

Introduction

Implementing a list of Dangerous Abbreviations is one of the Required Organizational Practices (ROPs) PHCC must have in place in order to achieve Accreditation. Strong clinical evidence suggests that preventing the use of all dangerous, inappropriate and ambiguous abbreviations, terminologies, symbols and dose designations can significantly prevent patient harm and improve safe medication use

Aim

Prevent the use of known dangerous abbreviations anywhere in the PHCC organization

Methodology

- Introduction of a new PHCC Dangerous Abbreviations Policy
- Development of a new dangerous abbreviations training program
- Adoption of the Institute for Safe Medication Practices (ISMP) recommended List of Error-Prone Abbreviations, Symbols, and Dose Designations
- Implementation (i) All clinical staff trained on use of dangerous abbreviations. (ii) Distribute the ISMP list to all Health Centers
- Development of a clinical audit tool to monitor the effective adoption and adherence to the new Dangerous Abbreviations Policy
- Encourage the documentation and reporting of medication errors / near misses on DATIX

Expected Outcomes

- Abbreviations listed on the ISMP list never to be used anywhere in PHCC Health Centers
- Reduced medication errors / near misses via increased incident reporting and sharing lessons learned
- PHCC to develop an additional list of common Approved Abbreviations for Health Center staff to use safely
- Achievement of the Dangerous Abbreviations ROP Accreditation criteria

Institute for Safe Medication Practices

ISMP's List of Error-Prone Abbreviations, Symbols, and Dose Designations

The abbreviations, symbols, and dose designations found in this table have been reported to ISMP through the ISMP National Medication Errors Reporting Program (ISMP MERP) as being frequently misinterpreted and involved in harmful medication errors. They should **NEVER** be used when communicating medical information. This includes internal communications, telephone/verbal prescriptions, computer-generated labels, labels for drug storage bins, medication administration records, as well as pharmacy and prescriber computer order entry screens.

Abbreviations	Intended Meaning	Misinterpretation	Correction
µg	Microgram	Mistaken as "mg"	Use "mcg"
AD, AS, AU	Right ear, left ear, each ear	Mistaken as OD, OS, OU (right eye, left eye, each eye)	Use "right ear," "left ear," or "each ear"
OD, OS, OU	Right eye, left eye, each eye	Mistaken as AD, AS, AU (right ear, left ear, each ear)	Use "right eye," "left eye," or "each eye"
BT	Bedtime	Mistaken as "BID" (twice daily)	Use "bedtime"
cc	Cubic centimeters	Mistaken as "c" (units)	Use "mL"
D/C	Discharge or discontinue	Premature discontinuation of medications if D/C (intended to mean "discharge") has been misinterpreted as "discontinued" when followed by a list of discharge medications	Use "discharge" and "discontinue"
IJ	Injection	Mistaken as "IV" or "intragastral"	Use "injection"
IN	Intranasal	Mistaken as "IM" or "IV"	Use "intranasal" or "NAS"
HS	Half-strength	Mistaken as bedtime	Use "half-strength" or "bedtime"
hs	At bedtime, hours of sleep	Mistaken as half-strength	
IU**	International unit	Mistaken as IV (intravenous) or IO (ten)	Use "units"
o.d. or OD	Once daily	Mistaken as "right eye" (OD=oculus dexter), leading to oral liquid medications administered in the eye	Use "daily"
OJ	Orange juice	Mistaken as OD or OS (right or left eye); drugs meant to be diluted in orange juice may be given in the eye	Use "orange juice"
Per os	By mouth, orally	The "os" can be mistaken as "left eye" (OS=oculus sinister)	Use "PO," "by mouth," or "orally"
q.d. or QD**	Every day	Mistaken as q.i.d., especially if the period after the "q" or the tail of the "q" is misinterpreted as an "i"	Use "daily"
qhs	Nightly at bedtime	Mistaken as "qid" or every hour	Use "nightly"
qn	Nightly or at bedtime	Mistaken as "qid" (every hour)	Use "nightly" or "at bedtime"
q.o.d. or QOD**	Every other day	Mistaken as "q.i.d." (daily) or "q.i.d." (four times daily) if the "q" is poorly written	Use "every other day"
q.i.d.	Daily	Mistaken as q.i.d. (four times daily)	Use "daily"
qP.M. etc.	Every evening at 6 PM	Mistaken as every 6 hours	Use "daily at 6 PM" or "6 PM daily"
SC, SQ, sub q	Subcutaneous	SC mistaken as SL (sublingual); SQ mistaken as "5 every," the "q" in "sub q" has been mistaken as "every" (e.g., a heparin dose ordered "sub q 2 hours before surgery" misunderstood as every 2 hours before surgery)	Use "subcut" or "subcutaneously"
ss	Sliding scale (insulin) or 1/2 (apothecary)	Mistaken as "SS"	Spell out "sliding scale;" use "one-half" or "1/2"
SSRI	Sliding scale regular insulin	Mistaken as selective-serotonin reuptake inhibitor	Spell out "sliding scale (insulin)"
SSI	Sliding scale insulin	Mistaken as Strong Solution of Iodine (Lugol's)	
tid	Three daily	Mistaken as "tid"	Use "3 daily"
TIW or tiw	3 times a week	Mistaken as "3 times a day" or "twice in a week"	Use "3 times weekly"
U or u**	Unit	Mistaken as the number 0 or 4, causing a 10-fold overdose or greater (e.g., 4U seen as "40" or 4u seen as "44"); mistaken as "cc" so dose given in volume instead of units (e.g., 4u seen as 4cc)	Use "unit"
UD	As directed ("ut dictum")	Mistaken as unit dose (e.g., diliazem 125 mg IV infusion "UD" misinterpreted as meaning to give the entire infusion as a unit [bolus] dose)	Use "as directed"
Dose Designations and Other Information		Misinterpretation	Correction
Trailing zero after decimal point (e.g., 1.0 mg)**	1 mg	Mistaken as 10 mg if the decimal point is not seen	Do not use trailing zeros for doses expressed in whole numbers
"Naked" decimal point (e.g., .5 mg)**	0.5 mg	Mistaken as 5 mg if the decimal point is not seen	Use zero before a decimal point when the dose is less than a whole unit
Abbreviations such as mg, or mL, with a period following the abbreviation	mg, mL	The period is unnecessary and could be mistaken as the number 1 if written poorly	Use mg, mL, etc. without a terminal period

Lessons learned/Critical success factors

- Ensuring the ISMP List is made available in all clinic / treatment rooms and Pharmacy
- Ensure the ISMP List is laminated for ease of use
- Creating an Approved Abbreviations list so staff are aware of abbreviations that can be used safely
- Zero tolerance level for the use of abbreviations specified on the ISMP List

Conclusion

Adopting the ISMP recommended List of Error-Prone Abbreviations, Symbols, and Dose Designations across our PHCC Health Centers will significantly improve safe medication use and reduce patient harm caused by inappropriate use dangerous abbreviations.

Sustainability/Replication potential

- PHCC will monitor compliance with the ISMP List by undertaking specific clinical audits to ensure adherence to the Dangerous Abbreviations Policy
- The ISMP list will be reviewed, updated and re-circulated as and when the ISMP list is updated

References

1. Institute for Safe Medication Practices (ISMP) (2013). ISMP's List of Error-Prone Abbreviations, Symbols, and Dose Designations. : www.ismp.org/tools/errorproneabbreviations.pdf