A NEW LOOK AT MATERIAL MANAGEMENT SYSTEMS IN HOSPITAL INFORMATION MANAGEMENT SYSTEMS FEFO (First Expiry, First Out)

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# Medical Material Management Challenges

Variety of Material
Material Use Circulation
UBB Barcode
Expiration Date

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## Objectives

•To reduce the amount of medical leakage to a minimum,

•To Follow the expiration dates of medical material efficiently to reduce the losses attributable to materials that have expired,

•To be able to bill the patients with the right price of the materials being used,

•To be able to reflect the amounts of the material items in the cost analysis reports 100% correctly,

•To enable hospital material stocks to be held at the optimum level,

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•To be able to follow the expiration date of materials in the main hospital and alternate storage areas correctly,

•To be in possession of the the very important information of what material was used on which patient and to be able to archive this information,

•To reduce the need for TKKY and other warehouse employees to have to use their own initiative to a minimum in order to get ahead of misuse and finally, most importantly,

•To remove the existing unfortunate loyalty to the employee working in the critical departments of the hospital such as material management and replace them with an efficient, reliable and consistent system

# Malzemeleri İlk Girişte Partilere Bölmek

Upon entry, it is possible to assign a single batch number to materials of the same kind or to assign a different batch number for each different expiration date on entry. In fact, if it is possible for the medical material to have difference UBB codes during the same entry a different batch number can be created for these as well.

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#### Labelling Materials in the Main Storage According to Batch Number

•The batch numbers that are created for materials at the point of entry can be obtained at the press of a button from barcode printers in the number of materials there are.

•While the batch number is on this barcode as strips the material code and name and expiration date are included in alphabetical order.

•The barcode that is used was selected as dual pergaminli. Thus it is made possible to remove the barcode on the material and adhere it somewhere else.

•In this way it has been made possible the read the batch numbers with a barcode reader quickly and with the right exit and it is also possible to see the summary information about the material on the product.

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### Stocking Materials According to the Physical Area Differences of the Main Storage Area

If the materials in the Main Storage Area are going to be stored in different areas in physical terms, the information of what physical storage on what shelf they were on also started being recorded in addition to the the entry and labeling processes.

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Sığınak	11076	51	AIR-WAY NO:1(MOR)	M36168	30/07/14	2	2	0	>>		
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Sığınak	11076	3	AIR-WAY NO:3 (YEŞIL)	M71871	30/06/16	300	0	300	>>		
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### Removing Materials from the Main Storage to Sub-Use Storage Area by Batch

If the materials are being sent from the main storage to the sub storage areas collectively the materials in those units were also stocked according to their batch numbers. Since exits were made by reading the barcode again when materials were exited on a patient or in collective exits the right product with the right UBB number was able to be billed to the patient. It was also possible to follow the critical stock level of products and their expiration dates in the relevant sub-storage areas. If there are products nearing expiration at the exits in the relevant storage areas an warning is given to the user to make sure that product is used from the shelf.

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## TABLE

	2010 First 6 Months	2011 First 6 Months	2012 First 6 Months	;		
Number of Admitted Patients	19443	21385	19558	10,0%	-8,5%	0,6%
C Number of Daytime Patients	13059	20610	20209	57,8%	-1,9%	54,8%
F Number of Clinic Patients	725306	874431	874612	20,6%	0,0%	20,6%
ן Total Items of Material Used	95 <mark>399</mark> 2	1965707	1929354	106,1%	-1,8%	102,2%
] Total Material Used	5.361.630	8 <mark>.446.441</mark>	9.825.522	<mark>57</mark> ,5%	16,3%	83,3%
<b>1</b> Total Items of Material Billed	923669	1908232	1619310	106,6%	-15,1%	75,3%
] Total Material Billed	5.128.664	8.305.015	8.513.748	61,9%	2,5%	66,0%
/ Number or Operations	42405	88450	81039	108,6%	-8,4%	91,1%
F Bill Amount	61.164.773,76	79.506.972,41	74.758.121,50	30,0%	-6,0%	22,2%
<sup>2</sup> Warehouse exit	5.494.311 TL	6.671.133 TL	8.997.626 TL	21,4%	34,9%	63,8%
✓ Warehouse entry	10.231.348,43	7.732.533,40	11.798.230,99	21,4%	52,6%	63,8%

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