



Singapore Healthcare
Management 2019

Audit Report of the Appropriateness and Accuracy of Intake and Output Monitoring – Experience of a Tertiary Hospital



Singapore
General Hospital

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Introduction

- Monitoring of oral intake and output through accurate documentation of fluid balance charts is vital and regarded as a critical component in care of acutely ill hospitalised patients.
- Inaccurate monitoring and poor documentation can result in missed recognition of warning signs of dehydration, leading to poor patient outcomes including prolonged hospitalisation and increased mortality.

Problem

Accuracy and appropriateness of intake and output monitoring for acutely ill hospitalised patients is not well-documented.

Methodology

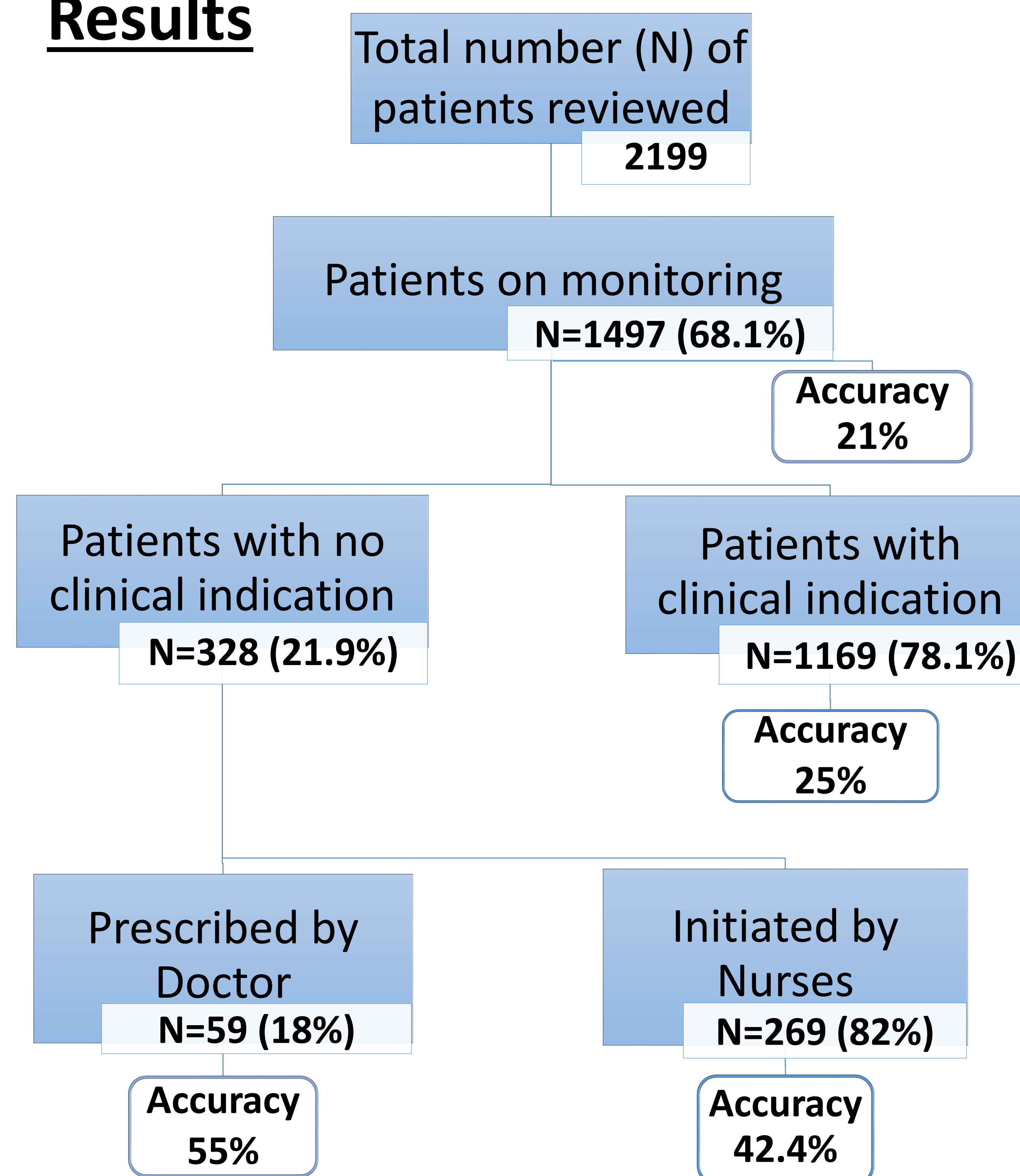
A retrospective review of electronic fluid balance charts documented between January 2017 and July 2017.
For each patient on intravenous fluid therapy, the following was assessed:

Whether monitoring was clinically indicated according to operational definitions of clinical indications by Salisbury NHS Foundation.

Whether monitoring and documentation is accurate.

- Each quantifiable amount (e.g. urine 100 ml) entered in intake and output chart was considered as one accurate count.
- Each non-quantifiable entry (e.g. void in toilet) documented was considered as one inaccurate count.
- Accuracy rate of documentation was the total accurate counts divide by total intake and output counts (in %).

Results

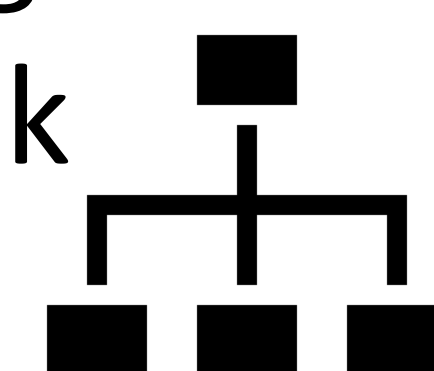


Inaccurate documentation with no quantifiable amount:

- “void in toilet” (93.3%)
- “diaper wet” (4.6%)
- “BO x _times” (bowel open) (3.0%)
- “vomit x _times” (0.1%)

Conclusions

- Lack of clear guidelines for monitoring:
 - Design an intake and output monitoring algorithm to identify those with high-risk factors and require strict monitoring.



- Need to improve documentation accuracy:
 - Improve staff knowledge with regular training
 - Regular auditing



- To improve awareness among patients on the importance of monitoring and engage/empower patients in the process
 - Visual aids in wards

