

# Avoiding medication omissions: Development of a time-critical medication list

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## Background:

Medication doses are unintentionally missed while delivering health services for a variety of reasons. While many of these occurrences can be considered insignificant there are critical medications and clinical conditions where delays or omitted medications can cause serious harm or death. A gradual increase in Queensland incident reports relating to medication omissions prompted a statewide intervention.

## Aim:

To develop a statewide list of medications that must be prioritised by all clinicians who are involved in the medication management cycle, to ensure the timely administration of time-critical medication and the optimisation of patient care.

## Methods:

A statewide working group was established with representatives from 17 different health facilities including hospitals, nursing homes and the prison health sector. Five years of incident reports relating to omitted medications were reviewed, sorted into drug groups and risk categorised. Additionally, examples of similar lists from the United Kingdom, the United States of America, India and Australia were reviewed for local relevance and usability. Specialist review was sought once a skeleton version of the list had been structured to ensure all relevant medications were included. Four trial sites were nominated to conduct baseline audits on missed medication doses, and then commence a trial implementation of the list before it is released for statewide use.

NIMC Missed Code	Meaning	Further documentation required
Ⓝ	Not available	- Actions taken to obtain supply - Possible alternatives (as discusses with medical officer) if not kept within the hospital
Ⓐ	Absent	- Actions taken to contact the patient
Ⓥ	Vomiting	- Actions taken to change formulation if possible
Ⓡ	Refused	- Information given to patient regarding medication, and risk if dose omitted ( Note: the patient does have the right to refuse medication, but they must be fully informed of the consequences and the treating team must be notified)
Ⓕ	Fasting	- Action taken to clarify that the medication is intended to be withheld while patient is fasting

Table 1: Documentation requirements for “On the Dot” medications

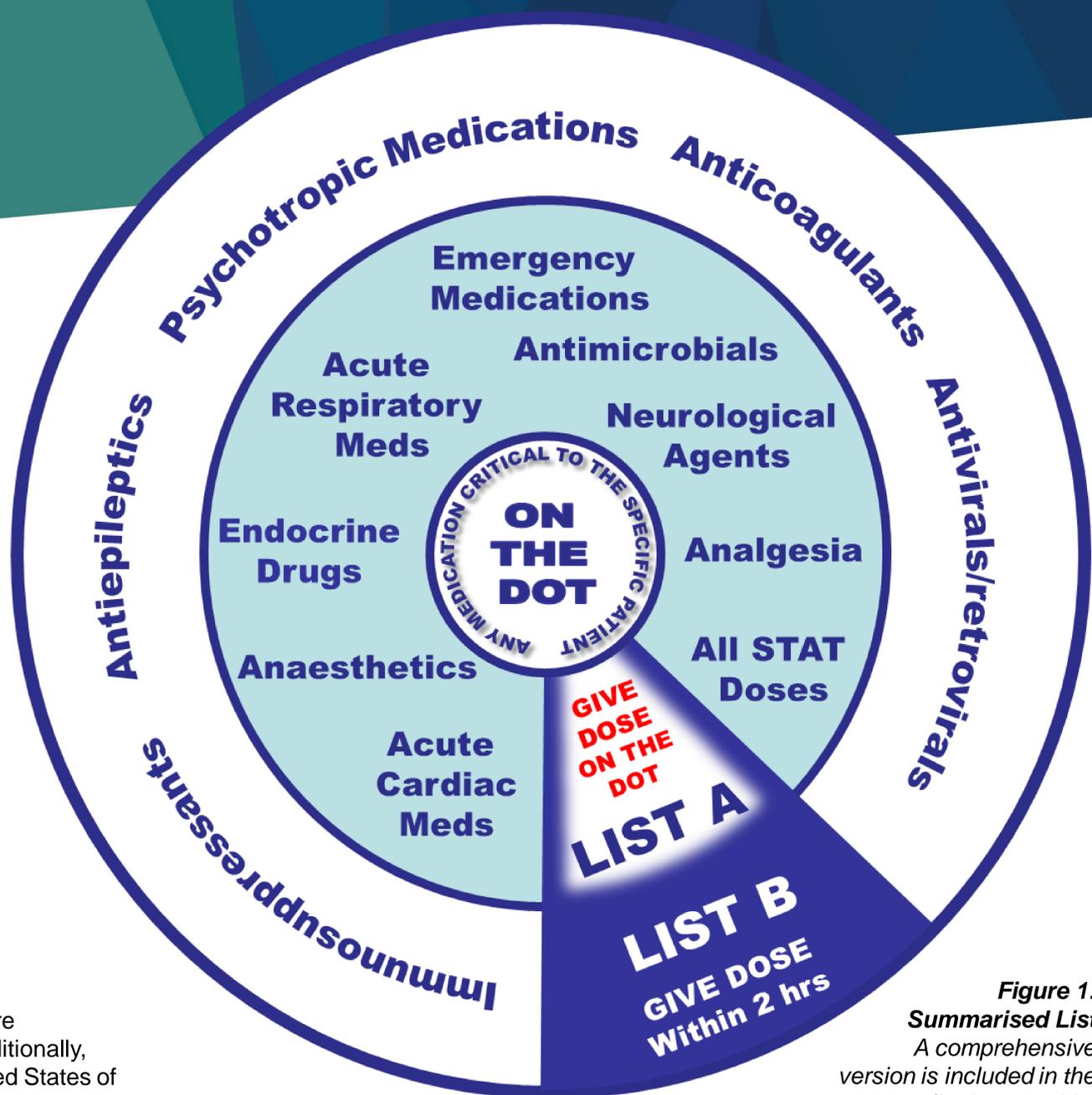


Figure 1: Summarised List  
A comprehensive version is included in the final user guide.

## Results:

The final version of a list of time-critical medications was formatted into two sections: A and B. List A outlined medications that must be administered immediately (no delay), and List B outlined medications that must be administered within 2 hours. A user guide was developed to outline the relevant responsibilities of all health professionals including documentation (see Table 1) and reporting requirements. Preliminary results from the baseline audits showed that currently one third of all missed doses were considered time-critical medications.

## Conclusion:

The list will be a welcome guide to health professionals regarding the expectations surrounding timely medication administration. Post implementation data will confirm whether the list has changed practice, with the desired outcome being a decrease in the percentage of missed doses that are time-critical medications.