Current Trends in Detectable Drugs

Peter Bowron
Toxicology Unit - PaLMS

Can you find out what drugs the patient has taken?

Drug Analysis

- Rapid Tests
- AS 4308
- Routine Clinical
- Broad Based

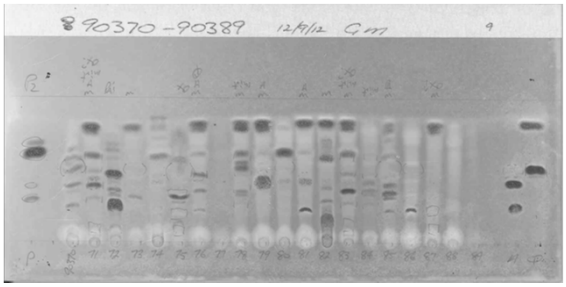
PaLMS Testing

- Approximately 130,000
- Half "Targeted"
- Half "Broad testing"

Techniques

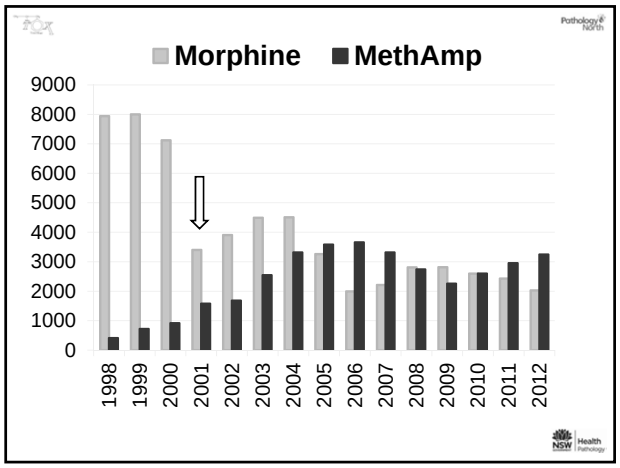
- Immunoassays
- HPTLC
- Targeted GC/MS
- Broad Screen GC/MS

HPTLC



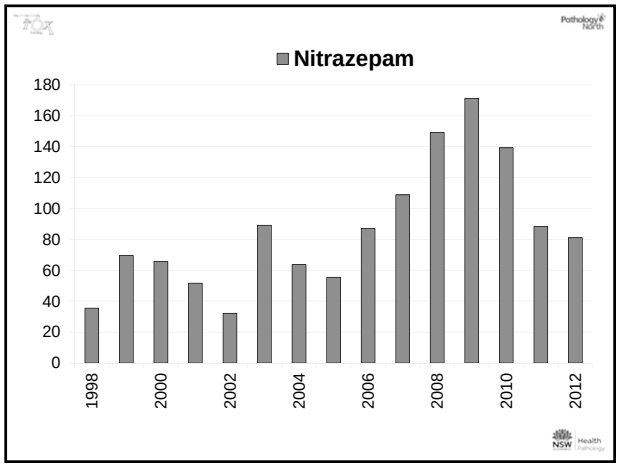
Data Limitations

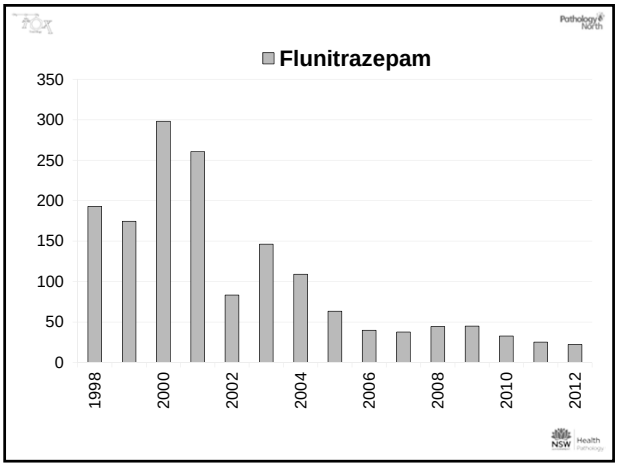
- Per sample not patient
- Different clinic protocols
- Long half-life vs. short
- What's on the list?
- How much is prescribed?

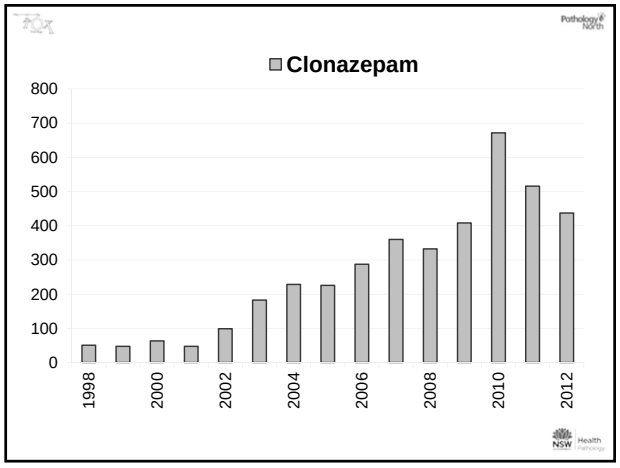


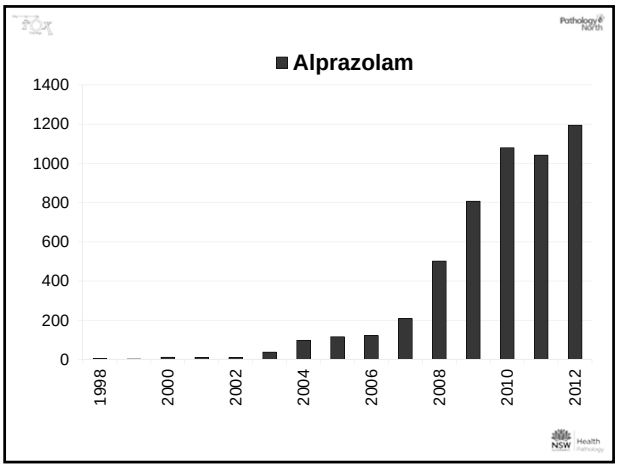
"Sleeping Pills"

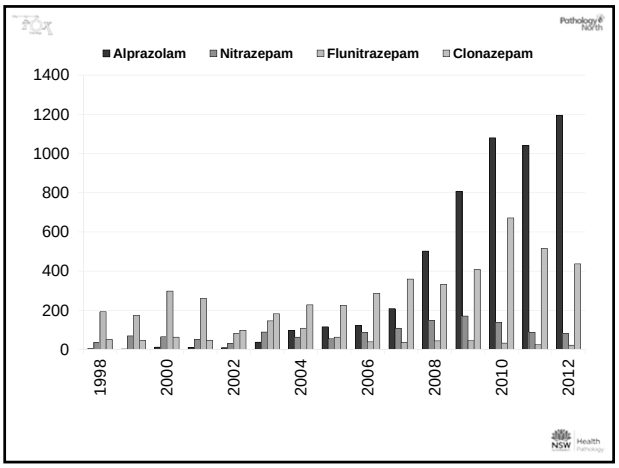
- Barbiturates
- Methaqualone
- Benzodiazepines
- More Benzodiazepines
- Z-Drugs

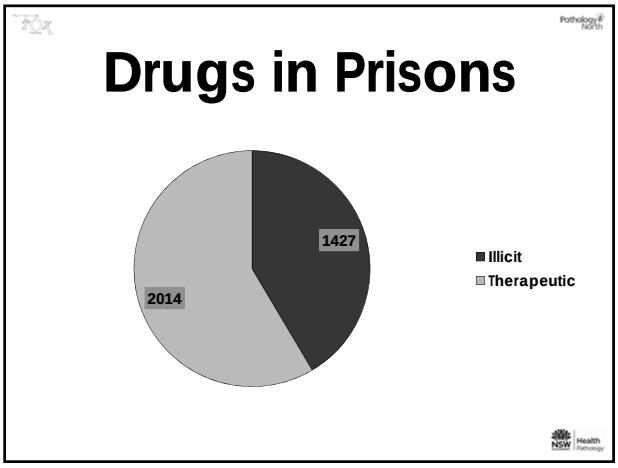


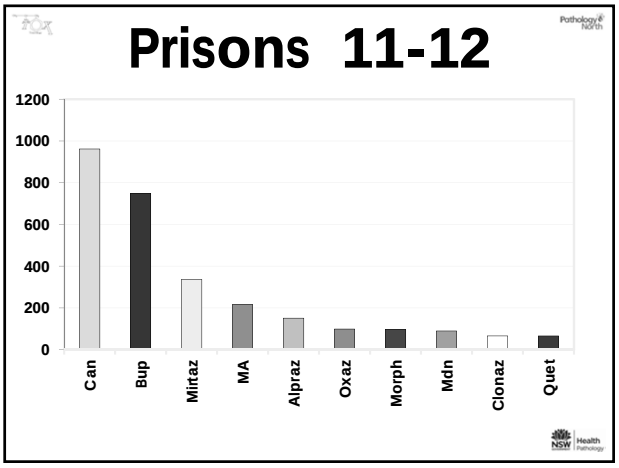


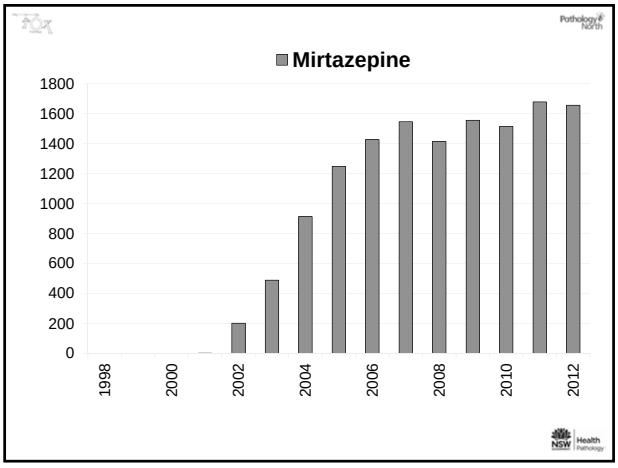


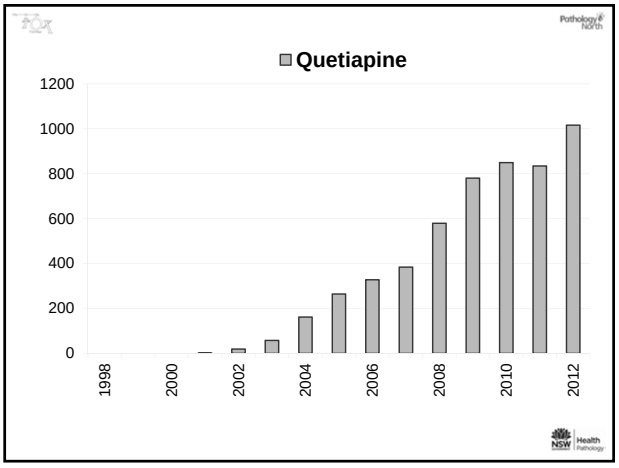

Alprazolam
1400
1200
1000
800
600
400
200
0
1998
2000
2002
2004
2006
2008
2010
2012

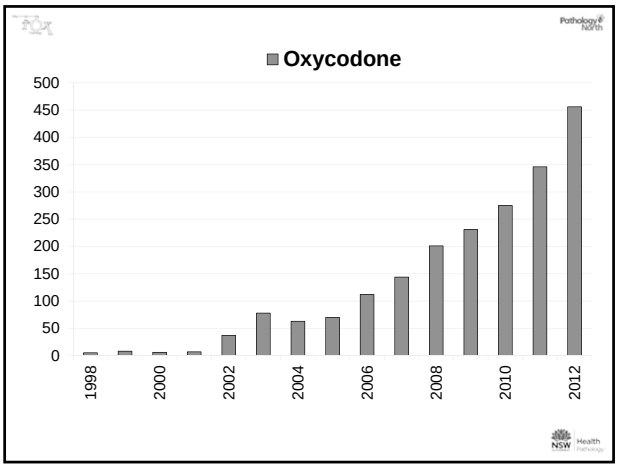

Alprazolam
Nitrazepam
Flunitrazepam
Clonazepam
1400
1200
1000
800
600
400
200
0
1998
2000
2002
2004
2006
2008
2010
2012


Drugs in Prisons
1427
2014
Illicit
Therapeutic


Prisons 11-12
1200
1000
800
600
400
200
0
Can
Bup
Mirtaz
MA
Alpraz
Oxaz
Morph
Mdn
Clonaz
Quet


Mirtazepine
1800
1600
1400
1200
1000
800
600
400
200
0
1998
2000
2002
2004
2006
2008
2010
2012


Quetiapine
1200
1000
800
600
400
200
0
1998
2000
2002
2004
2006
2008
2010
2012



What are we missing?

Special Tests

- Ketamine
- Fentanyl
- Buprenorphine

Challenges

- LSD
- Steroids
- Spice
- Designer Amphetamines