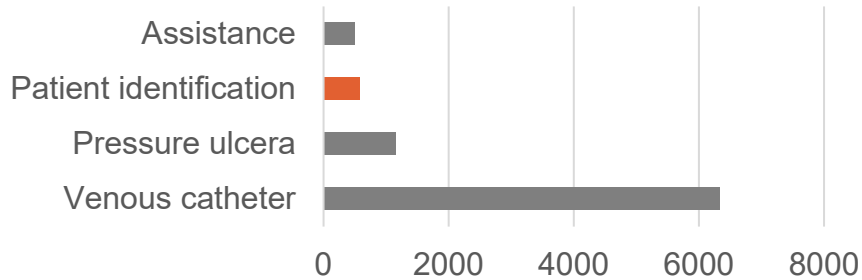
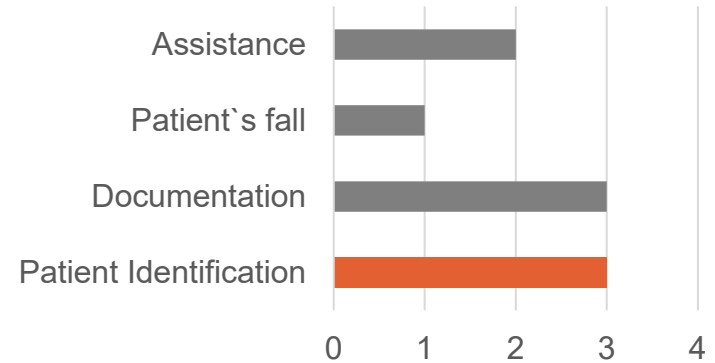


Incidents notification in Amazonas (September 2019 to August 2020)



Radiology





UFAM



MAGSCAN
Medicina e Saúde



Patient Safety in Diagnostic Imaging: Proposal to Mitigate Identification Errors

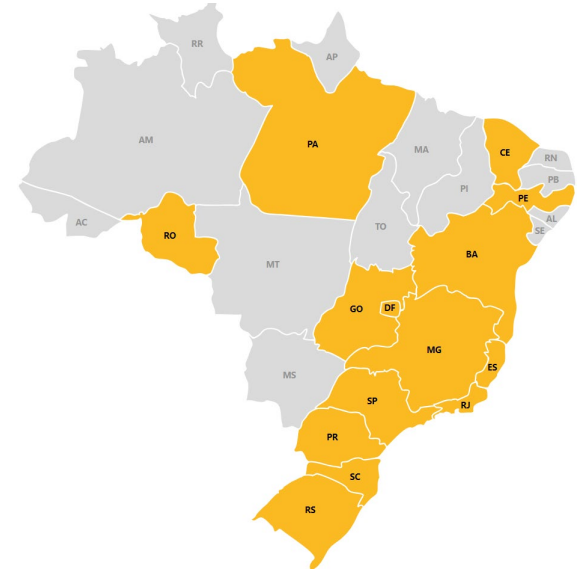
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Introduction

- Brazil: fewer than **50%** of hospitals have a Patient Safety Centers (PSC)
- Amazonas: only **8%** of healthcare services have PSC
- Increased by **96%** from 2020 to 2023 (50 into 98)

(ANDRADE et al, 2020) (SOUZA, 2023)



Picture 1: PADI (Program for Accreditation in Diagnostic Imaging) in Brazil.

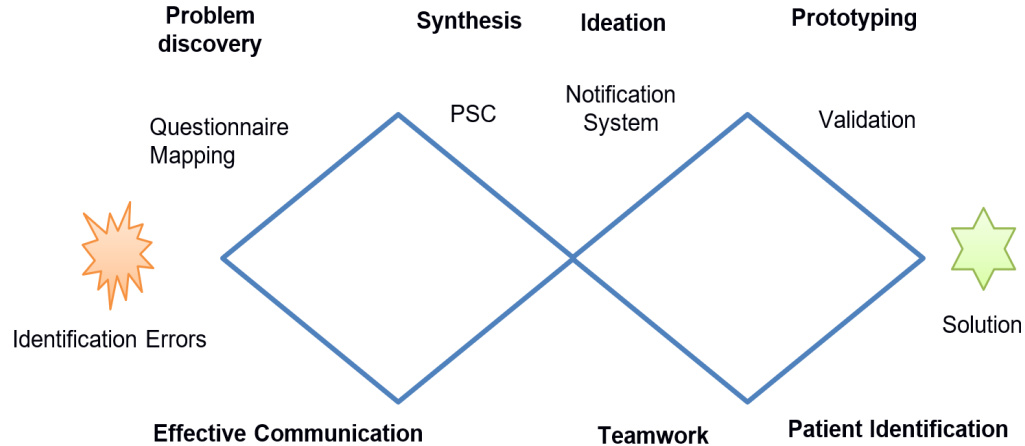
Objective

Establish an electronic notification system in an imaging clinic in Manaus and develop a protocol for the accurate identification of patients undergoing imaging exams.



Methods

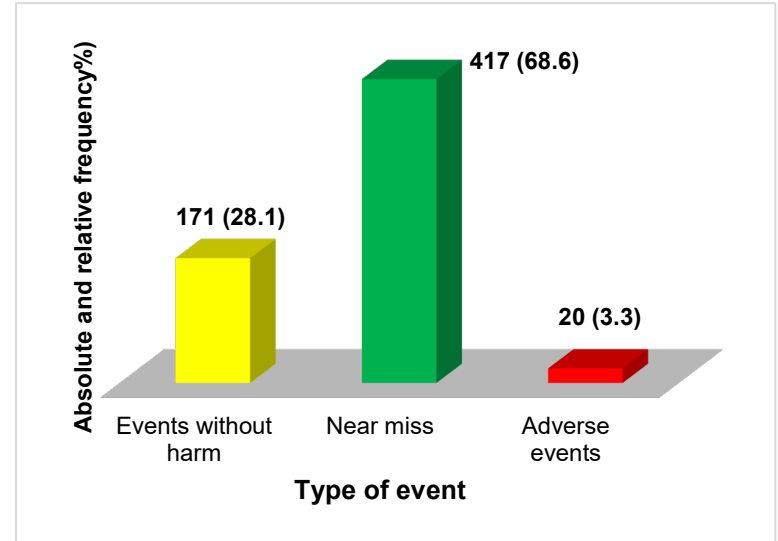
Design Thinking



Picture 3: Design Thinking Applied in an Imaging Clinic in Manaus, Amazonas.
PSC: Patient Safety Center.

Results

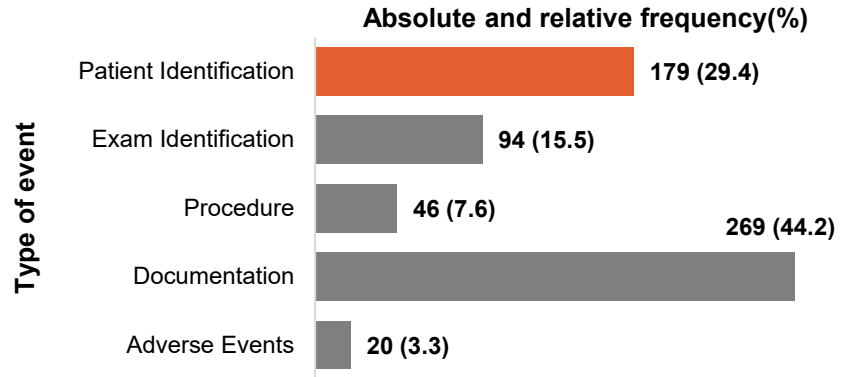
- In 18 months, there were 608 valid events.
- 0.36% of all exams conducted, with adverse events represented 0.01% (n=20).
- The patient`s name errors accounted for 20.6% (n=125).



Picture 4. Frequency of reported events from August 2020 to January 2022 (n=608).

Results

Most common: patient identification (n=179) and documentation (n=269) issues.



Picture 5. Relative frequency from August 2020 to January 2022 (n=608).

Results

- MRI scans (0.88%, n=227)
- CT scans (0.67%, n=122)
- X-rays (0.49% n=101)

Early detection:

Higher occurrence in the reception/exam areas and a reduction in the reporting area (p<0.001).

Table 1. Effect of the events notification systems in diagnostic imaging service in Manaus, Amazonas, Brazil. From August 2020 to January 2022.

Events	Notification System		p
	N=608		
	Before N=244 N (%)	After N=364 N (%)	
Events without harm			<0,001 ^a
Patient Identification	9 (13,6)	5 (4,8)	
Type, side and site	14 (21,2)	8 (7,6)	
Procedural	19 (28,8)	13 (12,4)	
Documentation	24 (36,4)	78 (74,3)	
Near miss			<0,001 ^b
Patient Identification	46 (27,2)	118 (47,6)	
Type, side and site	30 (17,8)	42 (16,9)	
Procedural	9 (5,3)	5 (2,0)	
Documentation	84 (49,7)	83 (33,5)	
Adverse Events			0,999 ^a
Patient Identification	0 (0,0)	1 (100,0)	
Physical reaction	9 (100,0)	10 (90,9)	

p: a: Fisher test; b: Qui-quadrado Pearson test.

Conclusion

The implementation of an electronic notification system, coupled with process improvements and training, led to:

- A **64.7%** reduction in patient identification errors.
- A **64.1%** decrease in the sum of errors related to the type, side and site of the exams.
- A **56.9%** reduction in procedural errors.





Thank you



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