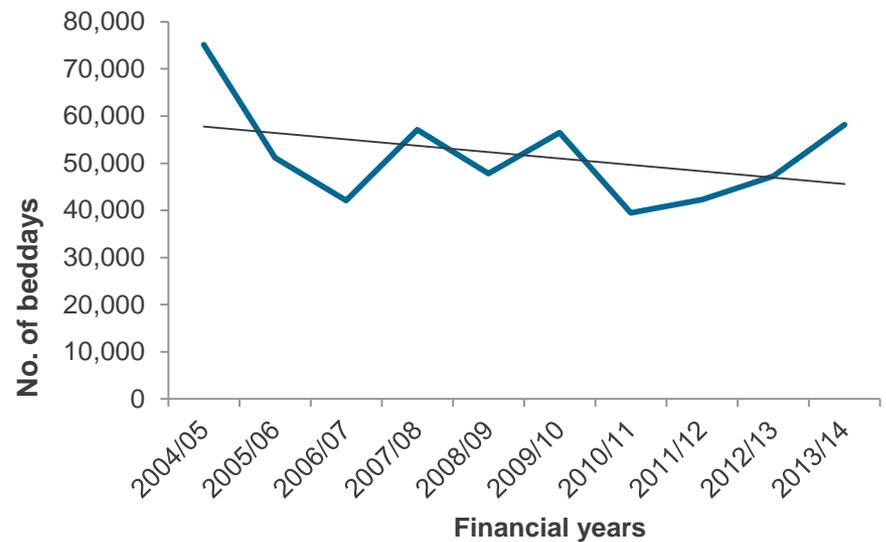
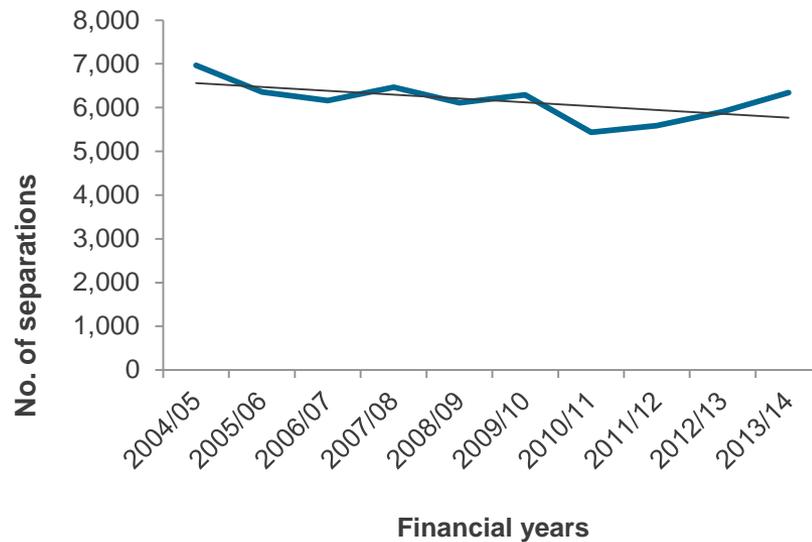


Method

The patient cohort comprised of all NSW and interstate residents of all ages who were admitted to NSW **public facilities** for or with Intellectual Disability from the 1st July 2009 to the 30th June 2014.

Key Summary results

- There were 29,574 hospitalisations and 233,823 beddays over the past five financial years for people with ID coded as either principal or (all) additional diagnosis.





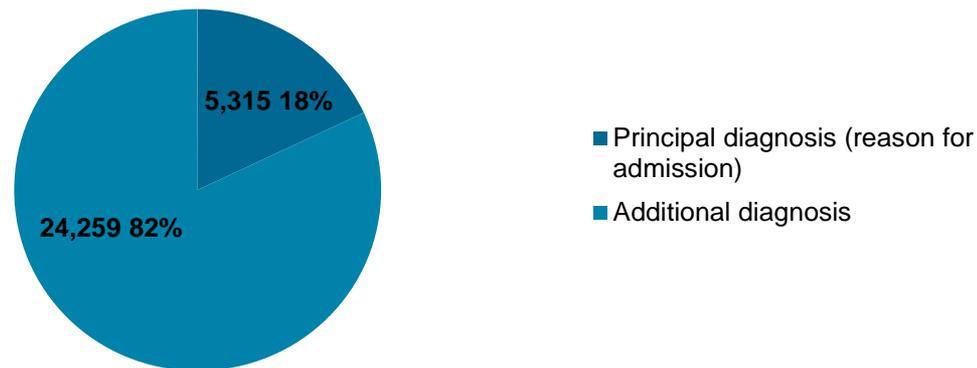
- The average length of stay (including same days) was 8 days which is twice the NSW ALOS of 3 days. When excluding same day admissions the average length of stay is 14 days which twice as high.

- This is likely to be a function of the DRG that the cohort is coded to rather than the ID
 - Of the top 20 AR-DRGs chosen only 7 DRGs had significantly higher ALOS than the general hospital population and these DRGs only represent 5% of the total patient cohort. This did not account for outliers which may also decrease this variation.



- People with ID are mainly (82%) being hospitalised and treated for acute episodes not related to their ID.

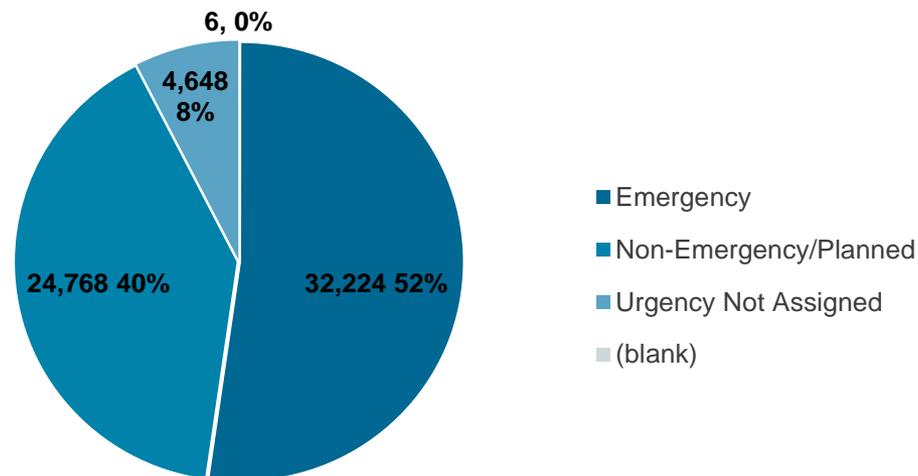
Number of hospitalisations where ID was coded as either the principal or additional diagnosis



- Around 45% (13,240) of hospitalisations were same day admissions.
- The top 3 most common principal diagnosis (reason for admission):
 - for **same day admissions** were *Cerebral palsy unspecified, Dental caries unspecified and Childhood autism*
 - for **overnight hospitalisations** were *Pneumonitis due to food and vomit, Pneumonia unspecified and Mucocutaneous lymph node syndrome[Kawasaki]*.
 - where **ID was coded as an additional diagnosis** were *Pneumonitis due to food and vomit, Other and unspecified convulsions and Pneumonia, unspecified* .
 - where **ID was the reason for admission (principal diagnosis)** were *Cerebral palsy unspecified, Mucocutaneous lymph node syndrome [Kawasaki] and Childhood autism*.

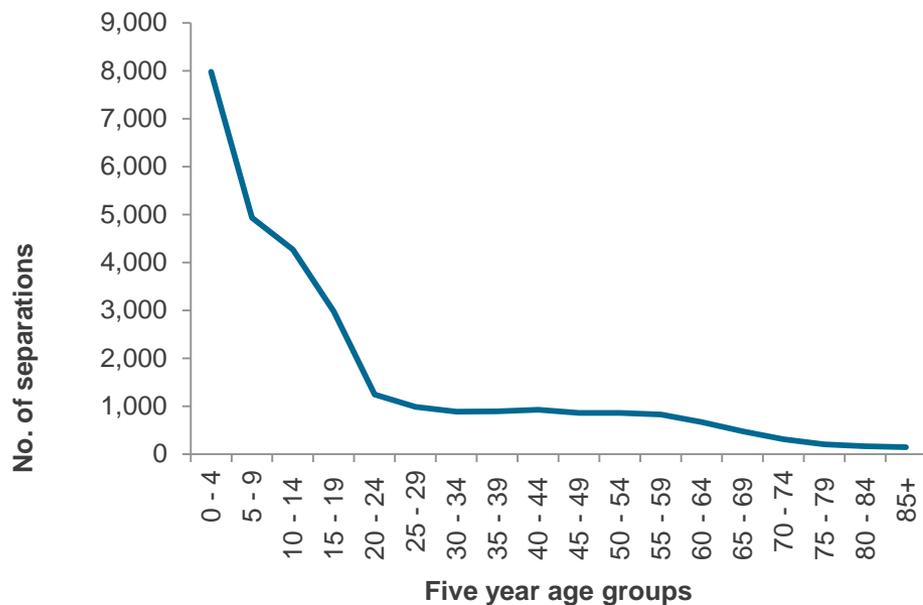
- Of the total hospitalisations, just over half (52%, 32,224) were an unplanned Emergency status which is significantly higher than the NSW total in which 27% of all NSW separations were *Emergency* admissions in 2013-14 (AIHW, Admitted Patient Care Report).

Total number of separations for people admitted with/for Intellectual Disability by Emergency status, between 2009/10 and 2013/14

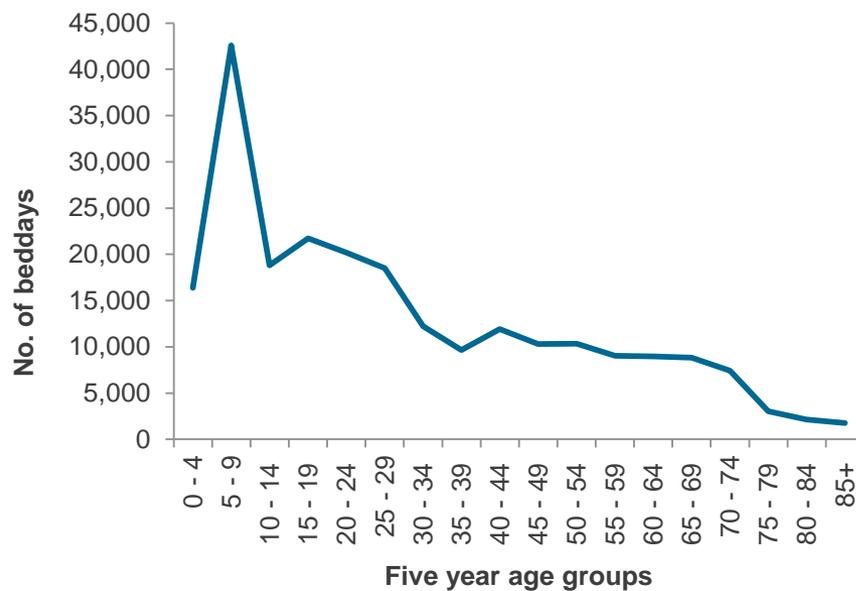


- The patient cohort is relatively young with a median age of 12.

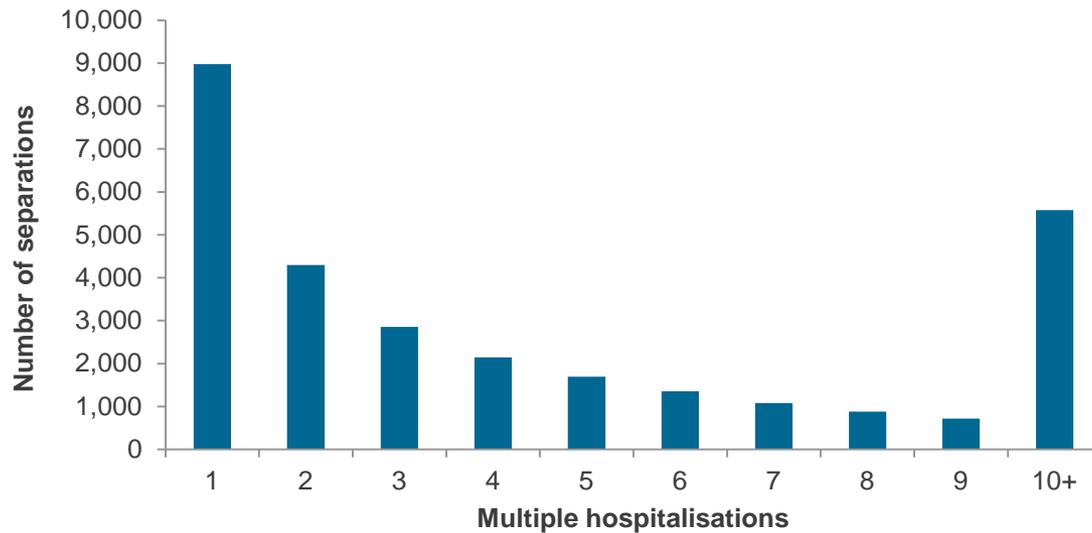
Total number of separation for people admitted with/for Intellectual Disability by five year age groups, between 2009/10 and 2013/14



Total number of beddays for people admitted with/for Intellectual Disability by five year age groups, between 2009/10 and 2013/14



- The total number of patients for this cohort was 8,980 .
- Of the cohort that have had a hospital admission over the period there is a trend towards multiple hospitalisations– an average of 3 hospitalisations per person over a 5 year period (still less than one a year on average).





Conclusions/Reccomendations

- Overall appears that the ID cohort is not statistically significantly different to the general population
- However may be an issue with emergency admissions
- Patients with ID may be low in volume but they are relatively complex given the DRGs thee patients are treated for (& concentrated for mainly reasons other than their ID).
- A study comparing rates of admission could be undertaken.
- Needs to be more understanding of the patients interactions within the system and how services are provided to people with ID and how differently they maybe being treated to the general NSW hospital population.

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QUESTIONS?

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