



Establishing a novel chemical restraint monitoring and reporting framework at a new digital metropolitan hospital

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Background and Objective

Chemical restraint can be described as the use of medication given to restrict movement in patients displaying behaviour which may cause harm. Psychotropic medications such as anxiolytics and antipsychotics are often used for chemical restraint.

The National Safety and Quality Health Service (NSQHS) standards state that chemical restraint be used only where necessary and that health services have systems to minimise use. To support this, a reporting framework was developed to monitor the use of chemical restraint within a new digital metropolitan hospital.

Method

A pharmacy-led multidisciplinary committee including medical consultants, nursing and digital subject matter expert representatives was convened to develop a chemical restraint monitoring framework.

The committee collated an original list of 32 medications and 8 indications of interest to be monitored as chemical restraint. These lists guided data collection from the integrated electronic medication record (ieMR), which was fed into interactive reporting spreadsheets to formulate a novel chemical restraint monitoring system.

Medications of Interest (v1)

Alprazolam	Donepezil	Olanzapine
Amantadine	Escitalopram	Oxazepam
Aripiprazole	Galantamine	Propranolol
Carbamazepine	Haloperidol	Quetiapine
Chlorpromazine	Lamotrigine	Risperidone
Citalopram	Lorazepam	Sertraline
Clonidine	Melatonin	Sodium valproate
Clozapine	Methylphenidate	Temazepam
Clonazepam	Midazolam	Venlafaxine
Desvenlafaxine	Mirtazapine	Zolpidem
Diazepam	Nitrazepam	

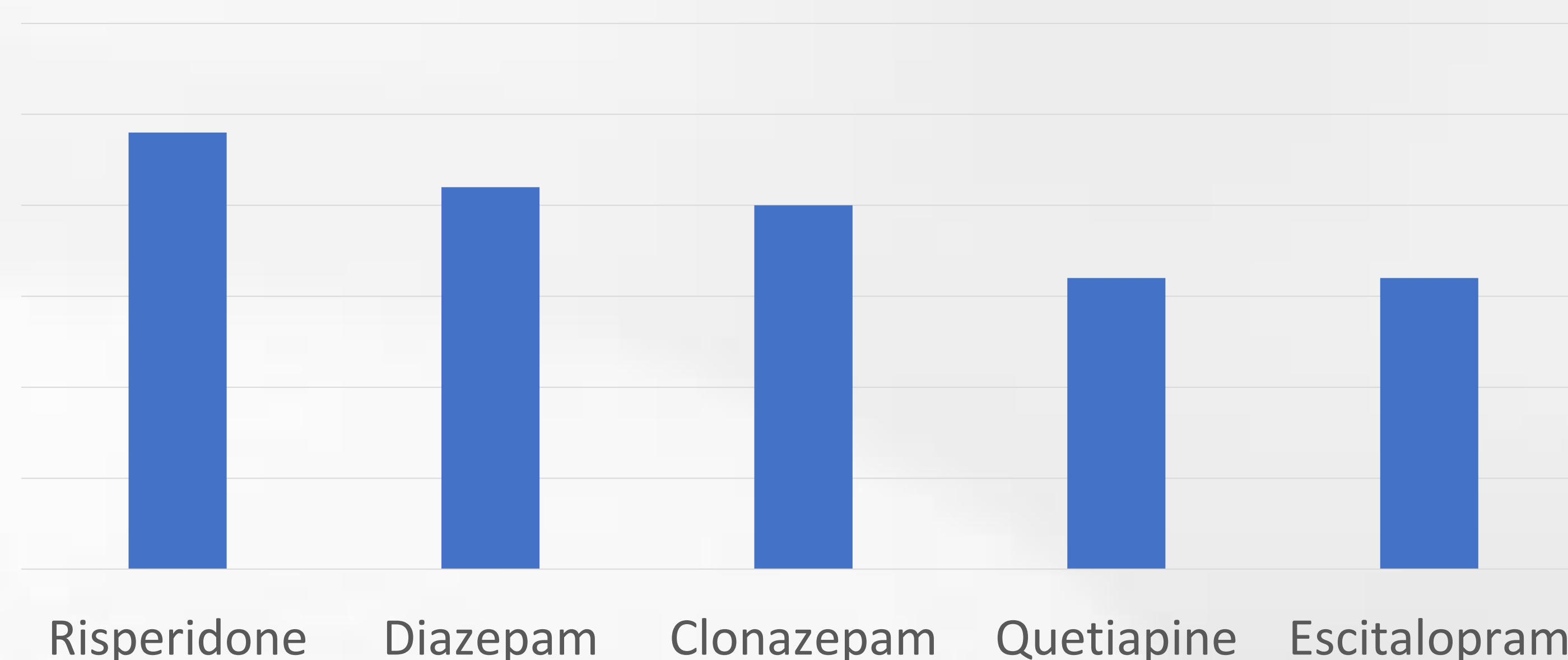
Indications of Interest (v1)

aggression	delirium
agitation	sedation
alcohol withdrawal	dementia
anxiety	impulsivity

Evaluation

Reporting from the preceding 6 months showed no concerning use as assessed by the multidisciplinary committee. This data will provide a valuable baseline for future monitoring of chemical restraint use within the facility.

Most Common Medications



Most Common Indications



Discussion

Accurately monitoring chemical restraint use is challenging as it can be difficult to determine if a medication is used primarily to treat symptoms or to control behaviour – thus there is currently a lack of consensus on the definition.

Continued collaboration with prescribers is necessary to refine reporting systems to more accurately reflect chemical restraint use – this has resulted in the indications list being rationalised, with the medication list currently under review.

Digital hospitals are well placed to develop powerful monitoring tools which can guide medication governance bodies to take more effective and targeted actions to remedy inappropriate use of chemical restraint.

Indications of Interest (v2)

aggression
agitation
behaviour

