

Benay Phillips
CEO

New York State Department of Health
Attention: Ms. Cathy A. Blake
Director, Healthcare Quality Initiatives
Office of Health Systems Management
161 Delaware Avenue
Delmar, New York 12054

Date: January 10, 2004

Re: 2005 Patient Safety Awards (acfalbm5) 142 - An Adult Care Facility

We are pleased and privileged to present this submission for a 2005 Patient Safety Award. We are Madison York Assisted Living Community (an Adult Care Facility that, in addition, has an Assisted Living Program Certification). We are located at: 112-14 Corona Avenue, Corona, New York 11368.

This project title is:

“Decreasing Medication Omission Errors in an Adult Care Facility and Assisted Living Program”.

This project is a part of our Medication Management Continuous Quality Improvement effort. The contact person is Mrs. Benay Phillips, CEO. We are certified for two hundred twenty six (226) ACF beds and, within that certification, one hundred eighty (180) Assisted Living Program (ALP) Beds. We have served thirty-five thousand seventy one (35,071) resident care days in 2003 and over forty eight thousand thirty five (48,035) resident care days in 2004. We are one of three (3) facilities owned by Mr. Tibor Klein, operator. Combined in all three facilities are a total of seven hundred and fourteen (714) resident beds which also contain a total of two hundred and ninety eight (298) Assisted Living Program (ALP) resident beds. Collectively, we are known as the York Group.

Analysis of target area and identification of areas for error/adverse event reduction/performance improvement initiatives:

The “Oregon Long Term Care Medication Safety Study”, (2004), involved both SNFs and Assisted Living and Residential Facilities. This study focused on four (4) main areas that were causal to medication errors resulting in adverse effects. One of these four areas was “Omission of Medications”. We selected the issue of omission of medication to residents of our Corona facility to develop a patient safety quality improvement program due to the fact that, since we had newly purchased this facility as of May 5, 2003 and found ongoing inappropriate medication management,

Analysis of target area(continued):

that was placing residents in a precarious position with regards to medication safety. A key concern was omission of medication doses. We selected a time frame of twenty (20) months to reverse an existing unacceptable and unpredictable medication management system which included issues regarding the omission of medication doses to residents for reasons including non staff/resident tracking of medication refills, resident non-compliance, physician/pharmacy errors and quality assurance absent for documentation of ingestion of medication.

A description of the formal process of identifying strategies, including barriers to success:

This facility had, previous to our purchase and take over, received numerous specific deficiencies (from the DOH) in medication management including the inappropriate staffing design of placement of only two aides (scheduled from 6AM to 7PM) assisting with the self administration of medication to all residents. It appears these aides handed medications to residents and instructed them to take them later on..."whenever". Routinely, these aides did not observe the actual ingestion of medications for most of the residents. It appeared these aides did not administer or assist with insulin and did not know who did. Medications were placed in cups on trays for room service and sent to residents' rooms. It was, therefore, impossible to know if residents were ingesting medications or, if they did... when. It was also impossible to know when residents did not receive medication. Persons other than those who pre-poured the medications actually "gave" the residents medication. Aides recorded that residents took medications when they actually had no idea if residents ingested medications. No one seemed responsible for developing/enacting/monitoring an appropriate system for filling/refilling resident medications.(NYS DOH Surveys of previous operator 5-09-98,05-20-98, 12-02-98, 11-02-01)

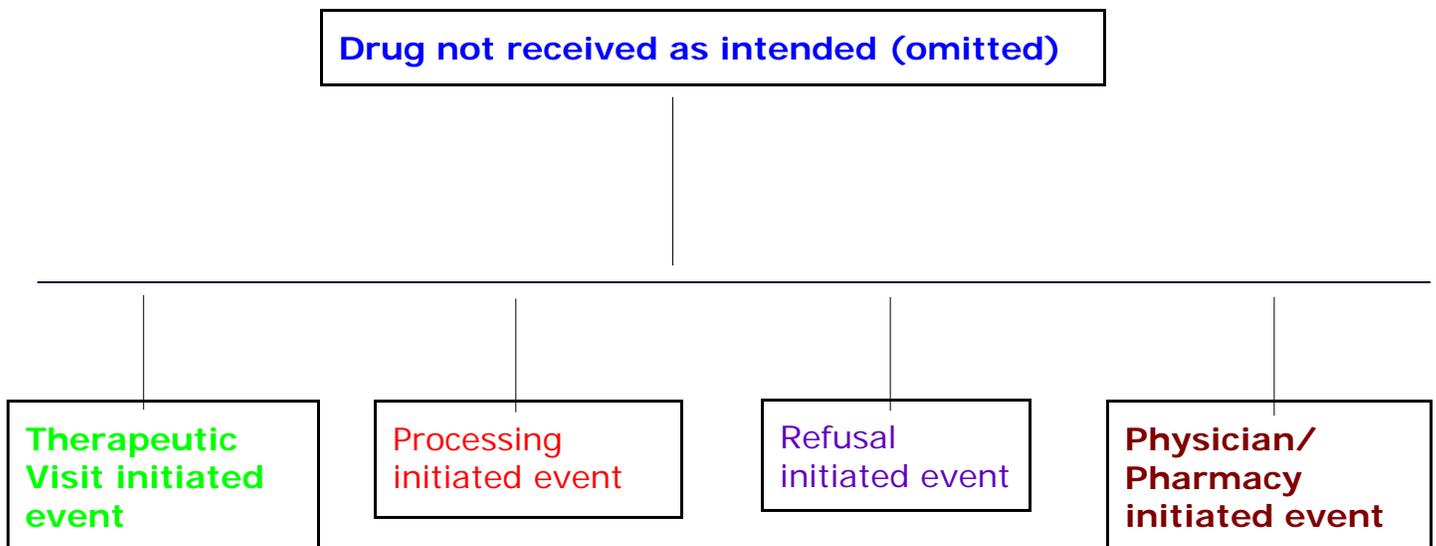
Through a team meeting with the Administrator of our adult care facility, our Director of resident services (a Registered Nurse), two (2) physicians and our CEO (a gerontologist), we established the use of a multi-directional strategy in improving medication management as a whole with a focus towards decreasing omission medication errors in particular. We decided we would hold a regular pattern of in-services and discussion meetings focused on the better adherence to our medication management system by those of our staff who were designated as medications aides. In addition, we decided that we would utilize various quality assurance tools to monitor performance of those persons and/or processes we designated as possible causal agents for this issue. As we examined previous poor performance, survey reports, and verbal descriptions from residents, family, friends and former staff, we came up with various focal ports for our strategies.

A description of the formal process of identifying strategies, including barriers to success:(continued)

Barriers to success included residents' previous inappropriate medication "training" and actualization of former protocols. Although the method previously used had been giving the residents a much freer hand in taking and deciding when to take their medication, at the same time, these residents had not been trained as to the importance of space windows and, in the instance of residents who self medicate, accurate reporting as to when to refill or when reevaluation of meds was necessary to occur on a timely basis. The lack of knowledge as to what, when and how the residents were actually ingesting medication also accounted for numerous omission errors and led us to concentrate on the issue of omission.

We also found that poor training of present staff had been a great barrier as they apparently had been following this inappropriate process for many years. Although we were willing to retrain these staff members, they chose to leave our employ, stating that it was "...time for their retirement...and or "...they had a need to move on...".

We then created an "omission tree" to allow us to categorize for purposes of examining reasons that residents would have an omission occurrence, and then, subsequently worked out the corrective strategies and the quality assurance to monitor each.



Explanation of protocol development and steps taken to implement quality improvement strategies:

The first focal area we undertook to design and implement quality improvement strategies was **Therapeutic visit initiated event** (see omission tree).

We identified that when residents chose to leave our facility to go on therapeutic visits without prior notification to staff, they could cause omission of **their** assist with the self administration of medication. In addition, family members and/or friends but who visit with our residents and summarily took them for a therapeutic visit without timely notification to staff, were also causing omission. We developed a protocol tool form to be completed by all parties in advance and then monitored for compliance. (see attached Exhibits #1a-e).

We also developed a education and training program to be given to every resident and then to every new resident and their significant others by our case management team.

Our next selected focal area undertaken to design and implement quality improvement strategies was **processing initiated event** (see omission tree). After careful consideration of all aspects of our processing methodology, we realized there were several issues that caused or could cause omission with our residents receiving an assist with the self administration of their medications or their self administration without our assist. We created an entire series of medication error reduction tool protocol forms in the expectation that this system would reduce the incidents of omission of medication doses to our residents. This risk management omission error reduction tool set includes such forms as:

(see attached Exhibits #2a - e)

Medication Self Management Form - this form delineates when a resident is capable of "self administration" of medication and not in need of an assist with the self administration of medication in accordance with part 487.7(2) of the regulations, and, Resident Taking Their Own Medication Form - For Quality Assurance that each of these designated residents actually receive their medications, and,

Initial Input Form for Each Resident's Pharmacy - This form assures that each pharmacy that each resident selects receives an initial data sheet giving full information for complete profiling of each resident. It contains such info as: Date of birth, financial billing information (public entitlements if appropriate), residents's physician, known allergies, known diagnoses, room and table number and any special information, and,

Resident Special Attention Sheet - This form is used as a change of shift sheet to make the next medication staff shift aware of any issues (such as stat medication expected, acute new medications expected, discontinuation of a particular medication etc.), and,

Explanation of protocol development and steps taken to implement quality improvement strategies:(continued)

Incident Reporting Form - This form is used when any medication staff member perceives that an incident has taken place (a resident has refused meds, a med has dropped on the floor, a medication has come into the facility incorrectly etc.)during said medication aide's shift. A supervisor then reviews all descriptions of this incident and makes a decision as to what course of action (if any) should be taken. At the same time all of these reports are put into the resident care record for each resident involved in the "incident".

Our next selected focal area we undertook to design and implement quality improvement strategies was **Refusal initiated event** (see omission tree). Although residents have the right to refuse medications and/or the assist with their self administration of medication, we use a protocol of verbal reporting of said incident so a Facility Case Manager can counsel with and make such a resident aware of the possible negative results of such a decision(note: this is noted on the resident's case management record). Such a refusal event will also trigger the initiating of the "incident reporting form"(see above). We also report this incident to the resident's physician and follow whatever instruction(s)(physician's orders) said physician may direct to us.

Our final selected focal area we undertook to design and implement quality improvement strategies was **Physician/Pharmacy initiated event** (see omission tree).After careful consideration of all aspects of our relationship protocols and communication methodology with both Physicians and Pharmacies, we realized that there were several issues that caused or could cause omission with our residents. We created an entire series of medication error reduction tool physician/ pharmacy related protocol forms to foster a system which would reduce incidents of omission of medication doses to our residents. This risk management omission/error reduction tool set includes such forms as: (see attached Exhibits #3a - h)

Change/New/Discontinue of Medication Physician Form - This form is sent with each resident who visits a physician outside of our facility. It allows that physician to indicate any instructions for medication assistance. When resident returns to our facility with this form, it is given to our medication assistance aides who then compare it with the current MAR and note any changes. They are also intrusted to alert their supervisors of same both verbally and in writing, who will notify the pharmacy when appropriate, and,

Physician's Medication Orders Form - This form is reviewed each time any physician enters our facility. It is completed by our medication aides (after they have received approval from their supervisors) and given to each physician each time they enter the facility. Each physician must then complete this form and return it to the medication supervisors for further processing to our pharmacies and for data entry into our records and, finally, to communicate to our medication aides. The concept here is to assure that each shift's medication aide(s) communicates with each other through passing on copies of this form to notify the next shift.

Explanation of protocol development and steps taken to implement quality improvement strategies:(continued)

For instance, a physician prescribes a new medication, and then this medication is ordered. Through the accomplishment of the processing of this form (see right end group of physician's acknowledgments) and a copy having been given to all medication aides, a medication aide is able to return from a day/shift off and still have immediate awareness that a specific new medication is required for a specific resident. Adherence to this protocol protects this resident from an omission in the medication dose as a result of ignorance of the need for same. Variations of this form are used directly as shift/day(s) off communication between medication aides, and, Resident to See Form - This form is utilized with physicians who readily attend residents of our facility, when a resident refuses medication. The resident's physician is verbally notified immediately, however, when this physician next comes to see residents (usually several times a week), notice is also put in writing to remind the physician to re-evaluate the need for this medication and to counsel the resident depending on this physician's findings and, then, finally to indicate to us, in writing, any physician's orders regarding this incident.

If a resident refuses a medication that a physician who usually does not attend residents at our facility prescribes, we still verbally notify the physician immediately, however we also fax a concern sheet and ask the physician to respond in writing so that we can know how to proceed. We also encourage this physician to physically counsel with this resident, and,

Check List for New Medications coming Into Facility - This form acts as a quality assurance for our medication aides to show accountability for each medication coming into our facility. We make the best use of this as part of our training for new medication assistance aides. and,

Medication Received by Wellness center - This form is used for receipt of treatment type medications such as eye, ear and nose drops; ointments, lotions and creams; inhalation aerosols and such. We have chosen to separate assistance with these items and created a private area in our "wellness center" room so that residents can receive this assistance more privately and with more dignity. This form serves as a quality assurance monitoring of the receipt of these medications by our treatment medication aides, and,

Communication Hospital Log to CHHA - This form is a linkage to our Certified Home Health Agency which gives skilled nursing services to our residents. Some of their services include Insulin therapy, wound care, certain injections, and physical-occupational-speech therapy. For instance, it is important that we prevent omission of medication (e.g. insulin, epogen), by reinstating them for residents promptly as they return to our facility from hospitalizations or nursing home or rehab care, and,

CHHA Weekly Service Report - This form is another linkage and quality assurance tool for us to monitor that residents who are supposed to be receiving CHHA services are receiving same and indications of resident status. In addition, The CHHA must immediately verbally notify our Director of Resident Services if a resident has any acute immediate medical incidents that take them out of homeostasis., and,

CHHA to Madison York Daily Communication Log - This form is handed in daily and reflect any and all issues with residents that occur on a daily basis.

Identification of measures used to determine effectiveness, standards and milestones for evaluation, and benchmark improvement indicators:

We developed several different measurement tools for determination of adherence to our protocols (standards) and the degree of effectiveness (by outcomes) at different time line points of this project.

To site some examples: In June, 2004, we added a responsibility to our weekend facility supervisors to review all MAR/TAR documentation relative to our stated protocols and various quality assurance forms. Each Monday, the Director of resident services reviewed their findings and any errors (including omission) were discussed with the aide immediately with suggestions as to how to avoid the same in the future, and then with the entire group for the same type of discussion at the weekly medication aide in-service. This quality assurance measure created a motivation for our aides to eventually have a "no errors" indication on their report. We eventually reduced error findings on the weekends by almost 75% by the end of August, 2004.

We also put into place a "tracking form" (see attached Exhibit #4a) that all medication aides were required to complete (one (1) resident per day to equal the number of days the aide works per week). We chose the form we had experienced seeing the NYS Department of Social Services utilize which followed each and every medication the resident was prescribed from the last medical evaluation completed as the regulatory required annual evaluation, right up to the present time to make sure that each resident had proper documentation of any and all changes, additions or discontinuation of medications and was currently being assisted with the appropriate medications. Again, if there are any issues/errors found, the Director of resident services re-examines same and either notifies the resident's physician and implements whatever the physician feels is befitting, or, if appropriate, assists the medication aide to correct same. Again, this measure has caused a more efficient procedure for documentation and making sure that physicians sign off properly to changes etc. which ultimately resulted in more accurate histories of medication regimens for each resident.

We also developed a Processing Prescriptions protocol and implemented its strict adherence. (See attached Exhibit #4b). We found there were inconsistencies in the way each different medication aide was processing prescriptions from residents' physicians and these inconsistencies were also causing medication error inclusive of omission. We felt the need to create this prescription protocol so that all medication aides and any other assigned staff could process prescriptions on behalf of our residents utilizing the same methodology. We could, therefore, have better quality assurance regarding the final outcome of receiving resident's medication properly and timely. This too has been a successful endeavor with far less errors, inclusive of omission, occurring on a daily basis.

Identification of measures used to determine effectiveness, standards and

milestones for evaluation, and benchmark improvement indicators:

Another very important issue was identified. We found that a major reason for omission errors was the untimely return of medications starting from the date the script was sent in to pharmacies. We had a meeting with our pharmacies and we developed a *Daily Communication Log Sheet* (See attached Exhibit #4c) which we receive daily by 3PM so that any scripts that have been received by the pharmacy will no longer be held up for processing because of easily solvable issues. We can respond almost immediately so that the pharmacy can fill the order and get the medication to us by their evening delivery. Some examples of pharmacy related issues previously causing unnecessary lengthy hold of processing of meds and therefore omission of medications doses include:

- Physician did not date script
- Physician did not write resident's name clearly
- Physician did not indicate dose or strength clearly
- Physician's info missing
- Medication not covered by Medicaid
- Medication insurance not effective
- Drug unavailable
- Not posted (for physicians who need to do this prior to authorization)
- Therapeutic Duplicate
- No refills left
- RX too old (more than 90 days- medicaid will not cover)
- Too soon (again for medicaid coverage purposes) Patient Info

Data reflecting favorable results directly related to quality improvement error/adverse event reduction strategies:

In the beginning of November, 2004 we conducted a survey of medications we were assisting residents with on a daily basis. Our Survey resulted in the following data:

Total number of AM meds assisted with:	1262
Total number of Mid Day meds assisted with:	123
Total number of PM(dinner) meds assisted with:	516
Total number of HS (prior to bedtime) meds assisted with:	<u>127</u>
Total number of daily dose assists: 2046	
Total number of yearly daily dose assists: 746,790	

We then prepared a survey of a random sample of 47 residents' assist with the self administration of medication and with regards to various monthly periods randomly selected by persons other than our own staff for each resident from October of 2003 thru November 30, 2004. Out of a total of 36, 043 (See attached Exhibit #5) doses assisted with, there were only 16 medication errors (as related to us by other than our own staff) caused by omission. As 1% would be 360, we can certainly observe a tremendous reduction in omission errors from May, 2003.

We attribute this extremely low incidence directly to all of our quality improvement endeavors as illustrated by this report.

Evaluation of outcomes and discussion of collaborative efforts and future

goals for continued improvement activities:

We feel that we have made a very positive advancement towards the elimination of **omission** as an error in the adult care facility assist with the self administration of medication.

It is our honor to state that the quality of our medication management system has been recognized by various NYS Department of Health Officials including Dr. Nancy Barhydt, Frank Rose, Lynn Chevalier, Angelo Ruperto, Judith Lennihan and others who spent a day experiencing our entire system and utilized concepts and parts of our medication management system manual (given to each of them) to assist them in their preparation of the Department's new Medication Guidelines.

In addition, the train the trainer from Brookdale, Susan Caccappolo, spent a day at our facility observing our medication system in person and, again, utilized parts of our system in her preparation of her train the trainer course and was most impressed with the quality of care given.

We have learned through our experiences that it is extremely important to develop and implement a medication management system that will include a methodology for quality assurance. In addition, it is essential to continuously retrain and educate all staff associated with the assist of self administration of medication in the adult care facility. Another important aspect in continuous quality improvement is to conduct ongoing surveys and reevaluation of systems and do research as to compliance and issues for correction in the scheme of continuous quality improvement of our Medication Management System.

Some of our goals for such activities would be to hire a continuous quality Assurance director (funding permitted) whose responsibilities would include such surveys, research and evaluation as mentioned above, and then to make recommendations and design and develop and train towards improvements on a continual basis. Training should be designed for both staff, residents and residents' significant others. In addition, we hope to expand our course to include reduction of other medication errors to include; wrong dose, wrong drug, and wrong resident as well as other such issues.

It is difficult to comprehend after reading research articles and reports from such authorities as the US Pharmacopeia Center for the Advancement of Patient Safety (CAPS), National Coordinating Council for /Medication Error Reporting and Prevention, and the American Society of Consultant Pharmacists guidelines with regards to medication errors and many more authorities such as Saul Weingart, P. Barach, S. Small, DW Bates, Catherine Hawes, Rosalie Kane, JH Gurwitz, that improvement in medication errors has not become a more compelling issue at all levels. It is our hope that this area of need will be addressed with more intensity in the future. Our focus of interest with regards to the Adult Care Facility level of assist. We shall continue that interest with fervor and passion.

Thank you for your considerations.

List of Exhibits

- Page 4 Exhibit #1
- A. Medications to Go Form
 - B. Medication Request for Visitation
 - C. Resident To visit (Not needing Medication)
 - D. Resident to Visit (inter office communication)
 - E. Medication to go (Addendum)
- Page 4 Exhibit #2
- A. Medication Self Management
 - B. Resident Taking Their Own Medications
 - C. Initial Resident Profile to Pharmacy
 - D. Resident Special Attention Sheet
 - E. Staff Incident Report
- Page 5 Exhibit #3
- A. Change in Medication
 - B. Physicians' Medication Orders
 - C. Residents to See (If a Resident Refuses Medication)
 - D. Check List For New Medication Coming In
 - E. Medication Received by the Wellness Center (Treatments)
 - F. Hospital List for CHHA
 - G. CHHA Weekly Service Report
 - H. CHHA Daily Communication Log
- Page 7,8 Exhibit #4
- A. Medication Tracking Form
 - B. Prescription Processing Form
 - C. Pharmacy Communication Sheet
- Page 8 Exhibit #5
- Data Summary Sheet - 2003/2004