

Complex Acute Severe Behavioural Disturbance - impact and issues

A/Prof Sally McCarthy

Medical Director NSW Emergency Care Institute

Clinical Lead Whole of Health Program

Sydney ASBD workshop

April 2016

ASBD Definition

Acute Severe Behavioural Disturbance:

Behaviour that puts the patient or others at immediate risk of serious harm

May include threatening or aggressive behaviour, extreme distress, and serious self-harm which could cause major injury or death

Scope of the problem

- Concerns raised by the community
- Concerns raised by emergency departments, pre-hospital services, police
- Impacts: on patients, staff, families
- ASBD predominantly associated with alcohol, methamphetamine and other drugs, and mental health presentations
- Data not comprehensive, however is consistent



I CAN'T FIGHT FOR
YOUR MATE'S LIFE
IF I'M FIGHTING
FOR MINE



Health

"It required six wardsmen, myself and two doctors to restrain the patient and get a drip into her so we could anaesthetise her and get her to sleep ... and even then we gave her enough of the drug that it would have put a horse to sleep. It was that much."

Mr Stanton is a veteran of the heroin epidemic of the late 1990s. He remembers the emergence of ecstasy and speed.

He says he never feared heading out on shift to treat drug patients. Not until the rise of ice.

"This is one of the worst drugs I've seen as a paramedic. There is no safe level of this drug," he said.

"We've had quite a few colleagues who have been assaulted due to methamphetamine taking."

“ The violence comes out of nowhere — unpredictable, superhuman strength. ”

Paramedic Julie Hughes

Most emergency doctors and nurses have been threatened by drunk patients.

HEALTH PROGRAM



Ninety per cent of emergency staff have being assaulted while on duty.

Nine out of 10 emergency department (ED) nurses and doctors have been physically threatened or assaulted by drunk patients, while almost all ED staff have been verbally abused, according to a new report.

Violence in emergency departments: under-reported, unconstrained, and unconscionable

Marcus P Kennedy

Med J Aust 2005; 183 (7): 362-365.

VIOLENCE IN HEALTH CARE — INCIDENT ANALYSIS

Violence in health care: the contribution of the Australian Patient Safety Foundation to incident monitoring and analysis

Klee A Benveniste, Peter D Hibbert and William B Runciman

MJA 2005; 183: 348–351

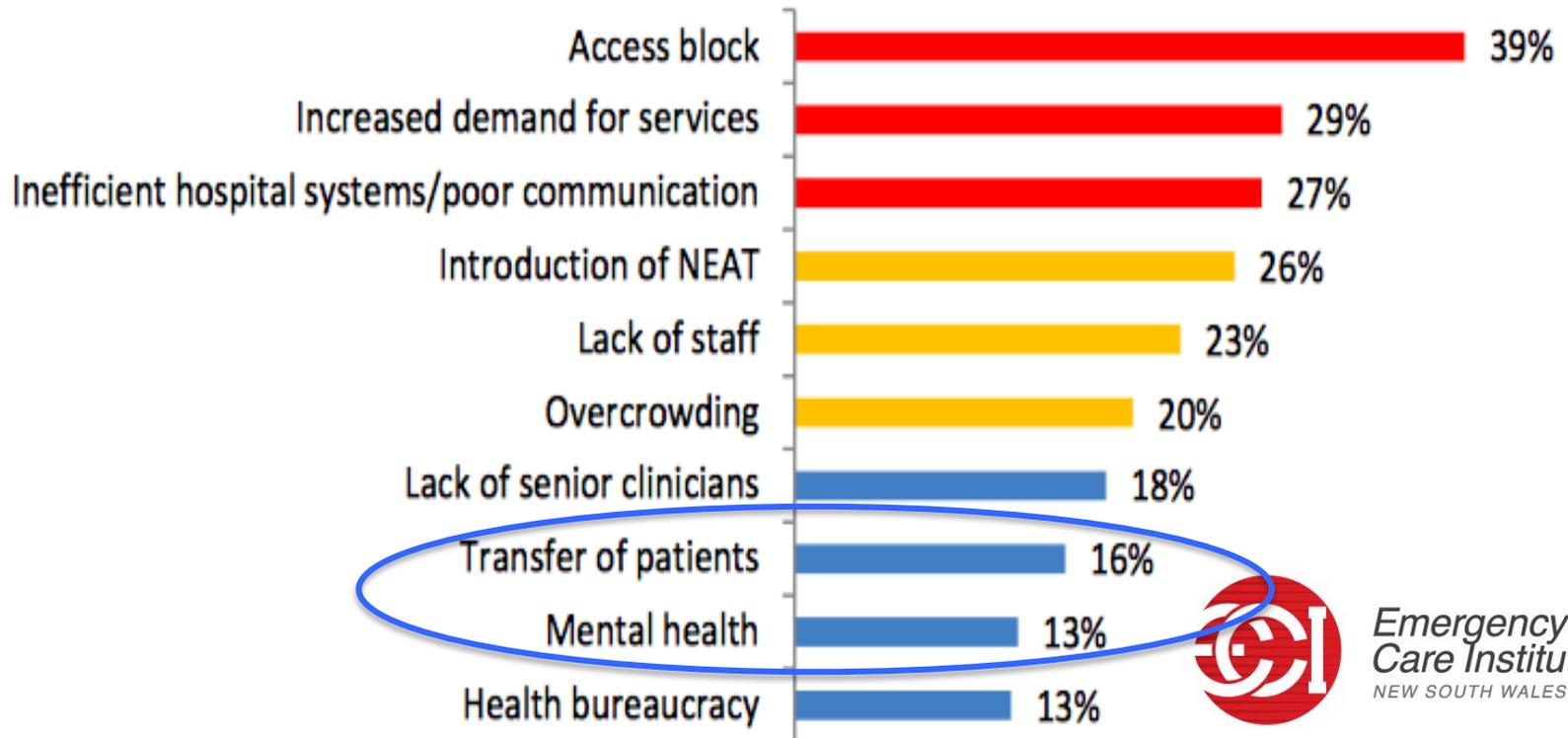
- AIMS analysis highlights the importance of understanding the contributing and precipitating factors in violent incidents, and supports a variety of preventive initiatives, including de-escalation training for staff; violence management plans; improved building design to protect staff and patients; and fast-tracking of patients with mental health problems as well as improved waiting times in public hospital emergency services.

Emergency Department environment

- 24/7 activity
- Crowded
- Bright lights, noise
- All age groups, all illnesses
- A stressful time for patients and families
- Not designed for calm, privacy, security

Challenges identified by NSW EDs 2013

Figure Q10 The top challenges as they relate to your Emergency Department



Challenges identified by EDs

Table 10.3 Top challenges – Met / Rural and regional

	Rural/Regional	Met	2013
Access block	3	1	1
Increased demand for services	4	2	2
Inefficient hospital systems/poor communication	6	3	3
Introduction of NEAT	9	4	4
Lack of staff	1	6	5
Overcrowding	10	5	6
Lack of senior clinicians	5	7	7
Transfer of patients	2	14	8
Mental health	7	8	9
Health bureaucracy	12	10	10

Source: NSW Emergency Care Institute Stakeholder Survey 2013



Emergency
Care Institute
NEW SOUTH WALES



Health

Managing patients with ASBD: Issues raised frequently

- Threatening for staff and other patients
- Variability of medication used for sedation
- ED environment problematic
- Difficulty accessing emergency detox and rehab
- Often “no bed” for patient post-ED
- Searches, seclusion and restraint issues
- Few on-site staff in small hospitals
- Transfers: difficult to co-ordinate all services
- Competing police and ambulance duties
- Prolonged LOS in EDs
- Multiple similar patients concurrently
- No face-to-face mental health clinician in most MPS

ALCOHOL HARM

IN EMERGENCY DEPARTMENTS

Violence fears at hospital

Clare Kenyon

The Health Department says regular police patrols are not needed at Kalgoorlie Hospital, despite figures revealing a “code black” occurring an average of once a fortnight at the hospital’s emergency department.

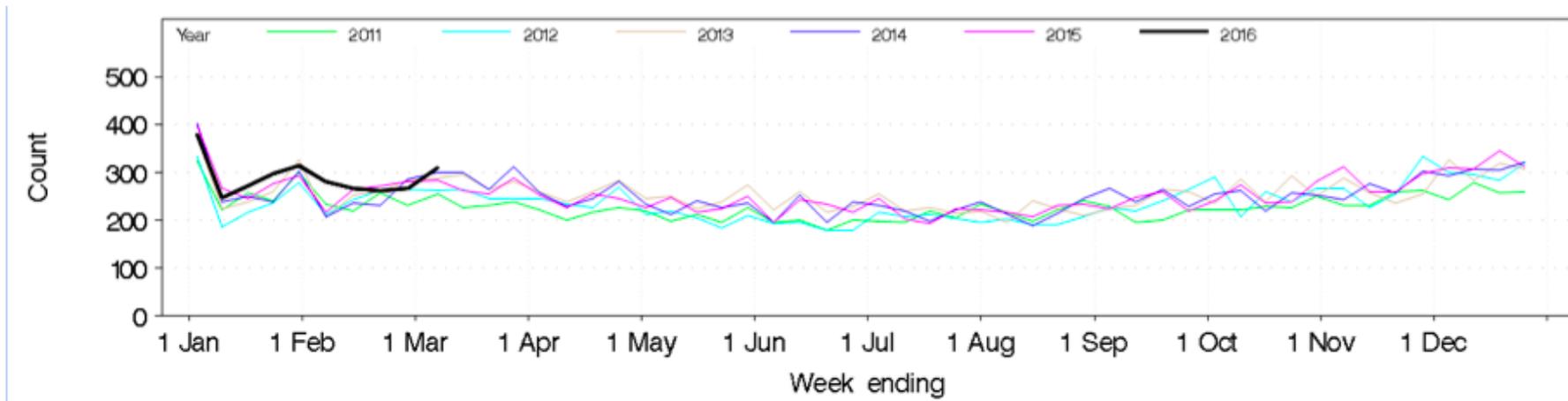
“We have a zero-tolerance policy across the WA Country Health Service on violence or aggression towards staff,” he said. “Staff are provided with training on how to manage aggressive patients. Police are called to assist when patients with known violent tendencies present at the ED ... and would con-

occur to what’s already happening, despite a hugely growing problem,” he said.

“The ANF believes significant measures such as having separate drug tanks or isolation areas attached to hospitals staffed by both medicos and police should be considered for the worst-affected hos-

Alcohol

Figure 1. Total weekly counts of Emergency Department presentations for alcohol problems, for 2016 (black line), compared with each of the 5 previous years (coloured lines), persons of all ages, for 59 NSW hospitals.



Centre for Epidemiology and Evidence, NSW Ministry of Health



Media Release

Melbourne, Monday 7 March, 2016

For immediate release

“Nothing’s changed,” – 18 months on and violence in the ED is still too common

Over a year ago [the largest survey of alcohol harm in Australasian emergency departments](#) (EDs) was carried out by the Australasian College for Emergency Medicine (ACEM). It revealed the devastating impact that alcohol was having on patients and clinicians.

Today, as the peer-reviewed survey is published in the *Medical Journal of Australia*, many doctors and nurses in Australia and New Zealand are still suffering from the unacceptable burden of alcohol-fuelled violence.

“We still see terrible things on a Friday and Saturday night or even during the week, nothing’s changed,” says Dr Andrew Walby, Director of the Emergency Department at St Vincent’s Hospital Melbourne, “There’s a lot of alcohol fuelled assaults happening out there, it seems like just as many as before.”

Study links ice to violence

May 7, 2014

The study, published in the journal *Addiction*, found only 10 per cent of the users were violent when they were not taking the drug, but 60 per cent were violent when they used the drug heavily.

"We found that the drug dramatically increases the risk of violence," Dr McKetin said. "It is clear that this risk is in addition to any pre-existing tendency that the person has toward violence."

Dr McKetin said heavy ice use altered the chemicals in the brain that are responsible for controlling emotions such as aggression.

Drug ice fuelling violent crime, funding international gangs, harming communities: Australian Crime Commission

By political reporter [Matthew Doran](#)

Updated 25 Mar 2015, 8:02pm

Violent crime is on the rise, gangs are raking in profits and "untold" harm is being done to communities because of the increased use of the "mind-eating" drug ice, according to a national report.

The Australian Crime Commission's report is the first to paint a picture of the growing crystal methamphetamine problem across the country.

"Of all illicit drugs, the Australian Crime Commission report assessment is that methamphetamine, and in particular the crystallised form, commonly known as 'ice', is the most dangerous and the highest risk



PHOTO: Australia's growing addiction to ice has serious consequences, as a new report details. (AFP)

Methamphetamine user profile

- At risk occupations and industries
- Peer communities
- Indigenous communities
- Socially disadvantaged
- Experimentation

Key drivers for demand

- Availability
- Affordability
- Purity and potency
- Social factors

Physical and Psychological Effects of methamphetamine

	Low dose	High dose
Physical	<ul style="list-style-type: none"> • Increases in systolic and diastolic blood pressure • Sweating • Palpitations • Chest pain • Shortness of breath • Headache • Tremor • Hot and cold flushes • Increases in body temperature • Reduced appetite 	<ul style="list-style-type: none"> • High blood pressure • Rapid or abnormal heart action • Seizures • Cerebral haemorrhage • Jaw clenching and teeth-grinding • Nausea, vomiting
Psychological	<ul style="list-style-type: none"> • Euphoria • Elevated mood • Sense of wellbeing • Increased alertness and concentration • Reduced fatigue • Increased talkativeness • Improved physical performance 	<ul style="list-style-type: none"> • Confusion • Anxiety and agitation • Performance of repetitive motor activity • Impaired cognitive and motor performance • Aggressiveness, hostility and violent behaviour • Paranoia including paranoid hallucinations • Common delusions including being monitored with a hidden electrical device, and preoccupation with 'bugs' on the skin

Methamphetamine: Impact on the health system

- Community
- Pre-hospital, ED and hospital services
- Rehabilitation and AOD services
- High risk behaviours, HIV impact
- Pathway from occasional use to dependence

“ As a mother of a daughter with an ice addiction I felt helpless and alone. You can't talk to anyone because you feel shame and there are not enough resources to help. The pressure being placed on families is immense. Do I throw my child out of her home thereby condemning her to a life of homelessness and crime? She has an addiction to a vile drug and they can't just stop no matter how many threats are made against them.³⁵⁰

“ Our son is a recovering Ice addict, he is well now but we have been through 14 years of hell. There have been car accidents, suicide threats and attempts and, of course, as with the great majority of addicts theft from us and his siblings. Our other two children have been distressed by seeing the impact of our son's behaviour on us as his parents. The emotional toll of trying to keep him alive has been enormous for me and I suffered an emotional breakdown. I continue to struggle with depression and anxiety.³⁴¹

“ The police attended a situation where a 17 year old and friends as young as 14 were breaking into cars at 6.00 am to purchase Ice. When confronted the boy attacked anyone coming close to him with a machete. I wrote to crime stoppers and the local council advising this house was a danger to the community. No response. I believe the young man living there could have been helped with his addiction, removing the supply from our area.⁴⁰⁷

“ Ice use by our 29 year old son has had a devastating effect on our family. This is the worst thing to ever happen to anyone, it just destroys everything, and your whole life is just chaos. We have had lots of things we have worked hard for smashed or broken, with holes punched in walls and doors. There seems to be no end to it all and it's very frustrating when there is no help and no one to turn to for help.³⁵⁵

Effects of methamphetamine on users

- Social isolation
- Shame
- Hopelessness
- Family

Figure 3.1: Annual number of hospital separations where the principal or additional diagnosis was methamphetamine related²⁵⁴

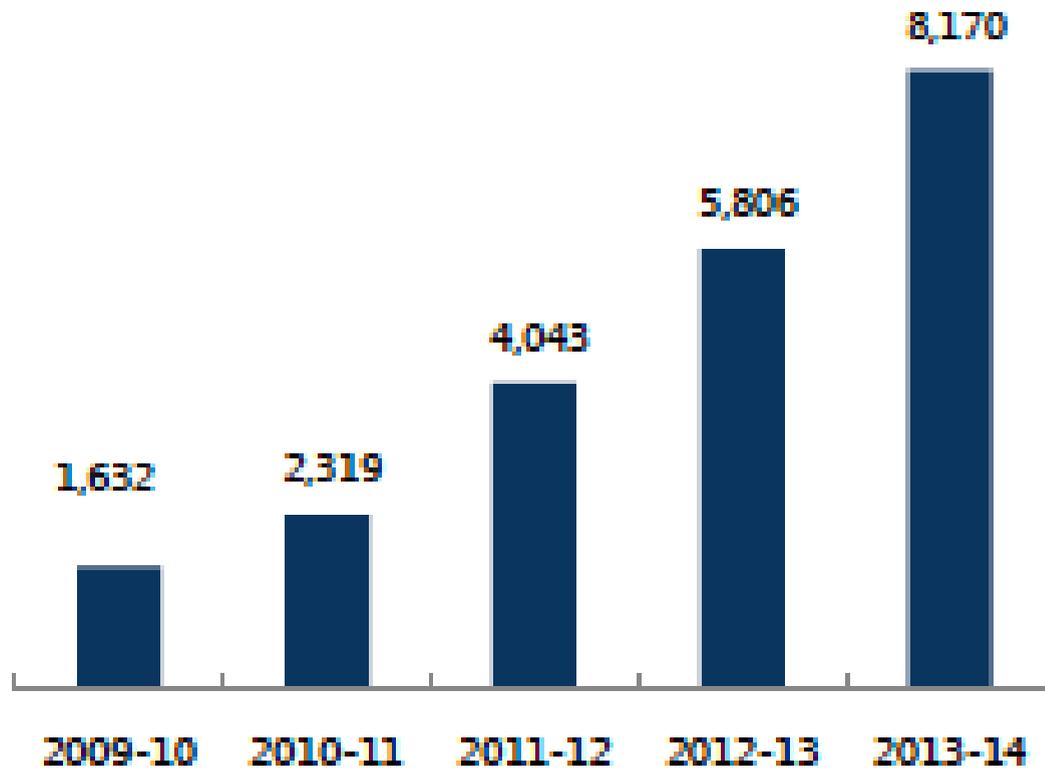


Figure 1.1: Methamphetamine-related Emergency Department presentations, by sex, persons aged 16 years and over, 59 NSW hospitals, 2009 to 2014

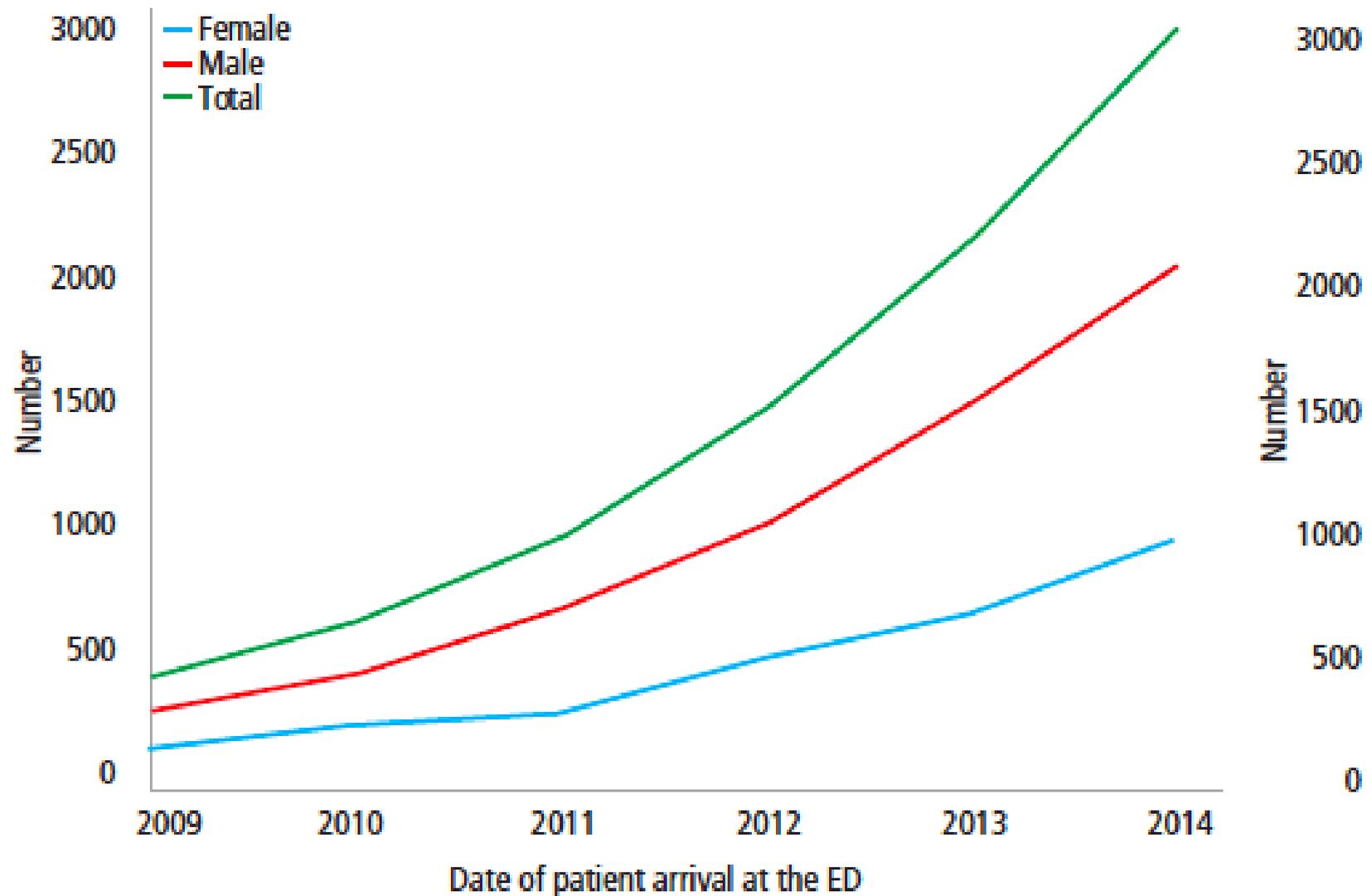


Figure 1.2: Methamphetamine-related Emergency Department presentations by age group, persons aged 16 years and over, from 59 NSW hospitals, 2009 to 2014

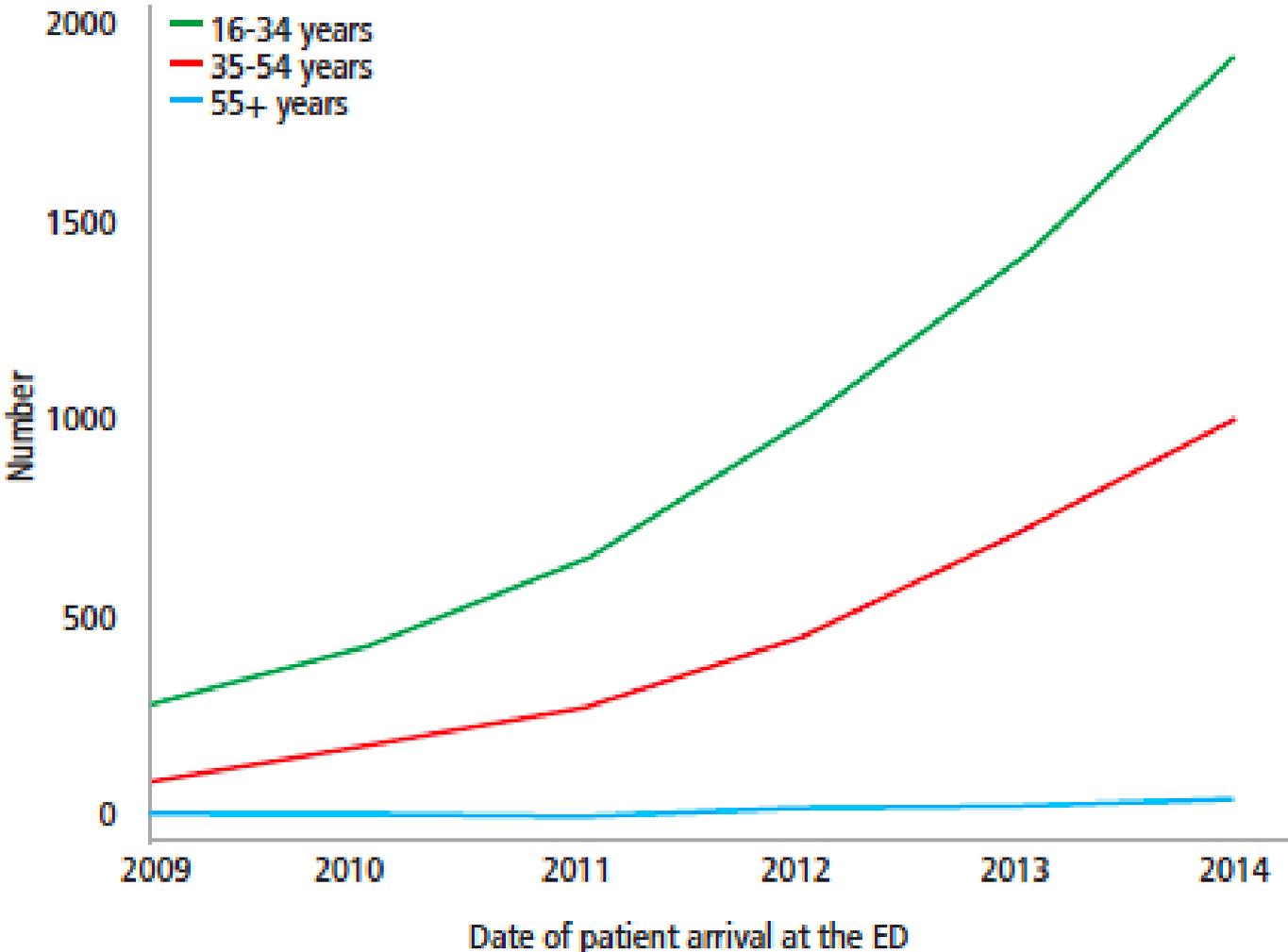
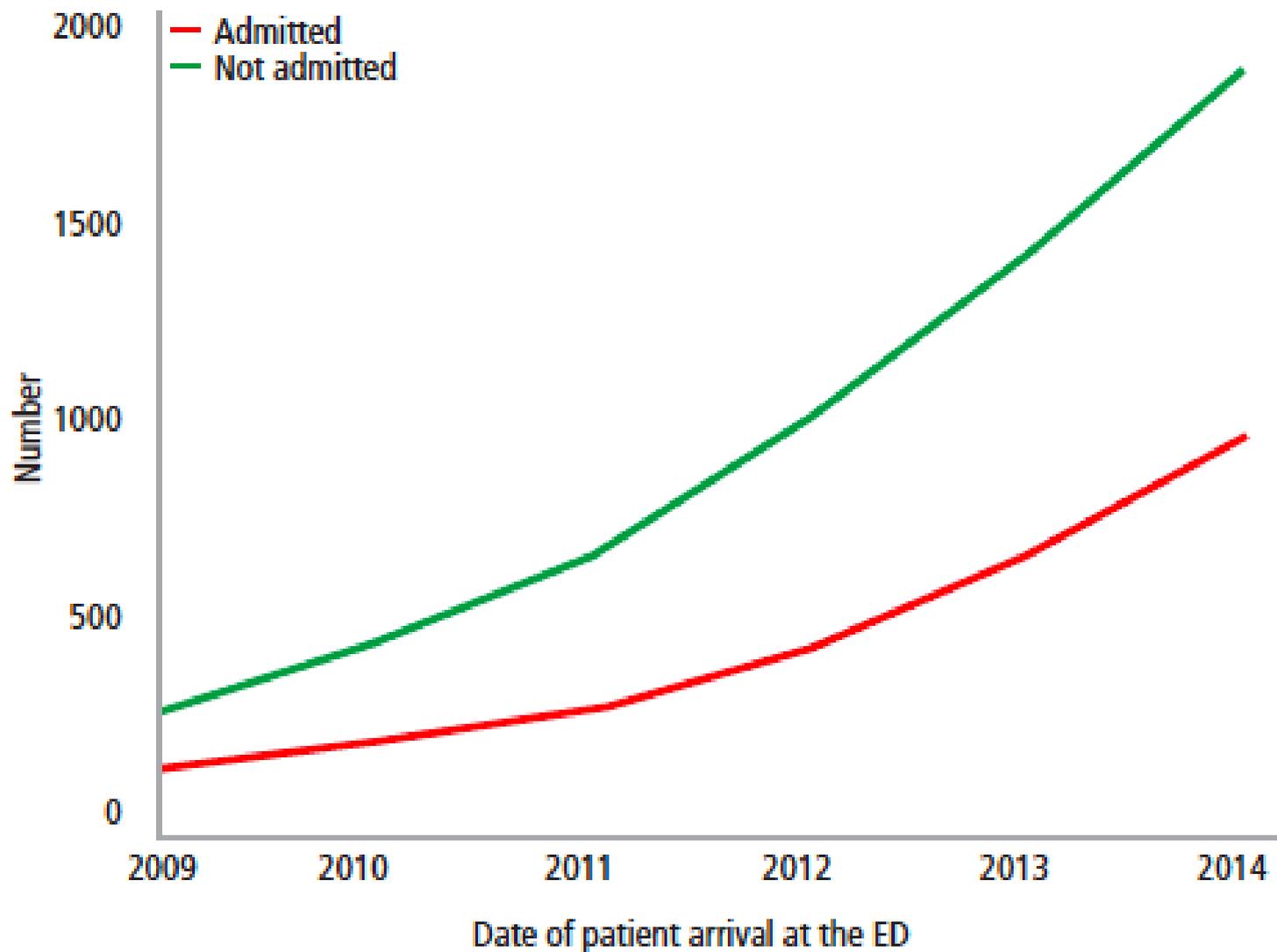


Figure 1.3: Methamphetamine-related Emergency Department presentations by admission status*, persons age 16 years and over, 59 NSW hospitals, 2009 to 2014



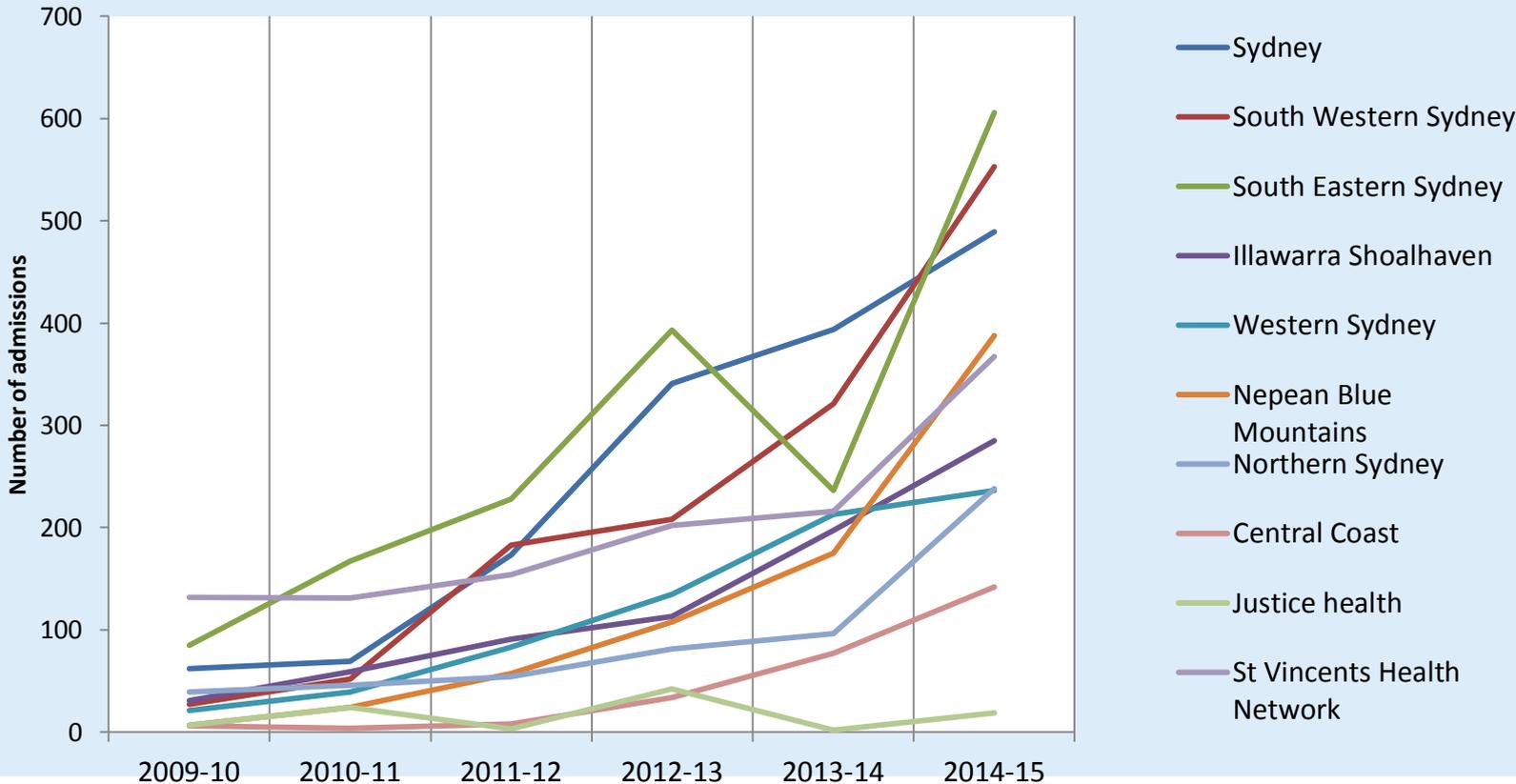
Methamphetamine related ED presentations

Table 1.3: Methamphetamine-related Emergency Department presentations by admission status*, persons age 16 years and over, from 59 NSW hospitals, 2009 to 2014

Year	Admitted	Not admitted	Total	% admitted
2009	124	270	394	31.5
2010	189	432	622	30.4
2011	266	672	941	28.3
2012	427	1032	1467	29.1
2013	665	1451	2134	31.2
2014	963	1897	2963	32.5

*Admission status was missing in 1.5% of records so numbers in "Admitted" and "Not admitted" columns may not add up to the total number of presentations.

Methamphetamine-related hospital admissions, by metropolitan Local Health District of Hospital, persons aged 16 years and over, NSW, 2009-10 to 2014-15



Notes:

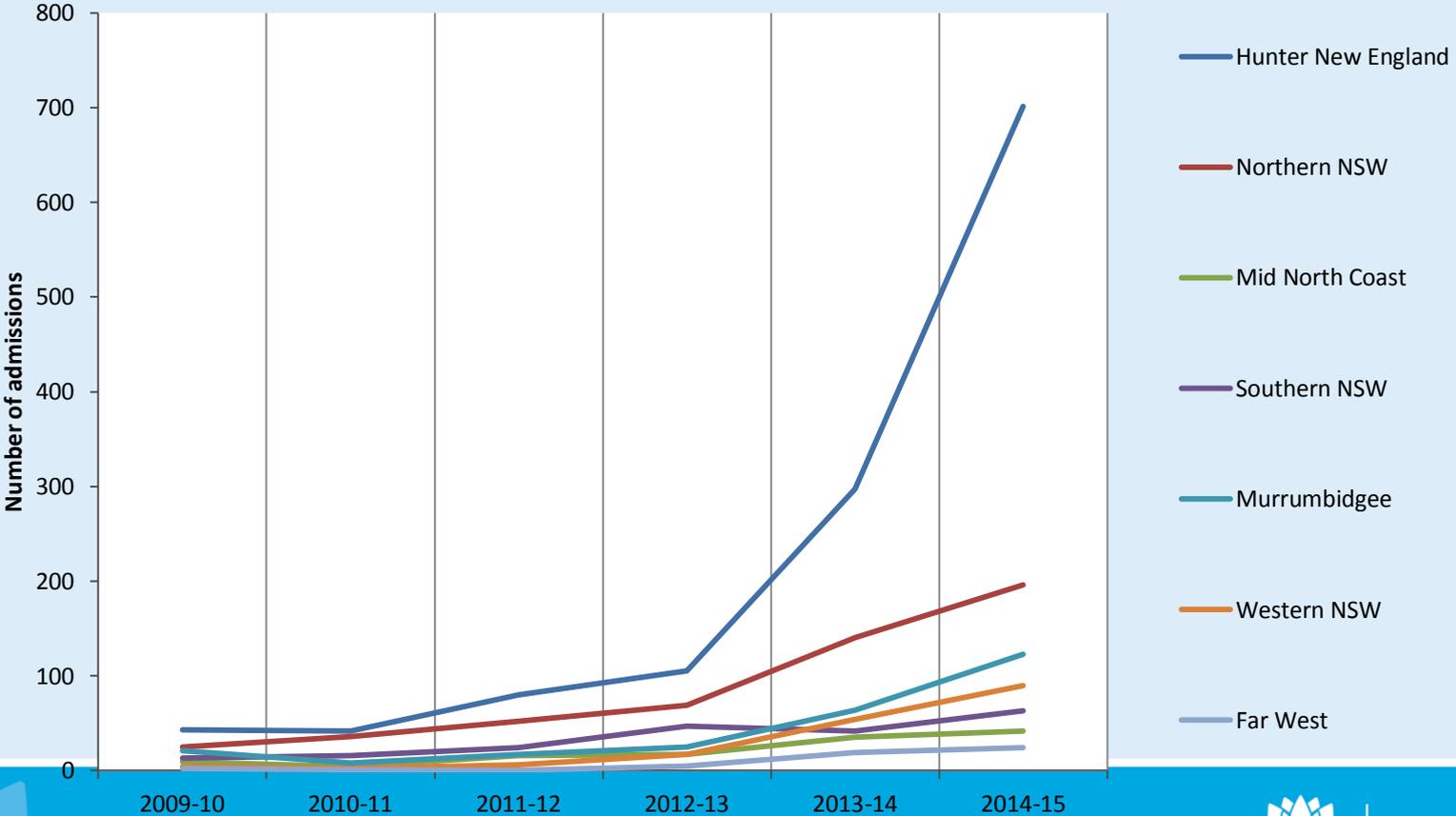
- Data for 2014-15 are preliminary
- St Vincent’s Hospital is included in South Eastern Sydney
- The number of admissions can be affected by availability of services

Number of methamphetamine-related hospital admissions, by hospital*, persons aged 16 years and over, NSW, 2014-15

Hospital	Number of admissions 2014-15
Nepean Hospital	379
St Vincent's Hospital, Darlinghurst	367
Private hospitals in Eastern Sydney LHD	294
Hunter New England Mater Mental Health Service	250
Royal Prince Alfred Hospital	208
Concord Hospital	206
Liverpool Hospital	206
Prince of Wales Hospital	177
Fairfield Hospital	146
Belmont Hospital	138
Royal North Shore Hospital	133
Campbelltown Hospital	121
Shellharbour Hospital	121
Wyong Hospital	103
Westmead Hospital	84
Wollongong Hospital	78
St George Hospital	74
Cumberland Hospital	74
Maitland Hospital	71
The Tweed Hospital	69

* the 20 hospitals in NSW with the highest number of admissions where methamphetamine use was recorded

Methamphetamine-related hospital admissions, by rural Local Health District of hospital, persons aged 16 years and over, NSW, 2009-10 to 2014-15



Notes:

- Data for 2014-15 are preliminary
- Albury Base Hospital is not presented
- The number of admissions can be affected by availability of services



ED MH Presentations and ASBD

- ASBD evident in 12.5% of total mental health cases
- 14% of presenting males and 11% females have ASBD

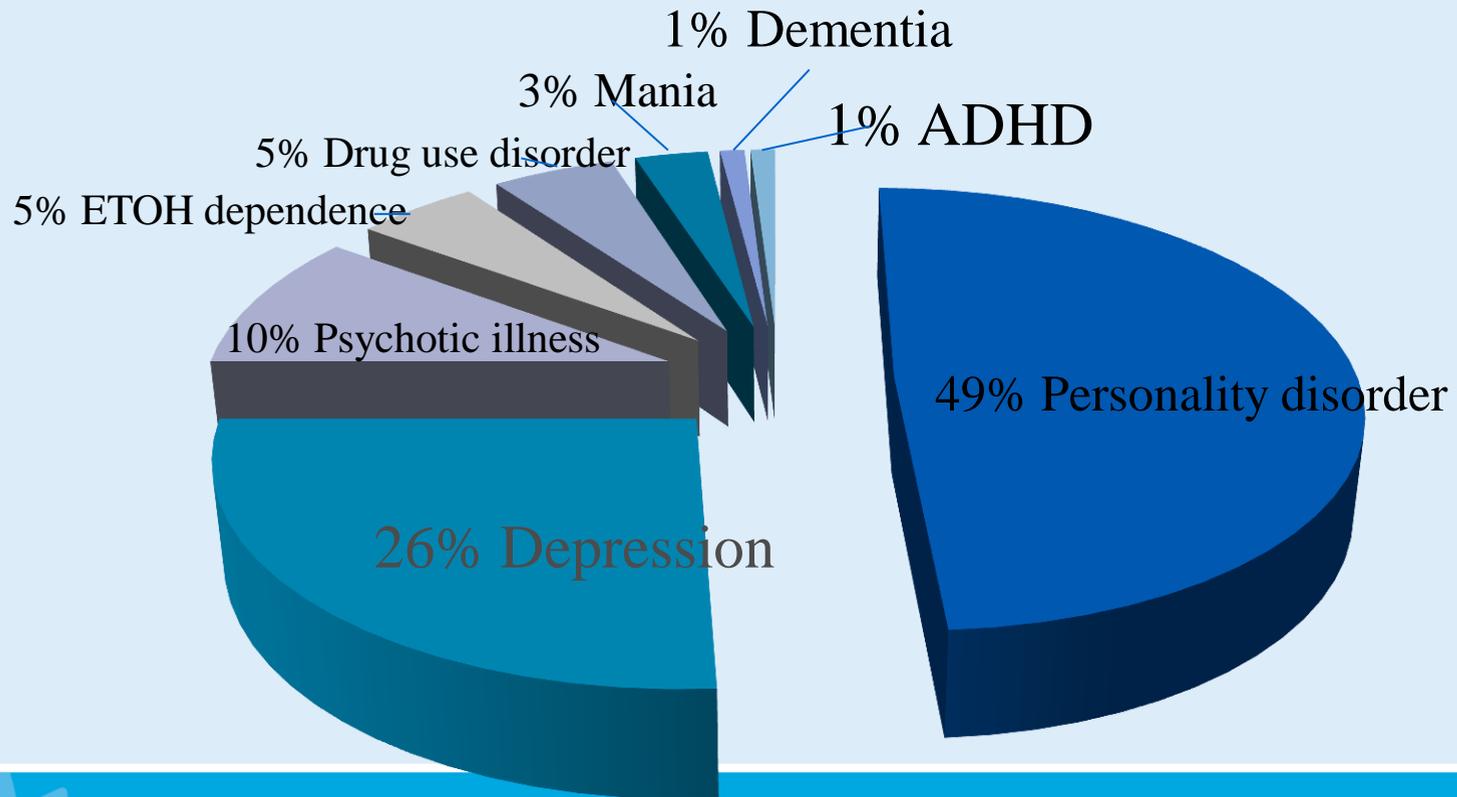
Martin Davis CNC MHECS WNSWLHD

ABSD in MH patients in ED

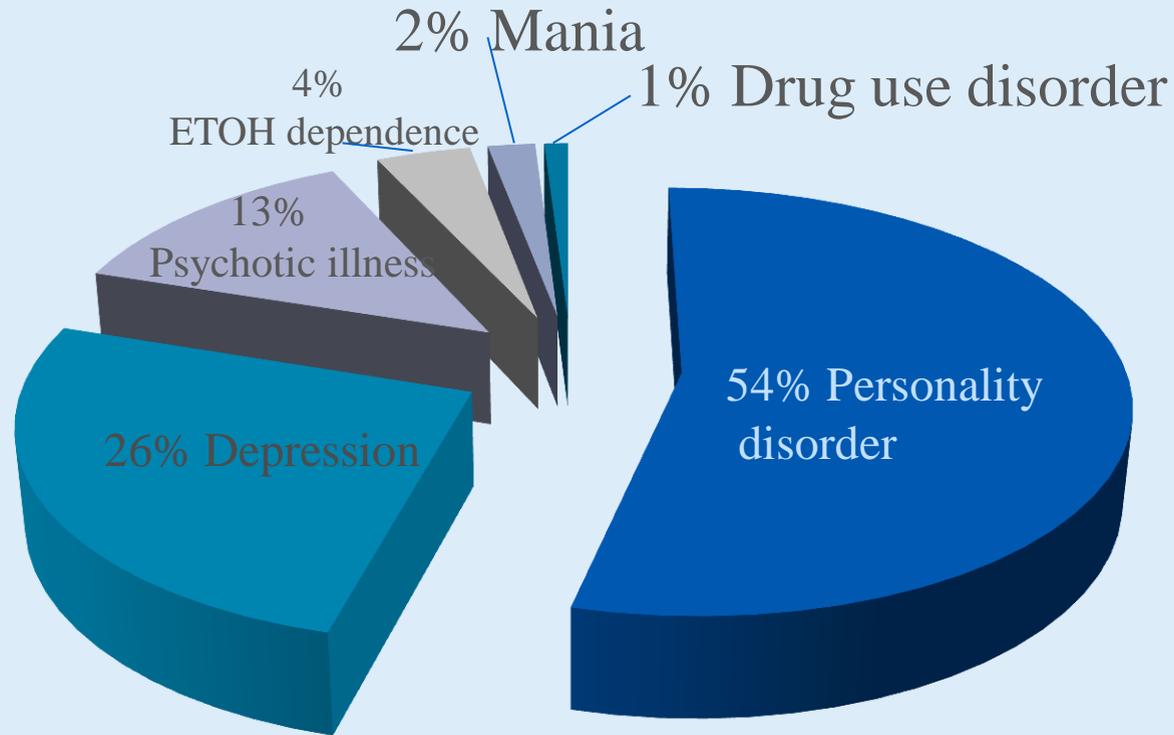
- Only 1 in 13 cases of ASBD does not involve initial verbal abuse
- ASBD patients are intoxicated in 50% of cases
- The majority of patients are mentally disordered rather the mentally ill
- Age range from 18 to 53 years of age
- Patient physical restraint sees 1 in 30 cases resulting in staff injury*
- 1 in 252 leads to patient injury*
- Average length of stay just over 6 hours

*Calver et al (2015) *The Safety and Effectiveness of Droperidol for Sedation of Acute Behavioural Disturbance in the Emergency Department*

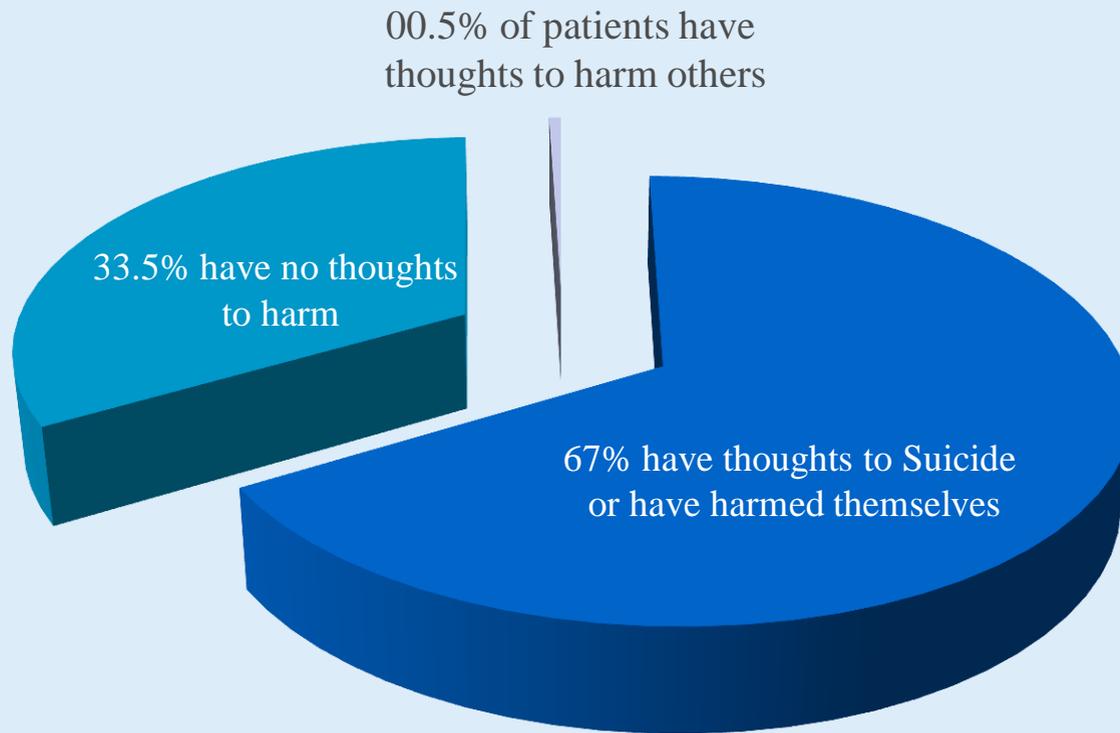
Primary Diagnosis in MALE presentations



Primary Diagnosis in FEMALE presentations

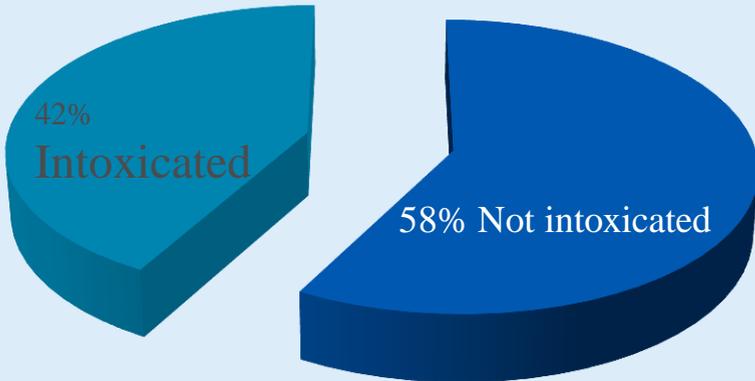


Suicidal Vs Homicidal Thinking in Mental Health

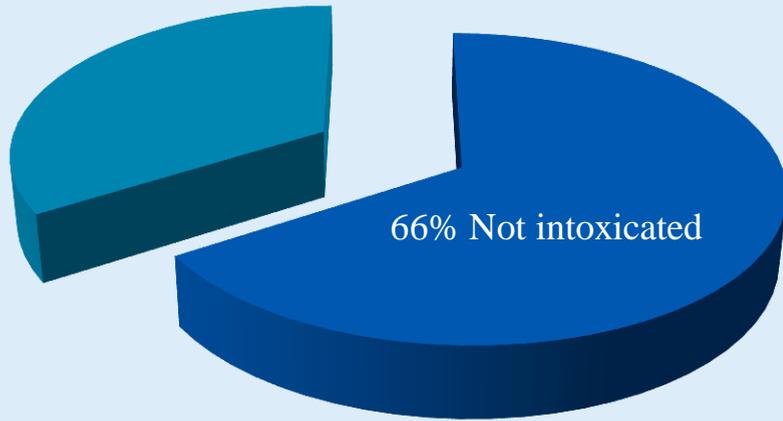


Intoxicated presentations

Males

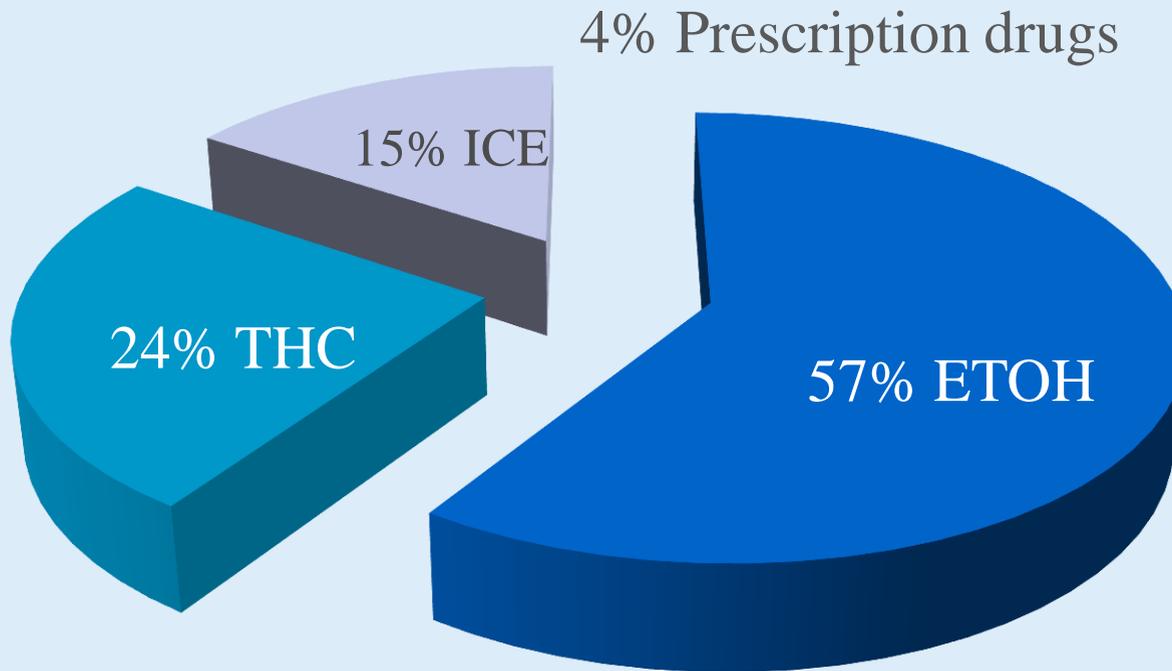


34% Intoxicated

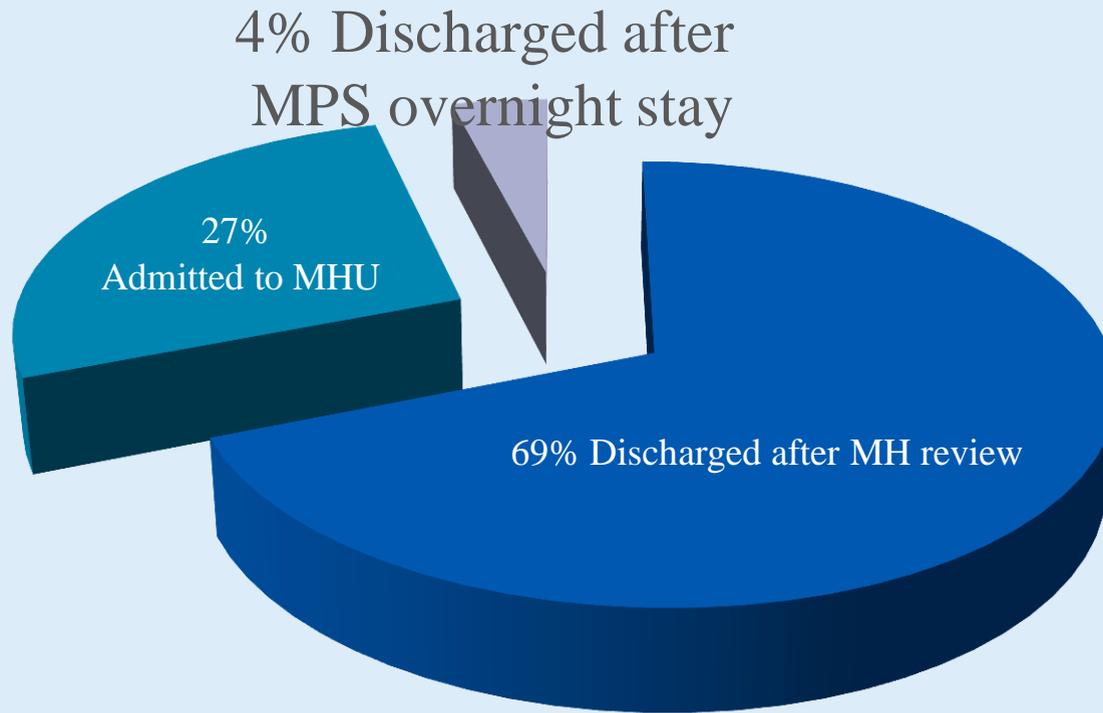


Females

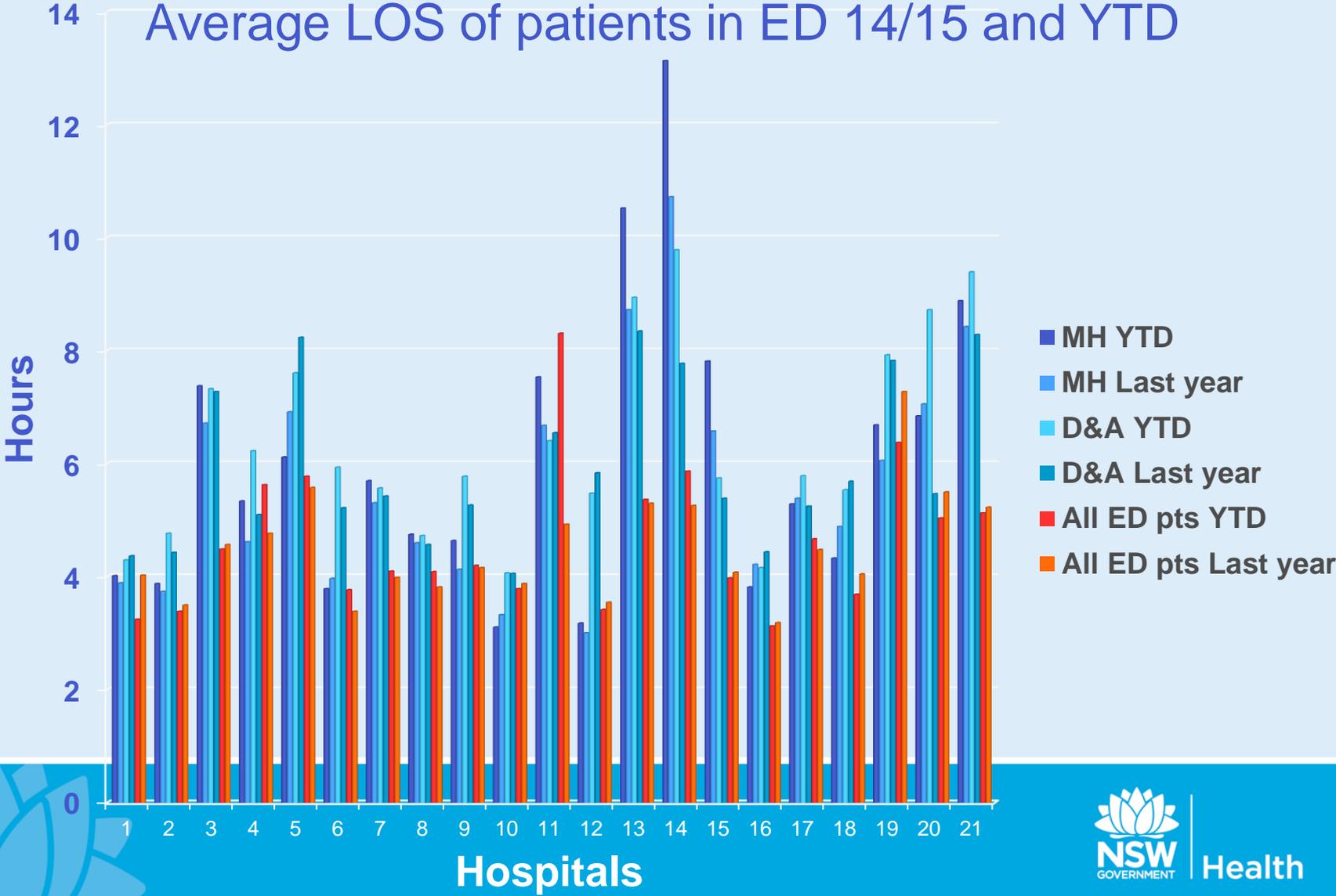
Type of Intoxicant



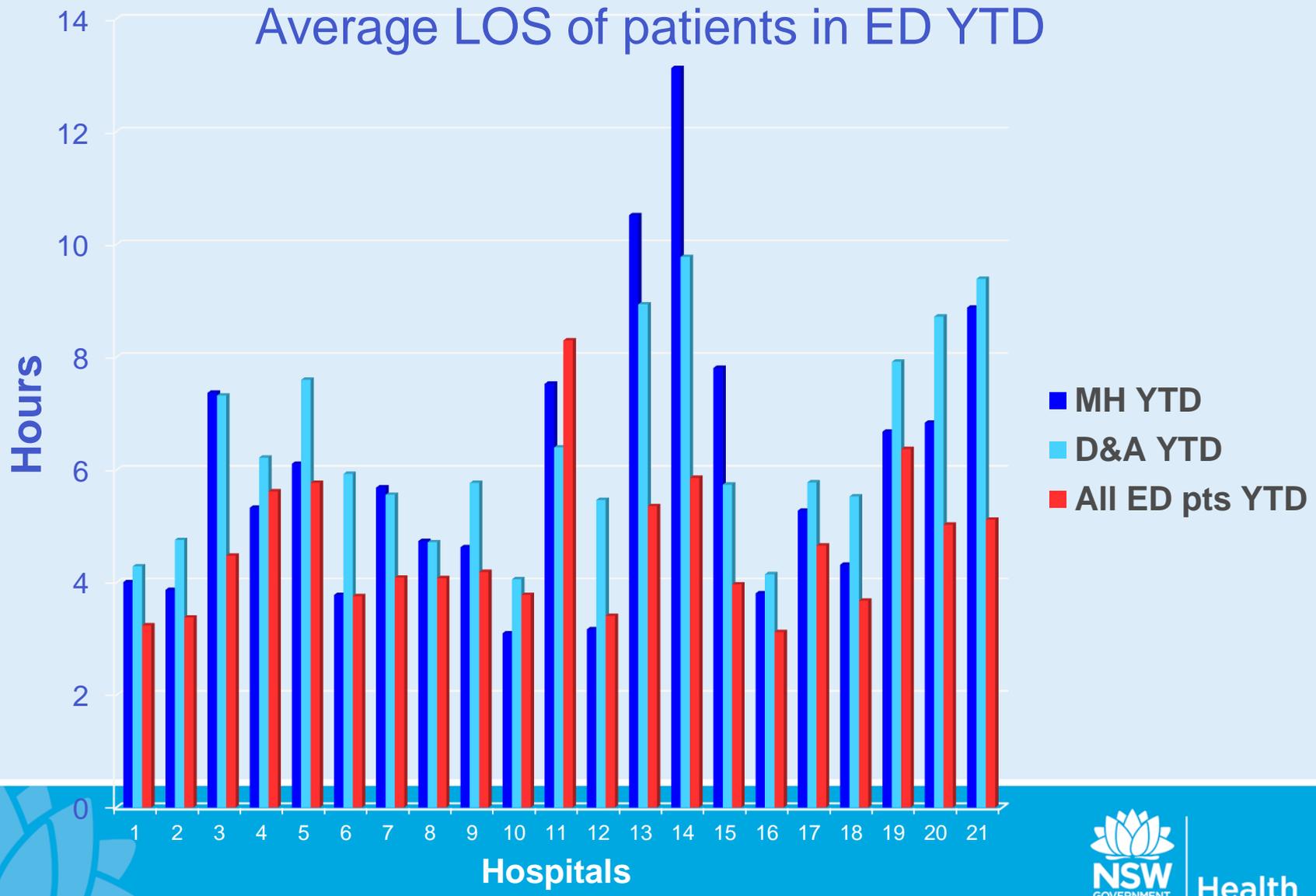
Rates of admission to Mental Health Units



Average LOS of patients in ED 14/15 and YTD



Average LOS of patients in ED YTD



Conclusion

- ASBD is becoming more frequent
- EDs not set up to manage ASBD patients in line with current best practice
- Delays, and lack of streamlined services and processes for this group of patients
- More broadly, need appropriate resources and pathways for “dual diagnosis” presentations
- Need to think from community through to destination for definitive care and ongoing care

VIOLENCE IN HEALTH CARE — INCIDENT ANALYSIS

Violence in health care: the contribution of the Australian Patient Safety Foundation to incident monitoring and analysis

Klee A Benveniste, Peter D Hibbert and William B Runciman

MJA 2005; 183: 348–351

- AIMS analysis highlights the importance of understanding the contributing and precipitating factors in violent incidents, and supports a variety of preventive initiatives, including de-escalation training for staff; violence management plans; improved building design to protect staff and patients; and fast-tracking of patients with mental health problems as well as improved waiting times in public hospital emergency services.

Clinical Guideline



PHYSICAL ASSESSMENT OF PATIENTS WITH A PRIMARY MENTAL HEALTH OR BEHAVIOURAL PROBLEM IN THE EMERGENCY DEPARTMENT

PURPOSE

To provide a standardised, evidence based approach to the physical assessment of people presenting to the Emergency Department (ED) with a primary mental health problem.

KEY PRINCIPLES

People with mental illness often experience high levels of complex medical comorbidity and poorer health outcomes.

People with mental illness are entitled to quality, evidence based care and treatment for all aspects of their health, including their physical health.

Physical assessment of people presenting to the ED with a primary mental health problem should be guided by history and specific presenting symptoms and will vary from a brief examination including physiological observations and history through to a comprehensive work-up.

The aim of the ED physical assessment is to reasonably exclude a physical health issue as:

Emergency Department Physical Assessment for patients with a primary mental health problem

Name _____	Patient's Details (or sticker) _____
Age _____	
DOB _____	
Address _____	

Brief description of presenting problem

Physiological Observations

Heart rate	BP	Temp.	Resp. Rate	O ² Sats	BSL

Orientated to: Time, Place, Person

Comments:

.....

.....

Meets low risk criteria (all required)

- Age 15-65 years ([50 for Aboriginal patients](#))
- No altered level of consciousness (e.g. no delirium)

Guideline



Management of patients with Acute Severe Behavioural Disturbance in Emergency Departments

Document Number GL2015_007
Publication date 10-Aug-2015
Functional Sub group Clinical/ Patient Services - Critical care
Summary The purpose of this Guideline is to address the management and initial sedation requirements of patients who present to emergency departments with acute severe behavioural disturbance (ASBD). This guideline includes information for children, adolescents (children and adolescents includes those under 16 years) and adults under 65 years. Management of older persons over 65 years is not contained in this Guideline.
Author Branch System Relationships and Frameworks
Branch contact System Relationships and Frameworks
Applies to Board Governed Statutory Health Corporations, Chief Executive Governed Statutory Health Corporations, Specialty Network Governed Statutory Health Corporations, Affiliated Health Organisations, Government Medical Officers, NSW Ambulance Service, Private Hospitals and Day Procedure Centres, Public Health Units, Public Hospitals
Audience Administration, clinical staff, emergency departments, security staff
Distributed to Public Health System, Divisions of General Practice, Government Medical Officers, NSW Ambulance Service, Ministry of Health, Private Hospitals and Day Procedure Centres, Tertiary Education Institutes
Review date 10-Aug-2020
Policy Manual Patient Matters
File No. 13/1433
Status Active

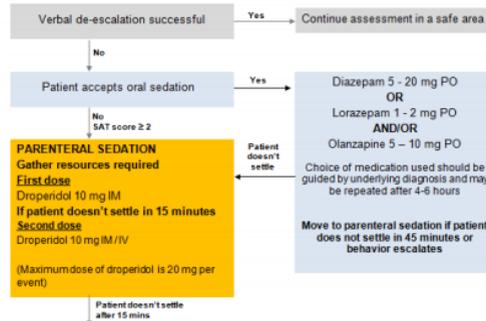
Director-General

Management of Patients with Acute Severe Behavioural Disturbance in Emergency Departments



5.1.1/

Adult algorithm



- If intravenous access is already in situ, IV route of administration may be more appropriate
- Use five point physical restraint for sedation purposes: one on each limb & head with team leader close to patient's head monitoring airway and patient's physical condition
- **Avoid** restraining patient in a prone position as it places the patient at high risk for respiratory restriction
- Aim for Sedation Assessment Tool (SAT - see section 6.2 in Guideline) score 0 or -1 or -2
- Continuous pulse oximetry & close observation is recommended in all patients until they are able to respond to verbal stimuli. Monitor vital signs and SAT score post EACH parenteral sedation dose 5 minutely for 20 min, then every 30 min for 2 hours
- Urgent clinical review by senior medical officer if parenteral benzodiazepines are used & respiratory depression noted (e.g. SpO2 < 95%, RR < 12 or patient appears poorly perfused)
- Benztropine 1-2 mg IM / IV may be given for acute dystonic reaction.

GL2015_007

Issue date: August-2015

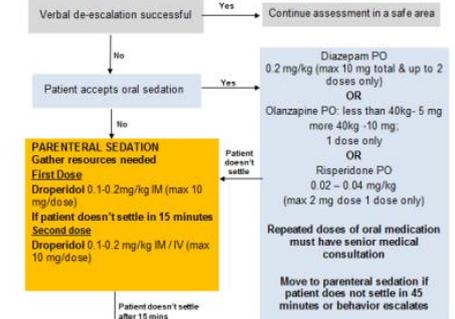
Page 11 of 20

Management of Patients with Acute Severe Behavioural Disturbance in Emergency Departments



5.1.2 Paediatric behaviour

Paeds algorithm



- If intravenous access is already in situ, IV route of administration may be more appropriate
- Use lean body mass to calculate drug doses
- Use five point physical restraint for sedation purposes: one on each limb & head, with team leader close to patient's head monitoring airway and patient's physical condition
- **Avoid** restraining patient in a prone position as it places the patient at high risk for respiratory restriction
- Monitor vital signs and respiratory rate/effort post EACH parenteral sedation dose 5-minutely for 20 min, then every 30 min for 2 hours on the appropriate age-related Standard Paediatric Observation Chart (SPOC) or Paediatric Emergency Department Observation Chart (PEDOC)
- Watch for respiratory depression if parenteral benzodiazepines are used; treat respiratory depression from benzodiazepines with flumazenil 5-10mcg/kg (titrated to respiratory rate and effort; do NOT titrate to level of consciousness or pupil size)
- Treat acute dystonia from anti-psychotic drugs with benztropine 0.02 mg/kg IM/IV

GL2015_007

Issue date: August-2015

Page 12 of 20