Running Head: HARPER PHARMACY

Performance and Cause Analysis at Harper University Hospital Pharmacy Dale A. Tucker Wayne State University

Performance and Cause Analysis: Harper University Hospital Pharmacy A performance and cause analysis was conducted at Harper University Hospital Pharmacy concerning communication discrepancies between employees within and outside the pharmacy. Interviews were conducted with both pharmacists and pharmacy technicians regarding both performance and causes of the communication problem. Fishbone diagrams were drawn to further focus on the cause or causes of the discrepancy.

The performance analysis was divided into two parts. The organizational analysis is found in Appendix A and includes the vision, mission, and values of the Detroit Medical Center (DMC) where the Harper University Hospital Pharmacy is located. The extant data also includes a survey done last year by a pharmacy student that focused on suggestions to improve pharmacy communication. The survey is found in Appendix B. The interview instrument for the environmental analysis is found in Appendix C. The interview instrument for the cause analysis is found in Appendix D. Both interview instruments were used to identify concerns of both the pharmacists and the pharmacy technicians. Fishbone diagrams used to help in the cause analysis are found in Appendix E and Appendix F.

With regard to the organizational analysis, communication is one of the values espoused by the DMC. The extant survey done last year averaged between three and four (moderate to good) points out of a total of five. The current effectiveness of communications ranged from 2.96 to 3.08. The methods proposed to improve communication ranged from 3.5 to 3.96. These methods of communication included the intraweb, postings, monthly meetings, memos, and dry-erase board notifications. The use of MS Meds email was outside the above listed range with an average of 3.21, and as it

has now been eliminated, it would not have any influence on current communications. The survey indicates that better communication would be of use, and its listed methods would help to improve the communication.

The environmental analysis was completed by interviewing equal numbers of pharmacists and pharmacy technicians. They were each asked where on a scale of one to 10, with one a low priority or impact and 10 a high priority or impact, they would place communication. In general, the pharmacists said communication problems were an average of 6.0; the technicians said 6.5 on that scale. The analysis of the problem was further divided into the areas of organization environment level, work environment level, work level, and worker level. The technicians found more of a problem at each level with the exception of the work level where the pharmacists were more affected.

Comments at the organization environment level from both pharmacists and technicians expressed concern about an excess of unneeded phone calls from nurses. The pharmacists also indicated they thought the technicians should screen phone calls more completely to facilitate their order entry; fewer interruptions for the pharmacist increases their ability to enter and send medication orders more quickly to the patients on the floors. The technicians were concerned in addition about the lack of respect from the nurses on the floors. They indicated the nurses would "talk down" to them and would often refuse to sign for narcotics or controlled medications delivered to the floor.

Environmental Analysis	Pharmacists	Technicians
Organization Environment Level	5.5	6.7

The second set of questions concerned the work environment level. The pharmacists indicated that time was at a premium because of the number of unnecessary phone calls from the nurses on the floors. They thought the nurses, and physicians, often had no concept of the procedures in pharmacy as well as the turn around times for stat, now, and regular medication orders. The technicians were concerned with policies regarding scheduling. They found feedback was nonexistent. Their concern with staffing was when there was no hood 3 person scheduled; the workload impacted the rest of the staff on that shift.

Environmental Analysis	Pharmacists	Technicians
Work Environment Level	4.3	6.5

The work level analysis indicated many problems with nurses, again, including too many phone interruptions, the need for nurses and clerks to pull the orders in order for them to be filled in the pharmacy, and too many places for nurses to check for medications causing them to make multiple calls for the same medications. The technicians were concerned with work left over from the prior shift causing them to be behind before they even started. They also referred to the training in the Wertz and Hutzel areas as inadequate.

Environmental Analysis	Pharmacists	Technicians
Work Level	5.8	1.5

The pharmacists at the worker level again referred to phone interruptions from the nurses on the floors as an impediment to achieving success regarding accurate and complete order entry. They also referred with optimism to the coming new model with pharmacists doing order entry as well as some clinical work on the floors as opposed to working only in central pharmacy on medication distribution. The technicians indicated, at times, not feeling appreciated. They referred again to not having enough training in the Wertz and Hutzel specialized areas.

Environmental Analysis	Pharmacists	Technicians
Worker Level	5.5	5.6

The cause analysis was also a survey filled out during interviews with both pharmacists and technicians. The questions covered data, feedback, tools, information, resources, and incentives under the topic of lack of environmental support. The lack of repertory of behavior topic included questions concerning knowledge and training, capacity, and motivation.

The pharmacists indicated a desire to have data more organized. Minimal expectations were not always apparent, and they were not aware of consequences for not performing well. The technicians were concerned about new drugs they were expected to reconstitute and make into piggybacks, especially, if they were carcinogenic or mutagenic. They wanted more information readily available about the medications.

Both groups interviewed indicated that feedback was always immediate if it was bad. They would periodically be given general a general "thank you," but feedback for doing their job well was usually not forthcoming. In the tools category, they referred to periodic printer failures. No problems were identified with regard to information except for the technicians needing and easier way to credit medications, one with fewer steps.

Resources were fine with the exception of seasonal heating and cooling problems with the changes of weather. With regard to incentives, both technicians and pharmacists noted that there really was no career ladder, a fact inherent in the profession. They both found good performance to be punished by the addition of more work to do because they "would get it done." Both groups also indicated that the incentives for doing well were primarily internal. The technicians were more concerned with monetary return for their work than the pharmacists.

Under the lack of repertory of behavior, the pharmacists indicated that consequences of good and bad performances were not clear. Though they had good resources, the belief was they could be more organized. They also thought feedback was minimal unless the nurses had a complaint and then it was negative. The technicians concurred with the pharmacists but also indicated, again, a desire for more training in the Wertz and Hutzel areas.

Neither group found any problems with employee capacity, including both emotional and physical expectations for the job. Both groups thought the desire to do well in the job was due to internal motivation, and if the motivation continued, it was because of the individual persons desire to always do their best. A disinterest in doing well was noted by both groups.

When the cause analysis was drawn on a fishbone diagram using the headings of people, methods, information, materials/tools, and facilities, the answer to the question of why communication is suboptimal in the pharmacy pointed toward the methods category both with the technicians and the pharmacists. Both groups indicated a lack of communication regarding the consequences of doing either a good or a bad job. Both groups also found feedback, in most cases, lacking, or, if noticed, it was only feedback for a bad performance. Both groups noted a plethora of phone calls from nurses, many of which were unnecessary. The people category was second in rank for suboptimal communication. There, the lack of career ladder was noted in both groups.

When determining an intervention to select to improve the communication in the pharmacy, the focus should first be on making clear the performance standards and what determines an excellent performance. This should be started in training then carried

throughout the employee's tenure of employment. For example, a good pharmacist could be described as one who is extremely accurate with computer order entry. An exceptional pharmacist could be one who is just as accurate but also looks beyond the order entry and makes sure there are no apparent drug related problems at that point such as ensuring norfloxacin is not given at the same time as calcium or magnesium supplements.

In conjunction with teaching performance standards, a strong feedback structure needs to be proffered. Perhaps, a survey of all staff would determine what nonmonetary incentives might encourage excellence in performance would be needed. Also, a strong role image projected by current staff would encourage all new hires to perform in a similar excellent manner. Stronger performance standards and feedback to the nurses might also help cut down on unnecessary phone calls. Selection and design of an intervention are the next steps in the process.

Appendix A

Detroit Medical Center

Vision

The DMC [Detroit Medical Center] will be known for

- 1. Quality, cost-effective care.
- 2. Accessible, responsive, and personalized service.
- 3. Innovation and academic stature.
- 4. Mutually beneficial relationships with medical staff.
- 5. Management leadership and a positive work environment.
- 6. Community service and stewardship.
- 7. Fiscal control, responsibility and efficiency.

Mission

The Detroit Medical Center is committed to improving the health of the population served by providing the highest quality health care services in a caring and efficient manner without invidious discrimination, regardless of the person's religion, race, gender, ethnic identification, or economic status. Together with Wayne State University, the DMC strives to be the region's premier health care resource through a broad range of clinical services; the discovery and application of new knowledge; and the education of practitioners, teachers, and scientists.

Values

- Community Welfare
- Quality
- Respect and Involvement
- **Teamwork**
- Communication
- Innovation and Education
- Efficient and Effective Resource Use

Appendix B

PHARMACY COMMUNICATIONS SURVEY

The purpose of this survey is to determine how effective the department is at communication regarding formulary changes/additions/deletions and the use of criteria monitored drugs. Please complete the following survey honestly and anonymously.

1. Please circle you position:

	Clinical Pharmacist	Clinica	1 Speciali	ist	Technic	cian	Intern	Other
2.	Please rate the current effi is not important to your p		_		commun	ications	(1=poor, 5=excell	ent, if this
	Formulary Changes	1	2	3	4	5	N/A	
	Stock Outs/Backorders	1	2	3	4	5	N/A	
	Restricted Drugs	1	2	3	4	5	N/A	
	Drug Related Department Procedures	1	2	3	4	5	N/A	
	Drug Information	1	2	3	4	5	N/A	

3. Please comment on other information where communication needs improvement:

Please rate the following methods of communication in terms of effectiveness (1=poor, 5=excellent):

Intraweb/Pharmweb	1	2	3	4	5
MS Meds Email	1	2	3	4	5
Postings	1	2	3	4	5
Discussed at monthly department meetings	1	2	3	4	5
Memos in mailboxes	1	2	3	4	5
Note on dry erase board	1	2	3	4	5

5. Please comment if you feel there are better methods of communication that are being underutilized:

6. Please leave any comments or suggestions:

Appendix C

Identification of Performance Problem				
Identify the problem				
Identify data that confirms the existence of the problem	ne			
Identify ideas that would make the problem b	etter			
Impact of the problem			-	
Low 1 2 3 4 5	6	Ü	8	9///10 High
Questions	Yes	No	Coi	mments
Analysis of the Problem				
Organization environment level				
Is the problem affected by external stakeholders?				
Does the organization successfully interact with external stakeholders?				
Do external stakeholders support the organizational values?				
Impact of the problem				
Low 1 2 3 4 5	6	7	8	9 10 High
Work environment level				
Are resources adequate to achieve optimal performance?				
o Time				
o Money				
o Staff				

o Tools					
o Materials					
o Space					
Is there adequate information to achieve optimal performance?					
Do policies for feedback and consequences support optimal performance?					
Impact of the problem					
Low 1 2 3 4 5	6	7	8	9	10 High
Work level					
Is the job designed for optimal performance?					
Does the work flow foster efficient completion of tasks?					
Are job responsibilities clearly established?					
Impact of the problem					
Low 1 2 3 4 5	6	7	8	9	10 High
Worker level					
Does the performer have the requisite knowledge or skills to achieve success?					
Is the performer motivated to achieve?					
Do the performer's expectations match the reality of the total performance environment?					
Is the performer able to achieve success?					

Impact of the problem	
Low 1 2 3 4 5 6	7 8 9 10 High

Appendix D

Identification of Performance Problem Cause					
Question	Yes	No	Comments		
Environmental					
• Data					
Is there sufficient accessible data to direct an experienced person to perform well?					
Are good models of behavior available?					
Are clear and measurable performance standards communicated so that people know how well they are supposed to perform?					
Are the standards reasonable?					
Feedback					
Is work-related feedback provided describing results consistent with the standards and not just behavior?					
Is it immediate and frequent enough to help employees remember what they did?	-				
Is it selective and specific, limited to a few matters of importance?					
Is it educational, positive and constructive?					
• Tools					
Are the necessary tools usually on hand for doing the job?					
Are they reliable and efficient?					
• Information					
Are procedures efficient and designed to avoid unnecessary steps?					

Capacity	
Are they free of emotional limitations that would interfere with performance?	
Do they have sufficient strength and dexterity to learn to do the job well?	
• Motives	
Do people seem to have the desire to perform well when they enter the job?	
Do their motives endure?	
Is turnover low?	



