

# TOPICS

In Geriatric Medicine and Medical Direction – Volume 33 Issue 2 – February 2011  
A Peer Reviewed Journal of the Minnesota Medical Directors Association

## Medication Reduction to Improve Resident Quality of Life By Sandra Delgehausen RN

The Saint Therese Quality Improvement Project on Medication Reduction began at the beginning of the second quarter of 2010. This project idea originated with a focus in reducing medications on our memory care unit. After completion of the memory care unit, the next step would be to assess the project and then expand to all units. The guideline for this project was based upon Centers for Medicare and Medicaid Services (CMS) survey F-Tag #329 *Unnecessary Medications*. In 2006, CMS issued revised guidelines for F-Tag #329 with the intention to clarify several aspects of medication management for residents in long term care facilities and staff. Our quality improvement project on medication reduction includes resident chart reviews using the six areas outlined in F-Tag #329 *Unnecessary Medications* to assist in identifying possible medications to reduce, discontinue or lessen frequency.

The information related to use of antipsychotic medications from F-Tag #329 also provided guidance to this quality improvement project to ensure that specific conditions were diagnosed and documented in the clinical record, as well as gradual dose reductions were completed as set out in the guidance and as resident condition warranted.

Lastly, this project aimed to reduce the number of medications residents with end stage dementia were prescribed; therefore, freeing licensed staff from heavy medication passes, thus increasing their time to manage other aspects of resident care (ie: falls management and non-pharmacological approaches to resident care). We discovered that many residents required medications to be crushed or be in a liquid form in order to safely swallow. However, we also found that residents with end stage dementia may have difficulty ingesting sufficient fluids to ease the taste of crushed and liquid medications. This led us to a significant part of this project focusing on resident quality of life in regards to lessening the offensive taste of crushed and liquid medications and to lessen the repeated attempts of offering the altered medication in hopes of gaining cooperation to swallow. By lessening the potential offensive taste of crushed/liquid medications, the benefit could enhance the resident's appetite at meal times.

With the FTag #329, *Unnecessary Medications* as our facility guide, the planning stage was underway to reduce polypharmacy and the potential adverse reactions that occur with this practice.

<b>Unnecessary Medication</b>
1. Excessive Dose or Duplicate Therapy
2. Excessive Duration
3. Medication given without adequate monitoring
4. Medication given without adequate indications for its use
5. Presence of adverse consequences which indicate the dose should be reduced or discontinued
6. Any combination of the reasons addressed in 1-5

It was determined that the chart reviews would occur weekly and be held off the unit to lessen the distractions of staff completing the reviews. Routine meeting times were established to best meet the RN Station Manager's schedule as this was the staff person designated to lead the reviews. The Station Manager was designated as the meeting leader because s/he had the closest knowledge of the resident being reviewed. Also attending the chart reviews were the Clinical Care Coordinator and the Quality Improvement ADON. For the review, the Station Manager selects two residents per meeting and is responsible for bringing the necessary documentation to complete the chart review. Meetings were scheduled for a total of 30 minutes, allotting 15 minutes per chart review. In addition to the resident chart review, this meeting time was used to educate the Station Manager on how to better use critical thinking skills in terms of medication management and how to present the case to the MD/NP. It was suggested that the Station Manager tell the "story" of the request and not just request to discontinue a medication. By telling the story, the goal was that the Physician or Nurse Practitioner would have a better comprehensive understanding of the resident, not just the medication.

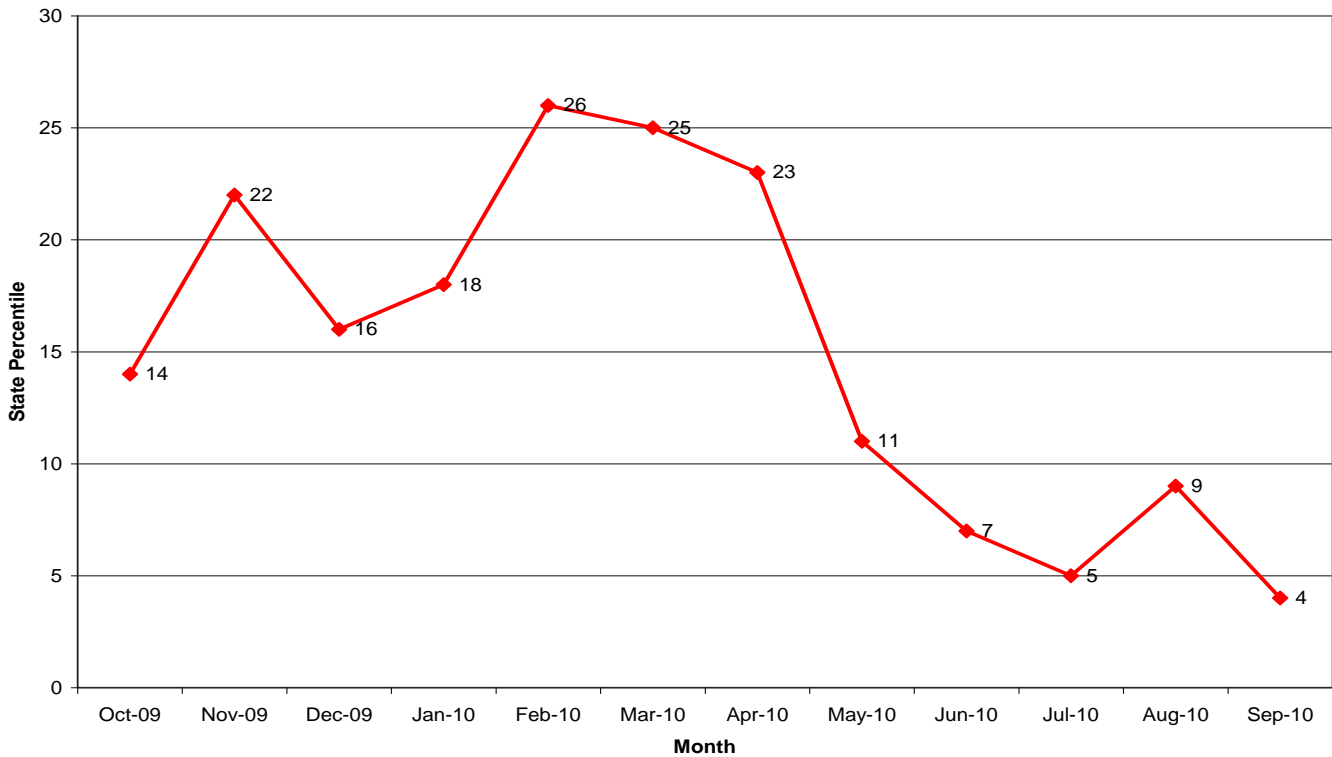
Each 15 minute chart review consisted of reviewing the most recent MD/NP signed medication and treatment list. Every medication and treatment was reviewed addressing the six areas from F-Tag #329 as previously outlined. Each medication was checked for diagnosis, resident's progress toward identified nursing therapeutic goal, reason resident was placed on the medication and does this reason remain an active concern for the resident, current symptoms, dose reductions in the past year, MD/NP and nurse progress notes over the past year, benefits, risks and side effects of medication, labs over the past year, clinical significance of medication, vital signs, and weights. Other areas taken into consideration prior to making recommendations to the MD/NP were the age of the resident, advance directives, family and resident input for goals of medication, resident tolerance to taking medications and if the resident required

medication to be crushed. Minutes were taken at every meeting and upon completion of review. The Station Manager was responsible for communicating the recommendations to the MD/NP on the next resident visit or sooner if necessary. Depending upon the recommendation, a determination was made and implemented as to the type of monitoring the resident might require during the medication reduction period. Findings from the monitoring were communicated to the MD/NP as resident condition warranted. The Quality Improvement ADON tracked all recommendations and follow up from Station Manager after MD/NP dialogue.

The Medication Reduction Quality Improvement Project is reviewed at the Saint Therese Nurse Administration meetings, Station Manager meetings, quarterly Nurse Practitioner Luncheon, and the facility Quality Improvement Committee meeting. An integral factor in the success of the project was the support from MD/NPs, Director of Nursing, and Medical Director. The project was put on hold during Quarter 3 and part of Quarter 4 due to MDS 3.0 and facility software implementation, but has since been re-implemented. Currently, the project is running on all long term care units. We have had mixed feelings from the Station Managers when starting this project ranging from excitement to apprehension. However, once further into the project, the Station Managers have been favorable in every case and offer positive comments to their peers. They have gained knowledge in medication management and the significance of attempting non-pharmacological interventions prior to calling the MD/NP to ask for another medication.

The project has received favorable responses from the residents and family. In one instance, a family member offered gratitude to the Station Manager for taking the time to care about medication reduction and improving quality of life. In addition to the favorable responses, Saint Therese had no citations in F-Tag #329 during our annual state survey from 2010, even though this is now the most frequently cited F-Tag in the survey process.

**"Use of 9 or More Different Medications" (Federal Quality Indicator)**



The graph above depicts Saint Therese’s state percentile ranking for the Federal Quality Indicator *Use of 9 or More Different Medications*. The project began in the second quarter of 2010, and over the next several months, we have dramatically reduced our state percentile ranking, down to 4<sup>th</sup> in September.

Success of the Medication Reduction Project are measured in the following areas:

- 55 residents had medication reviews completed. Several more resident reviews are pending dialogue with MD/NP. All two hundred forty long term care residents will have had a chart

review upon completion of this Quality Improvement project

- 61 medications were discontinued for a total of 81 daily doses.

- The medications/frequency medication order was discontinued:

Multivitamins x11	Artificial Tears x2	Simethicone x1
Oscal x5	Potassium x2	Zaroxlyn x1
Tylenol x3	Tums x2	Coumadin x1
Lasix x3	Lisinopril x2	Glucotrol x1
Omeprazole x3	Catapress Patch x1	Guifensen x1
ASA x3	ES Tylenol x1	Simvast x1
Flonase x3	Allegra x1	Trazadone x1
Actonel x2	Claritin x1	Pulmicort x1
Prilosec x2	Vitamin B12 x1	Refresh Eye Drops x1
Celexa x2	Senokot x1	Cranberry Tabs x1

- Several Accuchecks were reduced in frequency, discontinued entirely or discontinued in exchange for an every three month Hgb A1C. There has not been a need to resume more frequent blood glucose monitoring in any of the residents with reductions in blood glucose monitoring.
- 49 Treatments or Standard of Care orders were discontinued. Some examples included in this category of measurement were as follows: MD/NP orders to encourage fluids every shift and document intake for conditions that have since resolved, MD/NP medicated lotion orders when the trial of house lotion applied during cares was effective, MD/NP orders for monitoring of condition every shift such as shortness of breath, bowel sounds for conditions that have since resolved.
- 91 PRN medication orders were discontinued either due to non-use or ability to use a non-pharmacological approach.
- 24 medications had reductions in frequency administered (ie: QID to BID, QD to weekly etc.). Some of the medications included in the frequency reductions were as follows: Oxycodone, Celexa, Atenolol, Carvedilol, Naprosyn, Tylenol, Colace. In one case, a resident was receiving pain medications at six scheduled times a day. Upon review, this schedule was condensed to twice a day with no negative outcome to the resident.
- 12 medications had daily dose reductions. Some of the medications included in the dose reductions were as follows: Hctz, Trazadone, Lisinopril, Tylenol Extra Strength and Norvasc.
- 1 resident on Procrit had hemoglobin range re-evaluated and the frequency of Procrit administration was decreased with no negative outcome to the resident.
- In all the reductions noted above, only two medications needed to be reordered due to failed trials. These medications included Tranxene when resident redeveloped symptoms that

medication was originally ordered to treat and a drug to control hypertension.

- There were approximately 570 medication and treatment orders reviewed from the first fifty five residents. Of the total number of orders reviewed, forty two percent of the MD/NP orders had changes made in the nature of discontinuing, frequency and/or dose reduction.

A cost analysis was completed by facility pharmacist upon completion of the first twenty-four resident reviews. By using the number/types of medications either discontinued, reduced in doses or reduced in frequency, it was determined that the medication reduction project had an estimated cost savings of \$500.00/month for the first twenty four residents reviewed.

Additional things were found upon chart reviews that needed correction in order to remain in survey compliance and follow the resident plan of care. The Station Manager was responsible for ensuring this follow up was completed.

The following are some examples from the facility Medication Reduction Quality Improvement Project of how the six guidelines from F-Tag #329 assisted with identifying recommendations to reduce or discontinue medications.

#### **1. Excessive Dose or Duplicate Therapy**

A chart review found a resident on twenty-three daily medications. The resident is cognitively intact with multiple somatic complaints, and the resident's family insisted on antipsychotic medication treatment for distressing behaviors that only the family witnessed. The recommendation was to ask the consultant pharmacist to review the chart and ask MD/NP for detailed documentation to support resident polypharmacy and duplicate therapy. In this case, we were more successful with gaining the needed documentation to support the rationale for duplicate therapy than reducing medications.

A second example, found a resident to be on duplicate therapy for diabetic medication and antihypertensive medications. Documentation revealed chronically low blood sugars and low blood pressure. The resident also had an identified

behavior of isolation in room and low energy for which an antidepressant was ordered. The recommendation after the chart review was to try reducing the diabetic and blood pressure medications, and monitor for improvement in mood, with the intent of reducing the potential need for the added antidepressant. The blood pressure and diabetic medications were effectively reduced, but the resident discharged prior to GDR trial with antidepressant.

## **2. Excessive Duration**

An end stage dementia resident was found to be on long term Coumadin use. This resident had a long history of falls with potential for injury, in addition to, bruising. The resident was physically resistive to INR draws. The MD/NP was asked to re-assess risks and benefits of Coumadin use. It was found the reason for Coumadin was due to a deep vein thrombosis (DVT) several years prior with the original intention to keep the resident on Coumadin for one year past the DVT and discontinue if no further DVT activity was noted. In this case the resident's Coumadin was discontinued.

## **3. Medications Given Without Adequate Monitoring**

Several residents were started on multivitamins during a change in condition, weight loss or skin alteration. When the condition resolved there was no re-evaluation as to whether the multivitamin could be discontinued. This was a particular focus for residents who required their medication to be crushed.

## **4. Medications Given Without Adequate Reasons for Use**

Chart reviews for several residents found the use of diuretics with no symptoms of edema over the past year, no respiratory problems, and weights and vital signs had been stable. Some of these residents on diuretics had fall histories related to toileting and one resident required medication due to distressing behavior of frequent requests to use the bathroom. The residents under review were found to have no gradual dose reductions over the past year, so recommendations were made to MD/NP to try discontinuing or reducing diuretic. Monitoring was put in place after change in diuretic order to monitor for adverse effects of medication change for an identified time frame. Only one diuretic needed to be restarted due to an increase in edema.

## **5. Presence of Adverse Consequences Which Indicate the Dose Should be Reduced or Discontinued**

A non-ambulatory, end stage dementia resident was receiving Actonel, but due to kyphotic condition was not able to sit upright after ingestion. The resident had a difficult time consuming adequate liquid after administration of medication. The recommendation to the MD/NP was to discontinue medication due to potential adverse effects and it was discontinued.

Another resident was on Claritin because family reported history of allergies and Artificial Tears TID for dry eyes. Since admission to long term care, the resident seldom went outdoors and displayed no allergy symptoms. Claritin was discontinued with no adverse effects and subsequently the Artificial Tears was also discontinued.

## **6. Any Combination of Any of the Above Guidelines**

A resident was on duplicate allergy medications that were started prior to long term care placement. The recommendation was to discontinue all allergy medications due to inadequate reason for use as resident displays no symptoms. In addition, the resident had end stage dementia and was unable to follow directions for administering Flonase correctly. In this case, all allergy medications and Flonase were discontinued and staff no longer had to spend excessive time to convince resident to attempt to cooperate with Flonase administration.

The Saint Therese Medication Reduction Quality Improvement Project has proven to be beneficial in improving resident quality of life as evidenced by the significant number of medications and treatments discontinued, dosages reduced, frequencies reduced, and prns discontinued under the guidance of F-Tag #329 *Unnecessary Medications*. The facility goal for 2011 will be to continue with this medication reduction project for all long term care residents while providing education to unit nurses on how to sustain this project and continue to improve resident quality of life.

## About the Author

Sandra Delgehausen is Assistant Director of Nursing and Quality Improvement Director at St. Therese Long Term Care Facility, New Hope, MN.

## References

1. CMS FTag #329 Unnecessary Medications

## President's Column

### By John Mielke, MD

Adaptive problem solving leaders identify when the “heat is too high” for a key stakeholder. If a key player is already overwhelmed by their job, they will be unable to attend to the necessity of change. Val Ulstad says they may, “Quit and stay”. In other words, they continue to show up for work but fail to engage, remain passive, or even counterproductive to the change necessitated by the problem solving efforts of the team. Recognizing these overheated team members is critical for leading change.

Sometimes the overwhelmed staff person only becomes apparent after more is asked of them. Watching people as the work of change progresses will give you clues about who is engaging in “work avoidance”. You may assume they don't care about the process, or are intentionally sabotaging the work of the group. But it is critically important to avoid that assumption. The most important strategy for determining this problem – the overheated, work avoidant team member – is to simply ask. And listen. Carefully. And pay attention.

When you make the diagnosis – what's the treatment? As in medicine, prevention is better than the cure. Developing a positive, encouraging atmosphere is better than damage control when things have turned sour and negative. Creating a holding environment within the productive range by keeping the work meaningful and manageable is therapeutic.

### Reducing the Heat in a Work Group Includes:

1. Validate feelings, acknowledge loss (all change involves loss)
2. Be honest about the challenges, authenticity always helps!
3. Simplify and clarify the task
4. Thank people for their efforts

5. Recognize those groups contributing to the change process
6. If necessary, dial back the speed of change, delaying timetables, reducing targeted goals
7. Allocate more resources
8. Accept more of the task yourself
9. Tell stories – gets at the emotional context for people
10. “Go slow to go fast” (Losing highly engaged people by misjudging their commitment and pushing too hard is a leadership tragedy.)

I have found myself telling the following story to nurses in many different LTC settings, as a way of acknowledging the difficulty of their work AND encouraging them in the work.

*I met a nurse who had become a nurse practitioner in her mid fifties after years of holding a very responsible and challenging job. She managed a transplant unit on the University hospitals. I asked her, “Why in the world would you leave such an important position to come and work in long term care?”*

*She smiled and said, “I wanted something more challenging.”*

*“Did you find it?”*

*She smiled again, “Absolutely, in spades!”*

It seems to help nurses, especially those new to long-term care, to hear that this work is complex, challenging and multi-dimensional. They are not here because they can't get a job in a hospital. They are here because they care deeply about the elderly and want to meet the needs of the frailest and most needy patients in a holistic way. This story surprises many of them. I hope that it also provides encouragement to do the hard work needed to advocate for our residents.

So, look for those stories in your own settings. And share them with staff who are likely “overheated” with responsibilities. Leadership is made of this sort of stuff.

11-17-2010

Tip from Other Journal

# Atypical Fractures as a Potential Complication of Long-term Bisphosphonate Therapy

JAMA, October 6, 2010—Vol 304, No. 13

“Case reports and limited clinical series over the past 5 years have raised concern that prolonged bisphosphonate therapy (greater than 5 years) may suppress bone remodeling to the extent that normal bone repair is impaired resulting in increased fracture risk. Fractures potentially resulting from suppressed bone turnover have been described as ‘atypical’ affecting sites such as the subtrochanteric femur that are infrequently affected by osteoporotic fractures.” “Current strategies include fracture risk assessment, targeting bisphosphonate therapy appropriately to individuals at increased risk of fracture, (and) considering a 12-month interruption in therapy after 5 years in patients who are clinically stable...”



*Introducing the newest addition to the Saint Therese family...*



**SAINT THERESE**  
*at ST. ODILIA*


*Providing Palliative Care with the Comforts of Home*

**Benefits**

- Private care suites with bathrooms in an 8-bedroom home
- 24-hour nursing support
- Pastoral care programming for Catholic and non-Catholic residents and their families
- Therapeutic whirlpool tub
- Peaceful outdoor space and beautiful, wooded views
- Quiet and serene location, still close to St. Odilia Catholic School and Church
- Ongoing bereavement support for family after the death of a loved one



*Located in a beautiful home on the St. Odilia Campus in Shoreview.*  
Call 763.531.5098 to learn more.



[www.sttheresemn.org](http://www.sttheresemn.org)

Providing nonprofit, faith-based care and housing to seniors since 1968.



Minnesota Medical Directors Association

P. O. Box 24475  
Minneapolis, MN 55424  
Phone: 952-929-9398  
Fax: 952-929-4363

Website: [www.minnesotageriatrics.org](http://www.minnesotageriatrics.org)  
Executive Director: Rosemary Lobeck  
Editor: C. Dwight Townes, M.D.  
E-mail: [rlobeck@mnmeddir.org](mailto:rlobeck@mnmeddir.org)

*Topics in Geriatric Medicine and Medical Direction* is produced and Published bimonthly by the Minnesota Medical Directors Association.

## Inside

**Medication Reduction to Improve Resident Quality of Life** Page 1

**President's Column** Page 6

**Save the Date:**  
**MMDA Fall Conference:**  
**October 27-28, 2011**  
**Marriott Minnetonka Hotel, Minnetonka**

All rights reserved. Copyright Minnesota Medical Directors Association. Topics may be copied only with prior permission. Contact MMDA at 952-929-9398.

Topics in Geriatric Medicine and Medical Direction, the peer reviewed bimonthly publication of the Minnesota Medical Directors Association, is committed to publishing quality manuscripts representing scholarly inquiry into all areas of geriatrics and long term care medical direction and practice. We encourage submissions of geriatric and long term care research, best practices, reviews of literature and essays.

Manuscripts should be emailed to [rlobeck@mnmeddir.org](mailto:rlobeck@mnmeddir.org) and [cdwighttownes@hotmail.com](mailto:cdwighttownes@hotmail.com). The first page should include the title and a 50 to 60 word abstract. Manuscripts should range around 1800 to 3000 words.

Review Policy: Manuscripts will be reviewed by at least two members of the review board whose evaluations will provide a basis for the publication decision. We are committed to a rapid review process.