



Singapore Healthcare Management 2019

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INTRODUCTION

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Comprehensive master lists of inventories were created and updated regularly for Zone II, Zone III (1.5T), Zone III (3T), Zone IV (1.5T) and Zone IV (3T). The following practices were performed:

(NNI), the Magnetic Resonance Imaging (MRI) suite uses an array of products in daily clinical practice. As most products have a specific shelf-life, it is important to establish a proper inventory management system to monitor the expiration dates of the product used. Non-compliance to product expiration dates can threaten an organization's accreditation status as it may lead to serious lapses to patient's safety. As such, we have implemented a basic date expiration monitoring management system to check products used in the MRI suite.



We have two MRI scanners, 1.5T GE and 3T Philips at the MRI inpatient suite. The MRI in-patient suite is divided into clinical areas according to the MRI zoning definition. The four areas are: Zone II, Zone III (1.5T and 3T), Zone IV (1.5T) and Zone IV (3T) (Figure 1). Definition of MRI zone II, III and IV are provided in Figure 2. A weekly check is performed for each area according to order listed in Figure 3. This order of rotation is repeated once a month.

- Weekly check of inventories expiration date with proper documentation (Figure 4).
- Check and rearrange items to ensure that the oldest products are consumed first. During this check, staff should remove any expired items and document their action in detail.
- Apply stickers to items to denote items that will expire within three months and transfer these items to those areas of higher usage.

меекій	Expiration D	ate Monitori	ng Kecor	s at In-patient MRI			Year:		
Aonth	Week/Date	Zone	Initial	Remarks	Month	Week/Date	Zone	Initial	Remarks
JANUARY	1/	11			JULY	1/			
	2/	III (1.5T & 3T)				2/			
	3/	IV (1.5T)				3/			
	4/	IV (3T)				4/			
	5/					5/			
FEBRUARY	1/				AUGUST	1/			
	2/					2/			
	3/					3/			
	4/					4/			
	5/					5/			
MARCH	1/				SEPTEMBER	1/			
	2/					2/			
	3/					3/			
	4/					4/			
	5/					5/			
APRIL	1/				OCTOBER	1/			
	2/					2/			
	3/					3/			
	4/					4/			
	5/					5/			
MAY	1/				NOVEMBER	1/			
	2/					2/			
	3/					3/			
	4/					4/			
	5/					5/			
JUNE	1/				DECEMBER	1/			
	2/					2/			
	3/					3/			
	4/					4/			
	5/					5/			



Figure 1: Layout of In-patient MRI Suite with MRI zoning labelled.

Figure 4: Weekly expiration date monitoring records.



- By following the order of the cycle, the area covered is limited to the listed zones. It is an effective and efficient method as it is less time consuming.
- This task of expiration date check was rostered into the duty roster, thus becomes the responsibility of the MRI radiographers.
- Radiographers were briefed during the staff meeting of the problem we faced and the purpose and significance of expiration date check task.

MRI Zone definition:
Zone II - MRI In-patient waiting area
Zone III - MRI Control station

Zone IV - Magnet room

Figure 2: MRI Zone definition

Figure 3: Weekly inventories order of rotation.

Understanding this motivates staff to follow through with each task.



The expiration date monitoring system is simple with its user friendly interface. No special training is required and the staff adopted the system without any hassle. This regular date expiration check contributes to enhanced patient safety, reduction in product wastage and financial losses. Furthermore, it constitutes positive impact on audit results to Neuroradiology Department, NNI.