



# Evaluation of I-Vent utilization : Descriptive Analysis and Improvement Proposal

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## Background

The I-Vent template is a tool embedded in the hospital's electronic health record to document pharmaceutical interventions. The existing I-Vent template is not optimized, making documentation time consuming and inconsistent.

### Template I-Vent consists of

1. Selectable options from predefined lists, including:

- Type = Problem category (e.g. Too short duration,..)
- Sub-Type = Type of action (e.g Treatment duration)
- Acceptance = Accepted/Rejected

2. Free-text entries for detailed intervention descriptions:

- Identified problem
- Action taken
- Contacted physician / Contact number

Raison de l'intervention		Durée trop courte	
Problème identifié			
Action déjà effectuée			
Si oui, laquelle			
A quel numéro/sur la messagerie de quel médecin ?			

@ME@ - Pharmacien

## Objectives

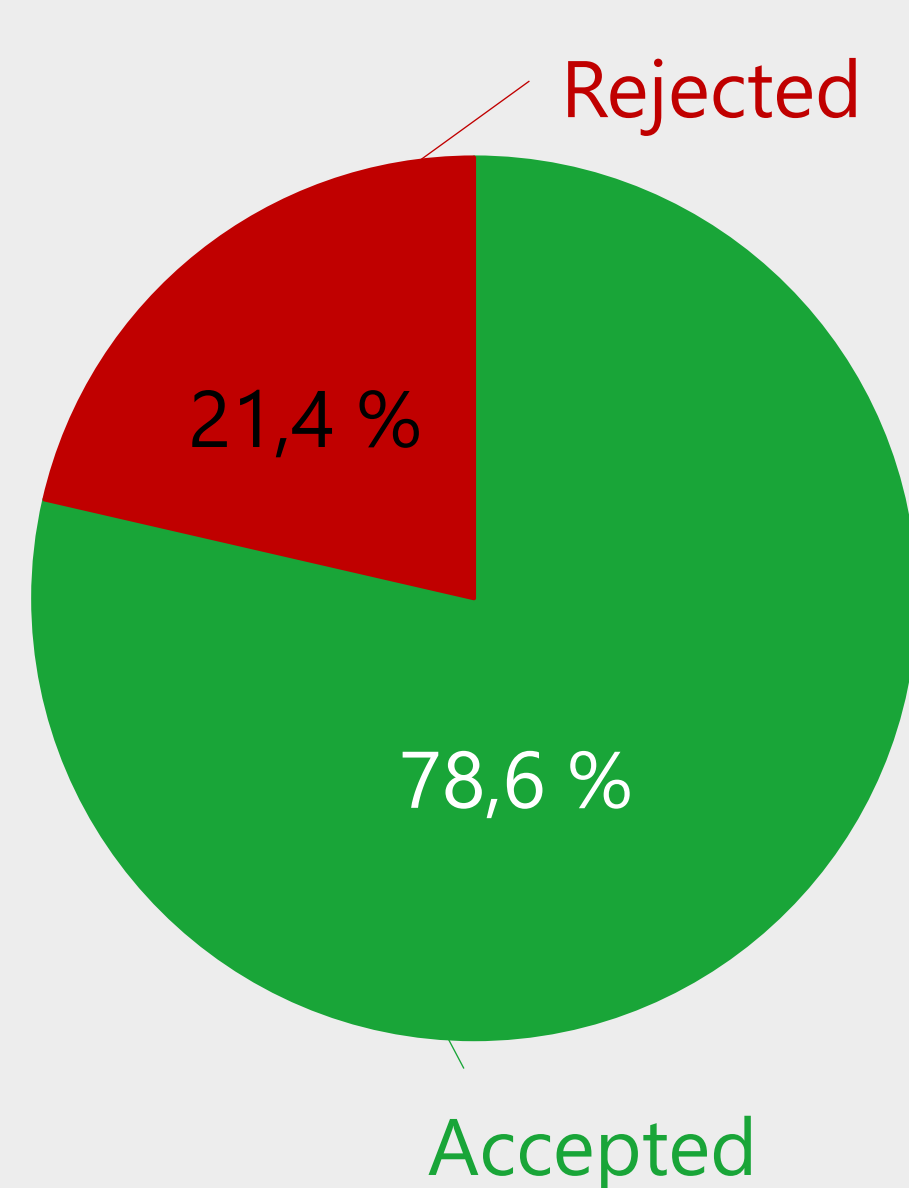
1. Evaluate the use of the I-Vent template in the distribution sector
2. Identify areas for improvement
3. Enable future use of I-Vents as clinical indicators
4. Verify if the contact persons are appropriate

**Method** A descriptive analysis was conducted over a 15-day period (May 11–25, 2025), including all I-Vents from the distribution sector, with data collected on medication, problem category, intervention, status, acceptance, and closure time

## Results

- 201 forms recorded and analysed
- 12 out of 24 prescribing problem categories were used
- Type of actions documented in only 1,5% (3/201), with just 2 out of 17 possible sub-types reported
- The prescriber was contacted in 90.1% of cases, with a median closure time of 2.65 hours

### → Acceptance rate



Highest rejection rates :

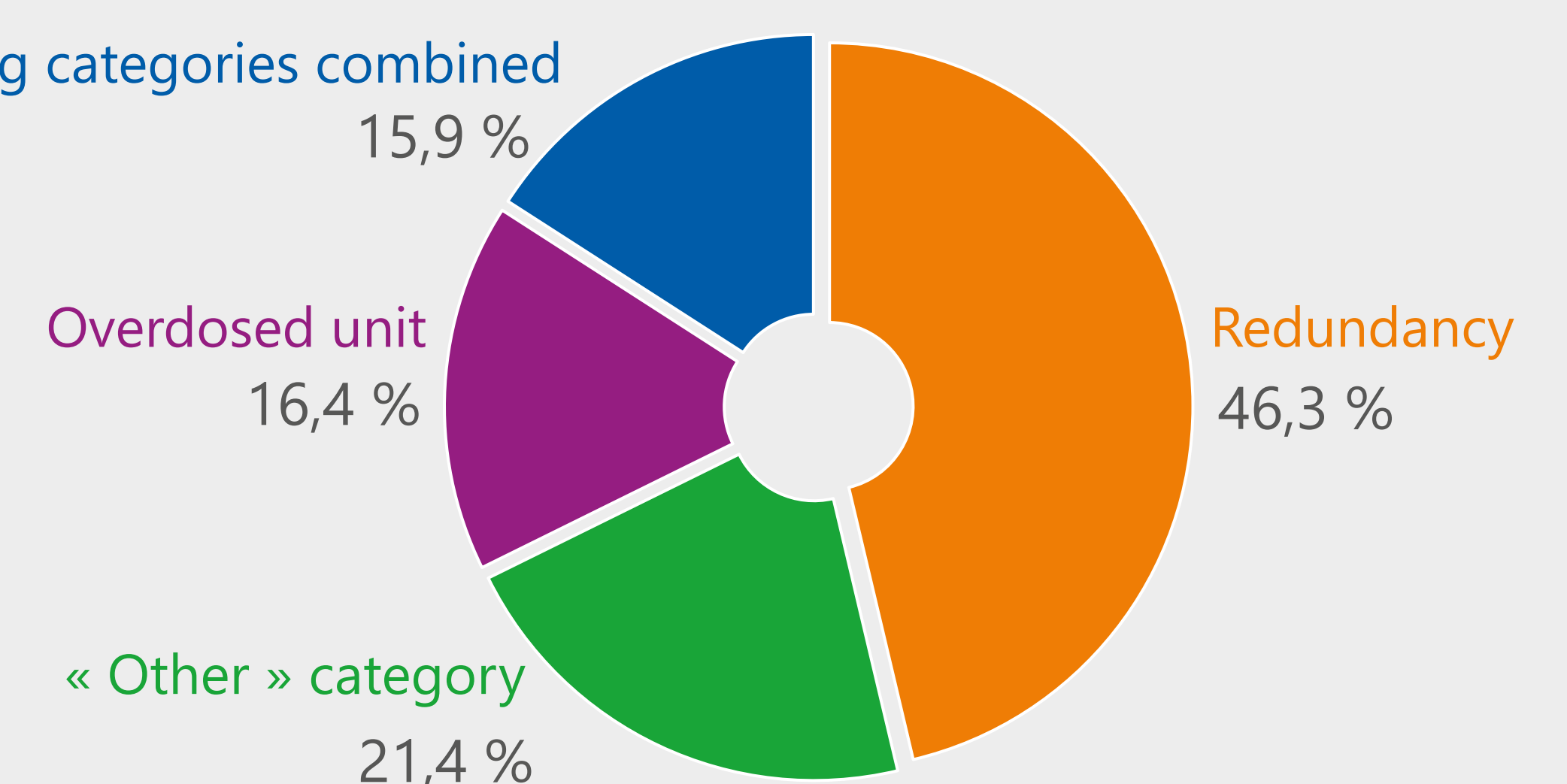
- Drug interaction (n = 4): 50%
- Underdosed unit (n = 2): 50%
- Overdosed unit (n = 33): 30,3%

Highest acceptance rates :

- Absolute/relative contraindication (n = 2) : 100%
- Redundancy (n = 93) : 82,8%

### → Problem categories

All remaining categories combined



→ 28 I-vents misclassified and excessive use of the « Other » category

**Conclusion** The evaluation identified significant gaps in the use and documentation of the I-Vent template. These findings highlight the need for two key improvements:

- Simplifying the I-Vent template by retaining only relevant and frequently used fields
- Promoting consistent and complete documentation by users

Based on this study and a review of the literature, problem categories and type of action were revised to better reflect practical use and evidence. The impact of these improvements will be assessed in future evaluations.

## References

- Alkanj, Ahmad, et al. « Deep Learning Classification of Drug-Related Problems from Pharmaceutical Interventions Issued by Hospital Clinical Pharmacists during Medication Prescription Review: A Large-Scale Descriptive Retrospective Study in a French University Hospital ». *European Journal of Hospital Pharmacy*, vol. 32, n° 4, juillet 2025, p. 324-28. DOI.org (Crossref), <https://doi.org/10.1136/ejhpharm-2024-004139>.
- Verheyen, Silke, et al. « Development and Partial Validation of Be-CLIPSS: A Classification System for Hospital Clinical Pharmacy Activities ». *International Journal of Clinical Pharmacy*, vol. 46, n° 1, février 2024, p. 80-89. DOI.org (Crossref), <https://doi.org/10.1007/s11096-023-01627-4>.