



Abbreviations put patients at risk

The hazardous medication ordering practices in the table below are the focus of a provincial initiative the Health Quality Council of Alberta (HQCA) is leading to improve patient safety across the continuum of care. Although abbreviations are commonly used in medication ordering, this is not just a prescriber issue. Abbreviations are used in many ways within the medication system, and this unsafe culture of practice is perpetuated, often inadvertently, by the many ways all health professionals communicate about medication orders.

Please adopt these recommended practices

shortcuts! to patient safety		
DO NOT USE	WHY?	DO USE
U,u,IU	Misread as IV (intravenous), 0 (zero) or 4	Write unit
qd, od, QD, OD for daily	Misread as q.i.d. or right eye	Write daily or every day
x.0 mg	Misread as 10x dose	No trailing 0 for whole number doses (e.g. 1 mg)
.x mg	Misread as x mg (whole number) dose	Use leading 0 for doses less than one (e.g. 0.1 mg)
Abbreviated drug names	Misread as an incorrect drug	Write generic drug names in full

This priority list is based on a longer list compiled by the Institute for Safe Medication Practices – Canada (ISMP-Canada)¹.

We need your help to resolve this problem

Ambiguous medical notations, including use of abbreviations, symbols and dose designations, are one of the most common and preventable causes of medication errors. A 2004 study by the Commonwealth of Pennsylvania Patient Safety Authority found 56% of 103 critical incidents involved the use of dangerous abbreviations.² Use of abbreviations in medication ordering is very common. Audits by Capital Health and the David Thompson Health Region showed that dangerous abbreviations, symbols and dose designations are used in approximately 21 to 25% of medication orders, depending on the facility surveyed. This likely reflects practice in the community as well. Risk of errors from these ordering practices is compounded by poor handwriting.

To ensure patient safety, medication orders must be clear and free from ambiguity, which means minimizing the use of dangerous abbreviations. Use of abbreviations is a broad, system-wide issue that has become an ingrained part of our health care culture. In the long-term, computer order entry and electronic prescribing are expected to eliminate the risk to patients of dangerous abbreviations.





We are counting on you to do your part

We can't wait for future technology to solve a patient risk that exists now. The impetus to reduce the use of abbreviations began in Alberta's health care facilities. But their efforts have been hampered by widespread use of these unsafe abbreviations throughout the system. We are asking all prescribers, including physicians and allied health professionals, to examine their medication prescribing practices and make changes to eliminate hazardous abbreviations and dose designations that put your patients at risk of medication errors.



You can improve patient safety

Even if you are not currently prescribing medications we ask that you consider how the use of these hazardous communication shortcuts are perpetuated in other areas of your practice, including:

- Preprinted order sets and standing orders
- Clinical pathways and protocols
- Notes in patient records
- Electronic medical records/clinical information systems
- Publications that you author
- Teaching messages and materials used with students and colleagues, including teaching in undergraduate and continuing education programs

Improving patient safety by eliminating these high-risk abbreviations and dose designations will take the combined efforts of all health care providers and organizations. We are counting on you to do your part to improve the safety of your patients by examining and changing your own practice.

References

- Anon. Eliminate use of dangerous abbreviations, symbols, and dose designations. ISMP Canada Safety Bulletin. 2006;6(4).
 Online: http://www.ismp-canada.org/download/ISMPCSB2006-04Abbr.pdf
- 2. Cohen MR. Alphabet Soup: hazardous to your health! ISMP Teleconference: Meeting the 2005 National Patient Safety Goals. Institute for Safe Medication Practices 2005; February 4.