

원 저

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## A Baseline Study on Quality Improvement Strategy for Appropriate Management of Medical Supplies and Goods at General Hospitals in Korea

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### Abstract

**Background:** This study was conducted to investigate the current situation of medical supply purchasing and stock management at general hospitals having more than 150 beds in Korea and to find methods of effective purchasing and

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optimal stock management.

**Methods:** Survey was done from staff at the purchasing departments of 229 general hospitals throughout Korea. Data collection was done using a structured questionnaire between January 3 to March 15, 2001. The survey form was returned from 88 hospitals (rate of return: 38.4%).

**Results:** Firstly, 13.6% of the hospitals did not carry the optimal stock of medical supplies, the lead time optimal stock was 3 weeks or longer in 64.4% of the hospitals. Secondly, since 69.8% of the hospitals showed passive attitude toward training on purchasing management and stock management techniques. Thirdly, as for the question on the presence or absence of a deliberation committee for purchasing of new medical supplies, 60% of the hospitals with less than 300 beds did not have one, and 9.4% of the hospitals opened the deliberation committee less than twice a year.

**Conclusion:** At the time of purchasing new medical supplies, purchasing should be done according to the decision by the deliberation committee so that no deduction is made at the time of claiming insurance, and by setting a certain period of time, purchasing of those medical supplies that were not purchased during this period needs to be done according to the decision by the deliberation committee.

**Key Words:** medical supplies, stock management, hospital management

1989 . 가 20 ( 2 , 18 )

2001 1 3 1 31 4

가 . 가 . 2001 2 7 ,

가

21% 10

가

40.1% 가 , 34% 229

(1). 가 88 38.4% 가

4 ,

MRP(Material Requirement Planning) (2-3), JIT(Just In Time) PC-SAS <sup>2</sup>-test

(4) (Stockless Strategy)

ERP(Enterprise Resource Planning) (5-6)

가 150

1. 가 150 (2 ) 188 (3 ) 41 , 가

2 ( ) 68

36.2% , 3 ( )

) 20 48.8%

( 1).

2000 2

(7) 가 150 249 29.6%, 26.1%

. 249

1.

					(%)
3	( )	41	20		48.8
2	( )	188	68		36.2
		229	88		38.4

2.

										N(%)
200	1(20.0)	0	0	0	3(60.0)	0	1(20.0)	5( 5.7)		
200 300	7(28.0)	0	0	9(36.0)	8(32.0)	0	1( 4.0)	25( 28.4)		
300 500	3(13.6)	0	2(9.1)	12(54.6)	2( 9.1)	1(4.5)	2( 9.1)	22( 25.0)		
500	12(33.3)	5(13.9)	0	5(13.9)	1( 2.8)	2(5.6)	11(30.5)	36( 40.9)		
		23(26.1)	5(5.7)	2(2.3)	26(29.6)	14(15.9)	3(3.4)	15(17.0)	88(100.0)	

IMF

2.

3

65.9%

31.8%

26.1%,

9.1% ( 4).

3.

					N(%)			
200					2(40.0)	3(60.0)	0	5( 5.7)
200	300				7(28.0)	18(72.0)	0	25( 28.4)
300	500				7(31.8)	15(68.2)	0	22( 25.0)
500					12(33.3)	22(61.1)	2(5.6)	36( 40.9)
					28(31.8)	58(65.9)	2(2.3)	88(100.0)

4.

	N(%)				
	200	200 300	300 500	500	
	1(20.0)	7(28.0)	6(27.3)	9(25.0)	23(26.1)
	0	3(12.0)	1( 4.5)	4(11.1)	8( 9.1)
	4(80.0)	15(60.0)	15(68.2)	23(63.9)	57(64.8)

3.

(  
 ) SPD MRP , JIT ,  
 ERP 가  
 5 , ABC  
 94.3%가 , ABC  
 (8-9) 79.3%, SPD(supply processing & dis-  
 tribution) (10-11) 76.5%가  
 , , , , ,  
 71.6%가 , 63.6%  
 (12-14) 65.5%  
 , . 500

5.

	N(%)				
	200	200 300	300 500	500	
	4(80.0)	23(92.0)	21(94.7)	35(97.2)	83(94.3)
	1(20.0)	2(8.0)	1(5.3)	1(2.8)	5(5.7)
ABC	4(80.0)	19(76.0)	15(71.4)	31(79.3)	69(79.3)
	1(20.0)	6(24.0)	6(28.6)	5(20.7)	18(20.7)
SPD	3(75.0)	19(76.0)	15(75.0)	28(77.8)	65(76.5)
	1(25.0)	6(24.0)	5(25.0)	8(22.2)	20(23.5)
, , , ,	4(80.0)	19(76.0)	14(63.6)	26(72.2)	63(71.6)
	1(20.0)	6(24.0)	8(36.4)	10(27.8)	25(28.4)
	3(75.0)	15(62.5)	15(71.4)	22(62.9)	55(65.5)
	1(25.0)	9(37.5)	6(28.6)	13(37.1)	29(34.5)

6.

					N(%)
	200	200 300	300 500	500	
	4(80.0)	24(96.0)	20(90.9)	28(77.8)	76(86.4)
	1(20.0)	1(4.0)	2(9.1)	8(22.2)	12(13.6)
	4(80.0)	15(60.0)	12(54.6)	25(69.4)	56(63.6)
	1(20.0)	10(40.0)	10(45.4)	11(30.6)	32(36.4)

7.

						N(%)
	200	200 300	300 500	500		
	4(80.0)	21(87.5)	16(72.7)	30(83.3)	71(81.6)	
	1(20.0)	3(12.5)	6(27.3)	6(16.7)	16(18.4)	
1	3(75.0)	18(81.8)	11(61.1)	17(53.1)	49(64.5)	
10	1(25.0)	2( 9.1)	5(27.8)	8(25.0)	16(21.0)	
15	0	1( 4.5)	0	3( 9.4)	4( 5.3)	
	0	1( 4.5)	2(11.1)	4(12.5)	7( 9.2)	
1	1(25.0)	0	0	3( 9.7)	4( 5.4)	
1 2	0	2( 9.1)	0	4(12.9)	6( 8.1)	
3	0	4(18.2)	2(11.8)	2( 6.4)	8(10.8)	
3	3(75.0)	14(63.6)	10(58.8)	19(61.3)	46(62.2)	
	0	2( 9.1)	5(29.4)	3( 9.7)	10(13.5)	
	2(50.0)	18(78.3)	18(85.7)	28(82.4)	66(80.5)	
	2(50.0)	4(17.4)	3(14.3)	6(17.6)	15(18.3)	
	0	1( 4.3)	0	0	1( 1.2)	
	3(75.0)	6(26.1)	8(38.1)	15(45.4)	32(39.5)	
	1(25.0)	17(73.9)	13(61.9)	18(54.6)	49(60.5)	

81.6% , 가 85.5% , 62.2% , (15)

39.5% 가 80.5%가 가

7 가 10 가 3

8.

N(%)

		200	200 300	300 500	500	
		0	6(24.0)	6(30.0)	17(50.0)	29(34.5)
		0	0	0	1( 2.9)	1( 1.2)
		2(40.0)	5(20.0)	7(35.0)	7(20.6)	21(25.0)
		3(60.0)	14(56.0)	7(35.0)	9(26.5)	33(39.3)
1	1	0	7(30.4)	9(42.8)	12(36.4)	28(34.2)
	2	2(40.0)	6(26.1)	8(38.1)	6(18.2)	22(26.8)
	4	0	0	0	2( 6.0)	2( 2.4)
		3(60.0)	10(43.5)	4(19.1)	13(39.4)	30(36.6)
		1(25.0)	1( 4.5)	3(15.0)	2( 6.1)	7( 8.9)
		2(50.0)	13(59.1)	7(35.0)	15(45.4)	37(46.8)
		1(25.0)	2( 9.1)	8(40.0)	13(39.4)	24(30.4)
		0	6(27.3)	2(10.0)	3( 9.1)	11(13.9)
		0	4(16.0)	7(31.8)	4(11.8)	15(17.4)
		4(80.0)	18(72.0)	15(68.2)	23(67.6)	60(69.8)
		1(20.0)	3(12.0)	0	7(20.6)	11(12.8)

34.5%, 25.0%, 42.1%, 57.9%가  
 1.2% ( 9).  
 34.5%, 50.0%가 59.1%가 39.0%  
 가 37.3%, 500  
 1 2 가 61.0% 50.0%가  
 55.7%가 가 63.5%  
 17.4% 가 33.8%  
 가 21.6%,  
 14.9% ,  
 12.2% 6.7%  
 ( )

9.

	200	200 300	300 500	500	N(%)	
					2	
	2(40.0)	10(40.0)	11(50.0)	28(77.8)	51(57.9)	0.016*
	3(60.0)	15(60.0)	11(50.0)	8(22.2)	37(42.1)	
5	1(50.0)	9(69.2)	3(27.3)	5(17.2)	18(32.7)	0.164
9	1(50.0)	2(15.4)	4(36.3)	13(44.8)	20(36.4)	
11	0	0	2(18.2)	4(13.8)	6(10.9)	
15	0	0	0	4(13.8)	4( 7.3)	
	0	2(15.4)	2(18.2)	3(10.3)	7(12.7)	
( )	0	3(18.7)	5(45.4)	15(50.0)	23(39.0)	0.046*
	1(50.0)	11(68.8)	1( 9.1)	9(30.0)	22(37.3)	
	0	0	1( 9.1)	3(10.0)	4( 6.8)	
	1(50.0)	2(12.5)	4(36.4)	3(10.0)	10(16.8)	
4	1(33.3)	1( 6.7)	2(12.5)	4(13.8)	8(12.7)	0.392
6	0	0	0	1( 3.4)	1( 1.6)	
12	0	0	2(12.5)	6(20.7)	8(12.7)	
2	1(33.3)	1( 6.7)	0	2( 6.9)	3( 4.7)	
1	1(33.3)	1( 6.7)	1( 6.3)	0	3( 4.7)	
	0	12(80.0)	11(68.7)	16(55.2)	40(63.5)	
	0	4(22.2)	8(40.0)	13(41.9)	25(33.8)	0.113
	1(20.0)	7(38.9)	2(10.0)	6(19.4)	16(21.6)	
	3(60.0)	0	4(20.0)	4(12.9)	11(14.9)	
	0	3(16.7)	2(10.0)	4(12.9)	9(12.2)	
	0	1( 5.5)	1( 5.0)	3( 9.7)	5( 6.7)	
	1(20.0)	3(16.7)	3(15.00)	1( 3.2)	8(10.8)	

\* P<0.05

4.

88.5%가  
( 10). 200  
, 500 13.0%

10.

	200	200 300	300 500	500	N(%)	
	2(66.7)	23(88.5)	19(86.4)	33(91.7)	77(88.5)	
	1(33.3)	3(11.5)	3(13.6)	2( 5.5)	9(10.3)	0.646
	0	0	0	1( 2.8)	1( 1.2)	
	0	8(30.8)	7(33.3)	22(61.1)	37(42.5)	
	0	6(23.0)	7(33.3)	10(27.8)	23(26.4)	0.007*
	3(75.0)	10(38.5)	7(33.3)	3( 8.3)	23(26.4)	
	1(25.0)	2( 7.7)	0	1( 2.8)	4( 4.6)	

\*P<0.05

가  
30.95%  
20  
가 ,  
가 (16).  
, (17). 가  
가 .  
가 .  
, (18-20). 가  
,  
,  
가 가  
가 , 가





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