

**ADL FUNCTIONAL/REHABILITATION POTENTIAL RAP KEY**

*(For MDS Version 2.0)*

**TRIGGER — REVISION**

**GUIDELINES**

**ADL TRIGGER A (Rehabilitation)**

*Rehabilitation/restorative plans suggested if one or more of following present:*

- Bed Mobility — not independent  
[G1aA = 1-4]<sup>(a)</sup>
- Transfer — not independent  
[G1bA = 1-4]
- Walk in room — not independent  
[G1cA = 1-4]
- Walk in corridor — not independent  
[G1dA = 1-4]
- Locomotion on unit — not independent  
[G1eA = 1-4]
- Locomotion off unit — not independent  
[G1fA = 1-4]
- Dressing — not independent  
[G1gA = 1-4]
- Eating - not independent  
[G1hA = 1-4]
- Toilet Use — not independent  
[G1iA = 1-4]
- Personal Hygiene — not independent  
[G1jA = 1-4]
- Bathing — not independent  
[G2A = 1-4]
- Resident believes he/she capable of increased independence in at least some ADLs  
[G8a = checked]
- Staff believe resident capable of increased independence in at least some ADLs  
[G8b = checked]

**ADL TRIGGER B (Maintenance)**

*Maintenance/complication avoidance plan suggested if:* [Note — when both triggers present (A & B), B takes precedence in the RAP Review]

- Severely impaired decision making [B4 = 3]<sup>(b)</sup>

<sup>(a)</sup> Note: Codes 2,3, and 4 also trigger on the Pressure Ulcer RAP

<sup>(b)</sup> Note: This code also triggers on the Cognitive Loss/Dementia RAP

*Confounding problems that may require resolution:*

- Delirium [B5]
- Persistent mood problem [E2]
- Decline in mood [E3]
- Daily behavioral symptoms [E4]
- Decline in behavior [E5]
- Unstable/acute health problem [J5a,b]
- Use of Psychoactive medications [O4a,b,c,d]
- Resident status deteriorated since last assessment [Q2]

*Clarifying issues to be considered:*

- Ability to make decisions [B4]
- Prior improvement in cognition, mood, behavior, or ADLs [B6; E3, E5; G9]
- Communication [C]
- Vision [D]
- Test for balance, functional limitation in range of motion [G3, G4].

*Complete ADL Supplement Part 1 for all triggered residents (see RAI Training Manual).*

*For a resident with rehabilitation potential, complete ADL Supplement Part 2 (see RAI Training Manual).*

- Staff/resident believe resident could be more independent [G8a,b]

**RESIDENT ASSESSMENT PROTOCOL: URINARY INCONTINENCE  
AND INDWELLING CATHETER****I. PROBLEM**

Urinary incontinence is the inability to control urination in a socially appropriate manner. Nationally, 50% of nursing home residents are incontinent. Incontinence causes many problems, including skin rashes, falls, isolation, and pressure ulcers, and the potentially troubling use of indwelling catheters. In addition, continence is often an important goal to many residents, and incontinence may affect residents' psychological well-being and social interactions. Urinary incontinence is curable in many elderly residents but realistically not all will benefit from an evaluation. Catheter use increases the risk of life-threatening infections, bladder stones and cancer. Use of catheters also contributes to patient discomfort and the needless use of toxic medications often required to treat the associated bladder spasms. For many (but not all) residents, urinary incontinence is curable, and safer and more comfortable approaches are often practical for residents with indwelling catheters.

**This RAP, the purpose of which is to improve incontinence, goes far beyond bladder training. Even if a patient is not believed to be a candidate for bladder training, the assessment should still be done since many other treatable conditions may be found, the treatment of which will not only improve incontinence, but the overall quality of life for the patient.**

The goal of this assessment is to detect reversible causes of incontinence, such as infections and medications, and situationally induced incontinence; to identify individuals whose incontinence is caused by harmful conditions such as bladder tumors or spinal cord diseases; and to consider the appropriateness of catheter use. Staff judgment is clearly required to realize these aims. Detailed instructions are provided to facilitate this clinical process.

Continence depends on many factors. Urinary tract factors include a bladder that can store and expel urine and a urethra that can close and open appropriately. Other factors include the resident's ability (with or without staff assistance) to reach the toilet on time (locomotion), his/her ability to adjust clothing so as to toilet (dexterity), cognitive function and social awareness (e.g., recognizing the need to void in time and in an appropriate place), and the resident's motivation. Fluid balance and the integrity of the spinal cord and peripheral nerves will also have an effect on continence. Change in any one of these factors can result in incontinence, although alterations in several factors are common before incontinence develops.

**II. TRIGGERS**

*Incontinence care plan suggested if one or more of following present:*

- Incontinent 2+ times a week  
[H1b = 2, 3 or 4]
- Use of external (condom) catheter  
[H3c = checked]
- Use of indwelling catheter  
[H3d = checked]
- Use of intermittent catheter  
[H3e = checked]
- Use of pads/briefs  
[H3g = checked]

Urinary Incontinence RAP (1 of 9)

### III. GUIDELINES

For residents with incontinence (including those with condom catheters), all MDS items described in Section A should be addressed, unless exclusionary criteria have been met. If incontinence persists, complete Section B and, if necessary, Section C. For residents with indwelling catheters, first complete Sections A and B and then complete Section D.

#### A. ITEMS NECESSARY TO EVALUATE INCONTINENCE OR NEED FOR CATHETER

Review the reversible problems listed on the RAP KEY. Virtually all are easily diagnosed, and their treatment will improve not only incontinence but functional status as well. Also, most of these factors can be identified by a nurse, but some will take a physician's order to carry out.

##### *UTI.*

Urinary tract infections are common causes of incontinence, especially new incontinence. Therefore, they should be looked for in all residents. If a clean catch urine is not feasible and the resident both has no memory recall and requires at least extensive assistance in self-transfer you may choose to forego catheterization to obtain a specimen, since identification and treatment of UTIs in this population has not been shown to make a difference.

- Send a clean catch or sterile urine specimen for microscopic analysis. If  $>5$  WBC are found, send a fresh and sterilely obtained specimen for urine culture. If UTI is found, consider treatment.
- For residents with an indwelling catheter, a new catheter should be sterilely inserted to obtain the specimen.

##### *Fecal Impaction.*

Impaction is very common and can cause incontinence by preventing the bladder from emptying well. Thus, check for impaction in all residents who are incontinent.

- To find bowel impaction, insert a gloved finger into resident's rectum.
- The finding of no stool or small amount of soft stool indicates that impaction is unlikely to be the cause of incontinence. A record demonstrating that the resident has recently passed stool is not sufficient to rule out bowel impaction.

##### *Delirium.*

If present, this is the most important problem. Often when delirium is treated, incontinence will resolve. In the meantime, regular toileting will help.

##### *Lack of toilet access.*

Daily use of restraints can result in a resident's inability to get to the toilet; quick staff response is necessary. The toilet may also be too far away for a resident who does not get adequate warning (e.g., there may not be

a toilet room near the activities room). Environmental modifications such as a bedside commode, urinal, or a room closer to the toilet can be useful. To remain continent, residents may also require more staff support, such as more timely responses to requests for assistance.

*Immobility.*

Immobility correlates highly with incontinence in many nursing home residents. Improving the resident's ability in transferring, locomotion and toileting will often reduce incontinence, as will providing timely staff assistance when needed.

*Depression.*

Severe depression can result in loss of the motivation to stay dry. Prompted toileting is often helpful as a means of positive reinforcement.

*Congestive Heart Failure (CHF) or Pedal Edema.*

CHF and pedal edema are especially troublesome when the resident is lying down: diuresis overwhelms the bladder. Treatment of these conditions is not difficult and will improve both incontinence and functional status.

*Recent Stroke.*

Once the resident is stable, delirium has cleared, and locomotion has improved, continue workup if incontinence persists. Most stroke patients are continent at this point.

*Diabetes Mellitus.*

Diabetes with persistently high blood sugar causes fluid loss that can cause or worsen incontinence. Treatment will improve incontinence and functional status.

*Medications.*

Many medications can affect the bladder or urethra and result in incontinence. Physicians would usually discontinue suspect medication if possible, weighing the risks and benefits of doing so. For instance, where a calcium channel blocker is used for mild hypertension, another medication might be easily substituted; a medication for arrhythmia, however, might not have an appropriate substitute.

- Review all medications - regularly prescribed, occasional or "PRN", and any nonprescribed ("over-the-counter") medications.

Medications that can affect continence include the following classes and types of drugs:

1. Diuretics, especially those that act quickly, such as furosemide (Lasix), bumetanide (Bumex), and metolozone (Zaroxilyn), and, less frequently, thiazide agents such as hydrochlorothiazide.

2. Sedative hypnotics, i.e., sleeping pills and antianxiety drugs such as diazepam (Valium), lorazepam, Xanax, Halcion, and Dalmane.
3. Any drug with anticholinergic properties:
  - Antipsychotics (e.g., Haldol, Mellaril)
  - Antidepressants (e.g., Elavil, Triavil)
  - Narcotics (e.g., Morphine, Dilaudid, Darvon)
  - Medication for Parkinson's disease (except Sinemet and Deprenyl)
  - Disopyramide
  - Antispasmodics (e.g., Donnatal, Bentyl)
  - Antihistamines (e.g., medications for colds)
4. Calcium channel blockers (e.g., verapamil, nimodipine, nifedipine, and diltiazem).
5. Drugs that affect the sympathetic nervous system:
  - Alpha blockers (e.g., prazosin and phenoxybenzamine)
  - Alpha stimulants (e.g., ephedrine, pseudoephedrine, phenylpropanolamine, and nosedrops)

#### B. OTHER POTENTIAL CAUSES OR FACTORS CONTRIBUTING TO INCONTINENCE OR USE OF CATHETERS

Much of the information asked for above will appear in a completed MDS. However, other items of information should be obtained and reviewed if incontinence persists. Identification and treatment of these factors will frequently not only improve incontinence, but may prevent further deterioration such as paralysis. However, in the resident who both has no memory recall, requires at least extensive assistance in self-transfer, and is free of related pain, there is, as of yet, no evidence that identification and treatment of such factors would benefit the resident .

##### *Pain*

Pain in the bladder, related to urination, is a distinctly rare and abnormal symptom in the incontinent patient, and often indicates another pathological process, which may be treatable. Physician evaluation is recommended.

##### *Excessive or Inadequate Urine Output.*

If daily urine output is less than 1 liter, incontinence may worsen because of very strong, concentrated urine. A daily output over 1.5 liters can overwhelm the bladder. If present, the identification of the underlying cause of the high urine output (e.g., diabetes, high calcium, or excessive fluid intake) is required before restricting fluids.

- The amount of fluid excreted daily should be measured for 1 to 2 days. This can be done using a voiding record or, if patient is severely incontinent, by inserting a *temporary* catheter.

***Atrophic Vaginitis.***

Caused by reduced amount of the female hormone estrogen, this condition causes or contributes to incontinence in many women.

- Examine vagina for evidence of estrogen deficiency.

Optimally, a pelvic exam checks for signs of atrophic vaginitis.

If a resident is impaired, or appropriate equipment is not readily available, an exam may be done in the resident's bed by spreading the labia and looking inside for redness, dryness, pinpoint hemorrhages, or easy bleeding.

- Pain or irritation during the insertion of a catheter is another useful sign of the condition (catheterization normally may be uncomfortable, but should not be painful).
- Atrophic vaginitis can be treated with a low dose of oral conjugated estrogens. Contraindications to estrogen therapy include a history of breast or endometrial cancer.

***Abnormal Lab Values.***

Several conditions detectable only by laboratory tests can cause incontinence. These include high blood calcium or glucose and Vitamin B12 deficiency. It is also important to check the blood urea nitrogen (BUN) or creatinine because some causes of incontinence also can damage the kidneys. All of these tests should have been done within the last 60 days, except the B12, which should have been checked within the past 3 years.

***Serious Conditions That Cause or Accompany Incontinence (To Be Considered By Primary Doctor).***

A doctor or a nurse practitioner can identify potentially life-threatening conditions that cause or accompany urinary incontinence. These include bladder cancer or bladder stones, prostate cancer, spinal cord or brain lesions (such as slipped discs and metastatic tumors), poor bladder compliance, and tabes dorsalis.

- Bladder cancer or stones are suggested by the presence of any amount of blood in the urine (even in microscopic amounts) without evidence of UTI. To investigate for bladder cancer, the first morning urine is sent for 2 or 3 days for cytology examinations. Residents more likely to have bladder cancer are men, smokers, and those with suprapubic pain or discomfort, a history of work exposure to certain dyes, or recent onset of urge incontinence. The physician will decide who is worked up or referred to a urologist.
- Suspected prostate cancer can be detected by a rectal exam.
- Spinal cord diseases are detected by a neurological exam.
- Decreased bladder compliance can result in damage to the kidneys and should be suspected in residents with a history of conditions that result in decreased bladder compliance (pelvic radiation therapy, abdominal/pelvic resection, radical hysterectomy or prostatectomy, or spinal cord disease).
- Another cause of incontinence is tabes dorsalis (an advanced stage of syphilis), which is treatable with antibiotics.

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### C. FINAL EVALUATION IF INCONTINENCE PERSISTS

After the above causes of easily treatable incontinence have been eliminated and most serious underlying conditions have been investigated, conclude the evaluation with an assessment of the four causes of incontinence that are due to abnormalities within the bladder itself. The following section first describe these abnormalities and then describes the tests to detect their presence. A variety of treatment options is available for each type of incontinence, including treatment and care plans appropriate for every resident. In each case, the care plan can be tailored to the needs and characteristics of the resident with dementia, immobility, etc. Notably, bladder training and medications have been shown to significantly improve incontinence in even severely demented residents. The options are discussed in full detail in the educational material.

**Exclusions:** Although demented residents have been shown to benefit from targeted therapy, certain patients have a low probability of responding. Therefore, if a resident has no memory recall, is extensively dependent in self-transfer, and the facility's ability to toilet the resident on a regular schedule is limited, then the patient may not benefit from this part of the evaluation, and should be managed with pads, frequent turning and changing, or external catheters. Indications for an indwelling catheter are: the resident is in a coma or has terminal illness, a stage 3 or 4 pressure ulcer in an area affected by the incontinence, untreatable urethral blockage, the need for exact measurement of urine output, a history of being unable to void after having a catheter removed in the past, or a resident with quad/paraplegia who failed a past attempt to remove a catheter.

The bladder abnormalities can be simply understood: either (1) the bladder contracts when it should not ("uninhibited bladder"), abruptly soaking the patient ("urge incontinence"); or (2) the bladder fails to contract when it should ("atonic" or underactive bladder), so that urine builds up and spills over as "overflow incontinence." Alternatively the urethra, through which the bladder empties, is either (3) blocked by an obstruction (e.g., a large prostate) or (4) unable to close tightly enough ("stress incontinence").

By doing a "stress test" and measuring the amount of urine that remains in the bladder after voiding (Post Void Residual – PVR) these conditions can be separated: the uninhibited bladder generally has little residual urine (< 100 ml) and a negative stress test, while the atonic bladder has a much larger residual (e.g., > 400 ml). Women with stress incontinence (it is rare in men) have < 100 ml residual urine and a positive stress test. Men with a blocked urethra (rare in women) have > 100 ml residual urine and a negative stress test.

#### *Post-Void Residual (PVR).*

The PVR (post-void residual) is the amount of urine left in the bladder after a void. Research has shown that many elderly people have large amounts left in the bladder after a void, even though they demonstrate no signs of this. That is, they do not feel full or uncomfortable, they have good urine output, and do not seem to have a large bladder by palpation or percussion. Also, in men, a high PVR can signal a variety of problems, and in both men and women, knowledge of the PVR can help guide the selection of medication. Therefore, a PVR should be determined in all patients who reach this point of the evaluation. In some cases, a physician's order may be necessary to perform a PVR. If the physician chooses not to allow this, it should be documented in the chart.

- When the resident feels relatively full, he/she should void as normally as possible into a commode, bedpan, urinal, or a toilet equipped with a collection device (hat). Measure volume voided. Within 15 minutes of voiding, under sterile conditions, insert a nonpermanent catheter to measure the residual volume (PVR). Adding the volume voided to PVR gives the Total Bladder Volume (TBV).

Attention to several points will ensure that the test is done correctly. First, if the resident cannot void intentionally, do the test after an episode of incontinence. Second, after allowing the urine to drain, apply gentle pressure with your hand to the abdomen to increase the drainage. When the urine has stopped draining, withdraw the catheter slowly, continuing to press on the lower abdomen. If possible, have the resident sit up during the catheter

withdrawal. Under sterile conditions, the risk of causing an infection is under 3%. Residents with known valvular heart disease (who receive antibiotic prophylaxis for dental work) probably should receive a dose of antibiotics before the PVR is checked.

***Kidney Ultrasound Test for Men With a PVR Greater Than 100 ml.***

- Ultrasound of the kidneys is indicated in male residents with a PVR greater than 100 ml to rule out hydronephrosis (inability of the kidneys to drain properly), which could be due to bladder obstruction and result in preventable kidney damage.

This test has no risks (compared to the risk of the dye injection in an IVP). Evidence of urine backing into the kidneys strongly suggests the need for urologic referral; if this is not done, the resident needs chronic indwelling catheterization.

***Bladder Stress Test for Female Patients.***

- ***Bladder Stress Test.*** When the resident has a relatively full bladder, *but not a strong urge to void*, have her stand or assume as upright a position as possible, relax, and cough vigorously or strain. The test is positive if there is immediate leakage similar in volume and circumstance to usual incontinence. The stress test is negative if there is a delay of more than 5 seconds, no leakage, or leakage of only a few drops, or if it is dissimilar to the usual volume and circumstance of leakage.
- Measure void plus PVR as described above (i.e., calculate Total Bladder Volume).
- ***Repeat Stress Test.*** If the bladder stress test is negative AND the Total Bladder Volume is less than 200 ml, another test is needed for verification. Insert a sterile catheter into the bladder (preferably do this while the catheter for PVR measurement is still in the bladder) and fill it with at least 200 ml of sterile water, if possible. Remove the catheter, have the patient stand up (if possible), and repeat the stress test as above.

**D. FINAL EVALUATION FOR RESIDENTS WITH INDWELLING CATHETERS**

After the resident with an indwelling catheter has been treated for infection and all the other treatable conditions listed above, a voiding trial can be attempted – unless the resident has terminal illness, stage 3 or 4 pressure ulcers, or untreatable urethral blockage. This trial may reveal that the catheter is not necessary after all.

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**Exclusions:** The resident is in a coma or has terminal illness, a stage 3 or 4 pressure ulcer in an area affected by the incontinence, untreatable blockage, the need for exact measurement of urine output, a history of being unable to void after having a catheter removed in the past, or a resident with quad/paraplegia who failed a past attempt to remove a catheter.

- If appropriate, institute a voiding trial.

- (1) Before removing the catheter, record urine output every 6 hours for one or two days. Use this record to plan when to remove the catheter so that the expected urine will not be over 800 mls during the time of the voiding trial.
- (2) Remove catheter and observe. For example, if the resident usually puts out 500 ml on the day shift, remove the catheter at the beginning of that shift and observe; if resident has not voided by the end of the shift, wait until the volume gets higher, but do not exceed a volume of 800 ml.
- (3) If resident is able to void, check the PVR, as detailed in Section C.

- If volume is greater than 400 ml, reinsert indwelling catheter permanently or until resident can be referred to a urologist.
- If PVR is between 100 and 400 ml, observe resident carefully as urinary retention may redevelop over a few days to a few weeks. If not, check for presence of incontinence: if present, complete Section C (above).
- If PVR is less than 100 ml, check for presence of incontinence; if present, complete Section C (above).

- (4) If resident has not voided by the time the expected volume is 800 ml, and there is no sensation of fullness, no urge to void, and no void, reinsert an indwelling catheter and record the volume. Residents who fail the voiding trial need either urologic referral, if appropriate, or permanent catheterization.
- (5) If the resident has no memory recall, is unable to transfer independently, and has incontinence that is resistant to all therapy for more than 2 weeks after removing the catheter, a catheter may be reinserted if deemed appropriate by the staff.

## URINARY INCONTINENCE AND INDWELLING CATHETER RAP KEY

(For MDS Version 2.0)

### TRIGGER — REVISION

*Incontinence care plan suggested if one or more of following present:*

- Incontinent 2+ times a week  
[H1b = 2, 3 or 4]
- Use of external (condom) catheter  
[H3c = checked]
- Use of indwelling catheter  
[H3d = checked]
- Use of intermittent catheter  
[H3e = checked]
- Use of pads/briefs  
[H3g = checked]

### GUIDELINES

*Possible reversible problems to be reviewed in evaluating incontinence or need for catheter:*

- **Conditions:** Delirium [B5], Fecal Impactions [H2d], Depression [I1ee], UTI [I2j], Edema [J1g]
- **Environment:** Locomotion [G1c,d,e,f], Lack of access to toilet, Barriers [observation], Restraints [P4]
- **Diagnoses:** Diabetes [I1a], CHF [I1f], CVA [I1t], Parkinson's [I1y],
- **Medications:** Diuretics [O4e], Parkinson's meds, Disopyramide, Antispasmodics, Antihistamines, Drugs that stimulate or block sympathetic nervous system, Calcium channel blockers (verapamil, nifedipine, diltiazem), Narcotics [from record]
- **Psychoactive Medications:** Antipsychotics, Antianxiety, Antidepressants, Hypnotics, [O4a,b,c,d]

*Other potential factors contributing to incontinence or use of catheter:*

- **Conditions:** Pain [J2]; Excessive or inadequate urine output, Atrophic vaginitis, Cancer of bladder, prostate, brain, or spine, tabes dorsalis [from record or exam]
- **Abnormal Lab Values:** High blood calcium, High blood glucose, Low B<sub>12</sub>, High BUN or Creatinine [P9; from record]

*Final evaluation if incontinence persists:*

- **Specific Tests:** Post Void Residual, bladder stress test for females, reflux test (kidney ultrasound for males with PVR > 100 ml.) [Note — Tests not indicated when Comatose [B1] or when No memory recall [B3e] AND Dependent in Transfer, Locomotion [G1b,c,d,e,f] are both present]

*Final evaluation for residents with indwelling catheters:*  
If indwelling catheter [H3d], do Voiding Trial unless Untreatable urethral blockage [I3], terminal illness [J5c], or stage 3/4 pressure ulcer [M2a] present

## RESIDENT ASSESSMENT PROTOCOL: PSYCHOSOCIAL WELL-BEING

## I. PROBLEM

Well-being refers to feelings about self and social relationships. Positive attributes include initiative and involvement in life; negative attributes include distressing relationships and concern about loss of status. On average, 30% of residents in a typical nursing facility will experience problems in this area, two-thirds of whom will also have serious behavior and/or mood problems. When such problems coexist, initial treatment is often focused on mood and behavior manifestations. In such situations, treatment for psychosocial distress is dependent on how the resident responds to the primary mood/behavior treatment regimen.

## II. TRIGGERS

*Well-being problem (P) or need to maintain psychosocial strengths (S) suggested if one or more of following present:*

- Withdrawal from care/activities (*Problem*)\*  
[E1o = 1,2]
- Conflict with staff (*Problem*)  
[F2a = checked]
- Unhappy with roommate (*Problem*)  
[F2b = checked]
- Unhappy with other resident (*Problem*)  
[F2c = checked]
- Conflict with family/friends (*Problem*)  
[F2d = checked]
- Grief Over Lost Status/Roles (*Problem*)  
[F3b = checked]
- Daily routine is very different from prior pattern in the community (*Problem*)  
[F3c = checked]
- Establishes own goals (*Strength*)  
[F1d = checked]
- Strong identification with past (*Strength*)  
[F3a = checked]

\* Note: This item also triggers on the Mood State RAP.

## III. GUIDELINES

Sequentially review the items found on the RAP KEY.

*Confounding Problems.*

Treatment for mood/behavior problems are often immediately beneficial to well-being.

Psychosocial Well-Being RAP (1 of 3)

- Does the resident have an increasing or persistently sad mood?
- Does the resident have increasing frequency or daily disturbing behavior?
- Did the mood/behavior problems appear before the reduced sense of well-being?
- Has the resident's condition deteriorated since last assessment?
- Have ongoing treatment programs been effective?

***Situational Factors That May Impede Ability to Interact With Others.***

Environmental and situational problems are often amenable to staff intervention without the burden of staff having to "change the resident."

- Have key social relationships been altered/terminated (e.g., loss of family member, friend or staff)?
- Have changes in the resident's environment altered access to others or to routine activities -- for example, room assignment, use of physical restraints, assignment to new dining area?

***Resident Characteristics That May Impede Ability to Interact With Others.***

These items focus on areas where the resident may lack the ability to enter freely into satisfying social relationships. They represent substantial impediments to easy interaction with others and highlight areas where staff intervention may be crucial.

- Do cognitive/communication deficits or a lack of interest in activities impede interactions with others?
- Does resident indicate unease in social relationships?

***Lifestyle Issues.***

Residents can withdraw or become distressed because they feel life lacks meaning.

- Was life more satisfactory prior to entering the nursing facility?
- Is resident preoccupied with the past, unwilling to respond to the needs of the present?
- Has the facility focused on a daily schedule that resembles the resident's prior lifestyle?

***Additional Information to Clarify the Nature of the Problem.***

Supplemental assessment items can be used to specify the nature of the well-being problem for residents for whom a well-being care plan is anticipated. These items represent topics around which to phrase questions and to establish a trusting exchange with the resident. Each item includes the positive and negative end of a continuum, representing the possible range that staff can use in thinking about these issues. Staff can use or not use the items in this list. For those items selected, the following issues should be considered:

- How do staff/resident perceive the *severity* of the problem?
- Has the resident ever demonstrated (while in the facility) *strengths* in the area under review?
- Are corrective strategies now being used? Have they been used in the past? To what effect?
- Is this an area that might be improved?

**PSYCHOSOCIAL WELL-BEING RAP KEY (For MDS Version 2.0)**

**TRIGGER — REVISION**

**GUIDELINES**

*Well-being problem or need to maintain psychosocial strengths suggested if one or more of following present:*

- Withdrawal from activities of interest (Problem)\*  
[E1o = 1, 2]
- Conflict with staff (Problem)  
[F2a = checked]
- Unhappy with roommate (Problem)  
[F2b = checked]
- Unhappy with other resident (Problem)  
[F2c = checked]
- Conflict with family/friends (Problem)  
[F2d = checked]
- Grief Over Lost Status/Roles (Problem)  
[F3b = checked]
- Daily routine is very different from prior pattern in the community (Problem)  
[F3c = checked]
- Establishes own goals (Strength)  
[F1d = checked]
- Strong identification with past (Strength)  
[F3a = checked]

\* Note: This item also triggers on the Mood State RAP.

*Confounding problems:*

- Increasing/persistent sad mood [E2, E3]
- Increasing/daily disturbing behavior [E4, E5]
- Resident's condition deteriorated since last assessment [Q2]

*Situational factors that may impede ability to interact with others:*

- Loss of family member, friend, or staff close to resident [F2f, from record]
- Initial use of physical restraints [P4]
- New admission [AB1, A4a], Change in room assignment [A2], or Change in dining location or table mates [from record]-

*Resident characteristics that may impede ability to interact with others:*

- Delirium/cognitive decline [B5, B6]
- Communication deficit/decline [C4, C5, C6, C7]
- Not at ease interacting with others [F1a]
- Locomotion deficit/use of wheelchair [G1c-f, G5b,c,d]
- Diseases that impede communication —  
Mental retardation [AB10], Alzheimer's [I1q], Aphasia [I1r], Other dementia [I1u], Depression [I1ee]
- Uninvolved in activities [N2, N4]

*Lifestyle issues:*

- Incongruence of current and prior style of life [AC, F3c]
- Strong identification with past roles/status [F3a]
- Length of time problem existed [from record]

*Supplemental problem clarification issues [from resident/family if necessary]:*

- Ability to relate to others
  - \_\_\_ Skill/unease in dealing with others
  - \_\_\_ Reaches out/distances self
  - \_\_\_ Friendly/unapproachable
  - \_\_\_ Flexible/ridiculed by others
- Relationships resident could draw on
  - \_\_\_ Supported/isolated
  - \_\_\_ Many friends/friendless
- Dealing with grief
  - \_\_\_ Moving through grief/bitter and inconsolable
  - \_\_\_ Religious faith/feels punished

## RESIDENT ASSESSMENT PROTOCOL: MOOD STATE

## I. PROBLEM

About 15% of nursing home residents will have a major depression; about 30% will exhibit noticeable symptomatic signs of a mood state problem. Such signs are often expressed as sad mood, feelings of emptiness, anxiety, or unease. They are also manifested in a wide range of bodily complaints and dysfunctions, such as loss of weight, tearfulness, agitation, aches and pains.

## II. TRIGGERS

*A mood problem suggested if one or more of following present:*

- Resident made negative statements  
[E1a = 1,2]
- Repetitive questions  
[E1b = 1,2]
- Repetitive verbalizations  
[E1c = 1,2]
- Persistent anger with self or others  
[E1d = 1,2]
- Self deprecation  
[E1e = 1,2]
- Expressions of what appear to be unrealistic fears  
[E1f = 1,2]
- Recurrent statements that something terrible is about to happen  
[E1g = 1,2]
- Repetitive health complaints  
[E1h = 1,2]
- Repetitive anxious complaints/concerns  
[E1i = 1,2]
- Unpleasant mood in morning  
[E1j = 1,2]
- Insomnia/change in usual sleep pattern  
[E1k = 1,2]
- Sad, pained, worried facial expressions  
[E1l = 1,2]
- Crying, tearfulness  
[E1m = 1,2]
- Repetitive physical movements<sup>(a)</sup>  
[E1n = 1,2]
- Withdrawal from activities of interest<sup>(b)</sup>  
[E1o = 1,2]

- Reduced social interaction  
[E1p = 1,2]
- Mood Persistence  
[E2 = 1, 2]

- (a) Note: This item also triggers on the Psychotropic Drug Use RAPs when psychotropic drug use present
- (b) Note: This item also triggers on the Psychosocial Well-Being RAP.

### III. GUIDELINES

Specific conditions stated below suggest the need for an altered/new care strategy. They are not exhaustive; other situations may arise in which staff decide that an altered care plan is necessary. The most obvious are instances of drug-induced side effects (addressed in Psychotropics Drug Use RAP). Residents whose mood problems do not call for care plan alterations are those with stable behavior and no unusual confounding problems.

Many of the questions and issues that follow relate to the MDS items listed on the Mood State RAP KEY. An altered care strategy is suggested when specified conditions are met.

*Indicators of the need to consider a new/altered care strategy:*

#### Has Mood Recently Declined or Problems Intensified?

- Were mood problems present 6 months ago?
- Does resident have a cyclic history of decline and improvement in mood state?
- Has loss of appetite with accompanying weight loss occurred?
- Has interest in activities declined, even though resident remains physically capable?

#### Mood Unimproved and Potentially Reversible Causes Present.

Resolution of delirium (fluctuating consciousness) behavioral, relationship and/or communication problems often affect a resident's mood state. Only when these conditions have been addressed can the nature of a mood problem be fully understood.

Also, consider the possible presence of other complicating factors, such as:

- Delirium
- Review recent changes in the life of the resident (e.g., death of a child, transfer to new environment, separation from loved ones, loss of functional abilities or change in body image, loss of autonomy)
- Review nature and intensity of relationship and/or behavior problems

ADL decline can be both a cause and a consequence of distressed mood. Reviewing the sequence of ADL and mood decline may be informative. In any case, where mood seems to impair ADL functioning, useful strategies include modifying the physical environment, separating the resident's performance of ADL activities into a series of subtasks, and using verbal reminders and cues.

- Review record to determine whether there has been a sudden onset or worsening of cognitive symptoms or communication skills following initiation of treatment (e.g., medications)
- Review to determine whether the resident is using any medications known to cause mood shifts, such as psychotropics; antihypertensives, such as clonidine (Catapres), guanethedine (Ismelin), methyldopa (Aldomet), propenral (Inderal), reserpine; cimetidine (Tagamet); cytotoxic agents; digitalis; immunosuppressives; sedatives; steroids; stimulants.

### **Mood Unimproved and Other Conditions to Consider**

The passive resident with distressed mood may be overlooked. Such a resident may be erroneously assumed to have no mood state problem.

- Does the resident show little/no initiative?
- Does he/she remain uninvolved in activities (alone or with others)?
- Is the sad mood persistent?

### ***Does Sad Mood Appear to Respond to Treatment (e.g., Drug Regimen)?***

- Has the mood problem remained relatively unchanged for the last 90 days, or has it improved with the current treatment program?
- Have there been cycles of decline and improvement?
- Is resident receiving medications and/or psychosocial therapy?

### ***Confounding Issues:***

### ***Are There Indications of New or Intensified Problems With Conditions That May Affect Mood Problems?***

These conditions include: Alzheimer's Disease, cancer, cardiac disease, metabolic and endocrine disorders (e.g., hypercalcemia, Cushing's disease, Addison's disease, hypoglycemia, hypokalemia, porphyria), Parkinson's disease, stroke, or other neurological disease, and thyroid disease.

## MOOD STATE RAP KEY (For MDS Version 2.0)

## TRIGGER — REVISION

*A mood problem suggested if one or more of following present:*

- Resident made negative statements  
[E1a = 1,2]
- Repetitive questions  
[E1b = 1,2]
- Repetitive verbalizations  
[E1c = 1,2]
- Persistent anger with self or others  
[E1d = 1,2]
- Self deprecation  
[E1e = 1,2]
- Expressions of what appear to be unrealistic fears  
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[E1m = 1,2]
- Repetitive physical movements<sup>(a)</sup>  
[E1n = 1,2]
- Withdrawal from activities of interest<sup>(b)</sup>  
[E1o = 1,2]
- Reduced social interaction  
[E1p = 1,2]
- Mood Persistence  
[E2 = 1, 2]

<sup>(a)</sup> Note: This item also triggers on the Psychotropic Drug Use RAPs when psychotropic drug use present

<sup>(b)</sup> Note: This item also triggers on the Psychosocial Well-Being RAP.

## GUIDELINES

*Indicators of the need to consider a new/altered care strategy:*

- Mood decline [E3]
- Mood unimproved [E3] AND reversible conditions present
  - Recent move into/within facility [AB1, Record]
  - Delirium [B5] Cognitive decline [B6]; Delusions [J1e], Hallucinations [J1i],
  - Communication decline [C7]
  - Grief due to loss [F2f]
  - ADL decline [G9] —
  - Use of meds known to cause mood shifts (e.g., antihypertensives, cimetidine, clonidine, cytotoxic agents, digitalis, guanethidine, immunosuppressive, methyldopa, nitrates, propranolol, reserpine, steroids, stimulants) [from record]
- Mood unimproved [E3] AND indication of problem with cognitive ability/memory, decision-making ability, and ability to understand [B2, B4; C6] AND ANY of following:
  - Little or no initiative shown [F1]
  - Little or no involvement in activities [N2]
  - No psychotropic medications [O4a,b,c]
  - No psychological therapy [P1be]
- Behavioral or Relationship problems present [E4; F2]

*Confounding issues to be considered:*

- Communication skills [C4, C5, C6]
- Diseases: Thyroid disease [I1b,c], Cardiac Disease [I1d - I1k], Neurological disease [I1q to cc], Anxiety [I1dd], Depression [I1ee], Manic depression [I1ff], Schizophrenia [I1gg], Cancer [I1pp], Other Psychosis [I3], Hypercalcemia, Cushing's, Addison's, Hypoglycemia, Hypokalemia, Porphyria [I3]

**RESIDENT ASSESSMENT PROTOCOL: BEHAVIORAL SYMPTOMS****I. PROBLEM**

Between 60% and 70% of residents in a typical nursing facility exhibit emotional, social, and/or behavior disorders; about 40% have purely behavioral symptoms (i.e., wandering, verbal abuse, physically aggressive and/or socially inappropriate behaviors). Residents with behavioral symptoms also frequently have other related problems. Over 80% of those who have behavioral symptoms will have some type of cognitive deficit; about 75% will have mood and/or relationship problems.

Behavioral symptoms are often seen as a source of danger and distress to the residents themselves and sometimes to other residents and staff. Nursing facilities often find such residents difficult to cope with, and physicians often seem unaware of the wide range of available treatment and management options. As a result, overuse of physical restraints or psychotropic drugs is not uncommon. About one-half of residents who exhibit "problem" behaviors will be physically restrained, and about one-half will receive psychoactive medications - antipsychotics (neuroleptics), antianxiety agents, and, to a lesser extent, antidepressants. These interventions, however, have potentially serious negative side-effects, and many nurses in nursing facilities report being uncomfortable using only physical restraints and/or psychotropics to manage residents with behavioral symptoms. As a result, there is an increasing trend toward using other interventions and treatments in addressing behavioral symptoms.

**II. TRIGGERS**

The MDS trigger items identify two types of residents for whom further review is suggested: residents who exhibit the behavioral symptoms of wandering, being verbally abusive, being physically aggressive and/or exhibiting socially inappropriate behavioral symptoms AND residents who have improved behavioral symptoms but who are receiving treatment or intervention that might mask manifestations of the behavior (e.g., decreased wandering because resident restrained).

*Review of behavior status suggested if one or more of following present:*

- Wandering\*  
[E4aA = 1,2,3]
- Verbally abusive  
[E4bA = 1,2,3]
- Physically abusive  
[E4cA = 1,2,3]
- Socially inappropriate  
[E4dA = 1,2,3]
- Resists Care  
[E4eA = 1,2,3]
- Behavior improved  
[E5 = 1]

\* Note — This Item also triggers on the Fall RAP

Behavioral Symptoms RAP (1 of 6)

*Determine the Ways in Which Behavior Problems Impinges on Other Functioning.*

Understanding that a behavior can - but does not always - interfere with a resident's self-performance and treatment regimens is useful in considering the need for interventions. This view can also help to ensure that aggressive treatments or interventions (e.g., physical restraints or antipsychotics) are not introduced simply to keep the resident "looking normal."

- Does the behavior endanger the resident? Others? If so, in what ways does it endanger the resident or others?
- Are behavior problems related to daily variations in functional performance? If so, how?
- Does behavior problem lead to resistance to care?
- Does it lead to difficulties dealing with people and coping in the facility?

**REVIEW OF POTENTIAL CAUSES OF BEHAVIORAL SYMPTOMS**

Many behaviors, however, are problematic for the resident or others. Many are directly associated with acute health conditions, neurological diseases, or psychiatric conditions. Still others originate in the resident's reaction to external factors, such as psychotropic medications, the use of physical restraints, and stressors in the environment (e.g., loud noises, changes in familiar routines). Identifying the various factors involved in the manifestation of behavioral symptoms is critical. Such a process may reveal conditions that can be resolved, thus eliminating or reducing the behavioral symptoms. Further, distinguishing among potential causes or interrelationships is essential to developing an appropriate care plan (e.g., distinguishing between behaviors originating with a neurological condition as contrasted to a psychotic syndrome). Consideration of the items in the Behavioral Symptoms RAP KEY (as well as in related RAPs as indicated) should facilitate this process.

*Cognitive Status Problem Interactions.*

Decision-making ability is a key indicator of effective cognitive skills. Resolving acute confusional state or delirium, a potentially reversible problem, can be critical to behavior management. (See Delirium RAP if a diagnosis or signs and symptoms of delirium are present.)

For many residents with chronic progressive dementia, certain behaviors may continue in spite of remedial treatments or interventions. In some instances, the behaviors will be distressing; however, in many instances behaviors can be accommodated. For example, many residents who wander can be accommodated without restraints in a hazard-free environment. Similarly, the needs and patterns of demanding residents or those with catastrophic reactions can often be anticipated or the most disrupting reactions to the distress alleviated. The Cognitive Loss/Dementia RAP refers to several issues that can be considered for such residents. Thus, that RAP should be completed prior to this RAP on Behaviors for residents who have cognitive problems.

*Presence of Mood and/or Relationship Problem Interactions.*

Mood and relationship problems often produce disturbed behavioral symptoms. If the underlying problems are resolved, the behavior may lessen or stop.

- Does the resident have an unresolved mood state or relationship problem that may lead to behavioral symptoms (e.g., anxiety disorder and agitation; depression or isolation and verbally abusive behavior)? Refer to the Psychosocial Well-Being RAP and to the Mood State RAP.

- Is there an association among mood state, relationship, and behavioral symptoms?
- Can a cause and effect relationship be determined?
- Does the resident experience a sense of frustration because of rejection by family? If so, does this frustration result in the resident verbally abusing staff or other residents?

*Relationship Difficulties That May Affect Behavior.*

- Does the presence or absence of other persons precipitate an event?
- Was a combative act prompted by paranoid delusions about another's motives or actions?
- Did recent loss of loved one, change in staff, an intrafacility move, or placement with a roommate with whom the resident cannot communicate lead to disruptive behavioral symptoms?

*Environmental Conditions.*

A review of the resident's behaviors over time may, as noted earlier, reveal a pattern of behaviors that helps identify the causes of the behaviors. Because environmental conditions often have a profound effect on residents' behaviors, these factors should be given special consideration.

- Are staff sufficiently responsive? Do they recognize stressors for the resident and early warning signs of problem behavior?
- Do staff follow the resident's familiar routines?
- Do noise, crowding or dimly lit areas affect resident's behavior?
- Are other residents physically aggressive?

*Illness/Conditions.*

Sometimes, the onset of acute illnesses and/or the worsening of a chronic illness produces disturbed behaviors. Often identification and treatment of the illness will resolve the problem behavior. In addition, a resident with certain chronic conditions, particularly difficulties in making his/her needs understood or in understanding others may also exhibit problem behaviors that can be eliminated or reduced if more effective methods of communication are adopted by staff and families. Sensory impairments (vision, hearing) may also produce disruptive behaviors that would lessen or disappear if the underlying condition were addressed.

- Can physical health factors close in time to the disturbed behavior be identified (e.g., pain or discomfort from physical conditions such as arthritis, constipation, or headache)?
- Can the observed behavior be associated with an acute illness(e.g., urinary tract infection, other infections, fever, hallucinations/delusions, sleep deprivation, fall with physical trauma, nutritional deficiencies, weight loss, dehydration/insufficient fluids, electrolyte disorder, or acute hypotension)?
- Can the observed behavior be associated with the worsening of a chronic illness (e.g., congestive heart failure, diabetes, psychoses, Alzheimer's disease or other dementia, CVA, or hypoglycemia for a diabetic)?
- What was the role of impaired hearing, vision, or ability to communicate or understand others?

*Current Treatment/Management Procedures: Positive and Negative Consequences.*

A number of treatment or management interventions may affect a resident's behavior. Some may have had a positive effect, while others may exacerbate existing behavioral symptoms - or produce new problems. Both are important to consider in reaching a decision about whether to proceed with a care plan intervention. For example, review the resident's interest in, use of, or participation in psychological treatment program(s). This review will be especially important for residents who have recently experienced improved behavioral status. For some residents and some management programs, continuation of treatments may be central to maintaining their new-found control. In other cases, either the interventions can be reduced (at least on a trial basis), or the side effects of the intervention may be so severe that alterations in the treatment regimen should be considered. For example, a drug or restraint program may result in increased confusion and agitation, reduced ADL self-performance, a decline in mood, or a general decrease in the quality of life for the resident. On the other hand, breaking tasks of daily life down into smaller steps that the resident can comprehend and perform may reduce stress and prevent problem behavior.

- Has the resident been evaluated by a psychiatrist, etc.? When?
- Are there indicators that treatments have helped resident gain increased control over life? What were they?
- Can improvement be attributed to an identifiable treatment?
- If behavioral symptoms have decreased, can medication or behavior management programs be withdrawn?
- Is the onset or change of behaviors associated with the start of (or change in prescription of) a medication(s)?
- Is the behavior associated with the use of a physical restraint (e.g., increased agitation and anger)?
- Has the resident received care in a specially designed therapeutic unit?
- Are there special staff training/support programs that focus on managing behavioral symptoms?
- What disciplines are involved? How frequent/consistent is the training?
- Has task segmentation been used to maximize resident involvement?

**BEHAVIORAL SYMPTOMS RAP KEY (For MDS Version 2.0)**

**TRIGGER — REVISION**

*Review of behavior status suggested if one or more of following present:*

- Wandering\*  
[E4aA = 1,2,3]
- Verbally abusive  
[E4bA = 1,2,3]
- Physically abusive  
[E4cA = 1,2,3]
- Socially inappropriate  
[E4dA = 1,2,3]
- Resists Care  
[E4eA = 1,2,3]
- Behavior improved  
[E5 = 1]

\* Note — This Item also triggers on the Fall RAP

**GUIDELINES**

*Review and describe behavioral symptom:*

- Evaluating the seriousness and stability/change of behavioral symptoms. Review of intensity, duration, frequency and, if any, pattern of behaviors, their development over time, and their effect on the resident and others [E4aB, E4bB, E4cB, E4dB, E4eB, from record].

*Review potential causes that could be addressed or resolved:*

- Cognitive status problems. Delirium [B5], Alzheimer's Disease [I1q] or other dementia [I1u], Effects of stroke [C4, C5, C6; G5, G6; I1r, I1t].
- Mood or relationship problems. Sad or anxious mood [E1], Unsettled relationships [F2], Psychiatric diagnosis [I1dd, I1ee, I1ff, I1gg]
- Environmental conditions. Departure from resident's normal routines prior to entering facility [F3c], Staff responses, presence of stressful conditions of physically aggressive resident [from record, interviews with staff, resident]
- Illness/conditions. Onset of acute illness, worsening of chronic illness [J5a,b], and other related problems, such as Constipation [H2b], Diabetes [I1a], CHF [I1f], Pneumonia [I2e], Septicemia [I2g], UTI [I2j] or other infection [I2, I3], Fever [J1h], Delusions [J1e], Hallucinations [J1i], Pain [J2], Fall with physical trauma to head [J4a,b; I1cc]
- Communication deficits. Difficulty making self understood [C4] or Understanding others [C6]
- Sensory impairments. Hearing problem [C1], Visual problem [D1], Visual Limitations [D2]
- Treatment/management procedures. Antipsychotics, antianxiety, antidepressants, hypnotics [O4a,b,c,d], Behavior management program [P2], Trunk, limb or chair restraints [P4c,d,e]

**RESIDENT ASSESSMENT PROTOCOL: ACTIVITIES****I. PROBLEM**

The Activities RAP targets residents for whom a revised activity care plan may be required to identify those residents whose inactivity may be a major complication in their lives. Resident capabilities may not be fully recognized: the resident may have recently moved into the facility or staff may have focused too heavily on the instrumental needs of the resident and may have lost sight of complications in the institutional environment.

Resident involvement in passive as well as active activities can be as important in the nursing home as it was in the community. The capabilities of the average resident have obviously been altered as abilities and expectations change, disease intervenes, situational opportunities become less frequent, and extended social relationships less common. But something that should never be overlooked is the great variability within the resident population: many will have ADL deficits, but few will be totally dependent; impaired cognition will be widespread, but so will the ability to apply old skills and learn new ones; and sense may be impaired, but some type of two-way communication is almost always possible.

For the nursing home, activity planning is a universal need. For this RAP, the focus is on cases where the system may have failed the resident, or where the resident has distressing conditions that warrant review of the activity care plan. The types of cases that will be triggered are: (1) residents who have indicated a desire for additional activity choices; (2) cognitively intact, distressed residents who may benefit from an enriched activity program; (3) cognitively deficient, distressed residents whose activity levels should be evaluated; and (4) highly involved residents whose health may be in jeopardy because of their failure to "slow down."

In evaluating triggered cases, the following general questions may be helpful:

- Is inactivity disproportionate to the resident's physical/cognitive abilities or limitations?
- Have decreased demands of nursing home life removed the need to make decisions, to set schedules, to meet challenges? Have these changes contributed to resident apathy?
- What is the nature of the naturally occurring physical and mental challenges the resident experiences in everyday life?
- In what activities is the resident involved? Is he/she normally an active participant in the life of the unit? Is the resident reserved, but actively aware of what is going on around him/her? Or is he/she unaware of surroundings and activities that take place?
- Are there proven ways to extend the resident's inquisitive/active engagement in activities?
- Might simple staff actions expedite resident involvement in activities? For example: Can equipment be modified to permit greater resident access of the unit? Can the resident's location or position be changed to permit greater access to people, views, or programs? Can time and/or distance limitations for activities be made less demanding without destroying the challenge? Can staff modes of interacting with the resident be more accommodating, possibly less threatening, to resident deficits?

**II. TRIGGERS****ACTIVITIES TRIGGER A (Revise)**

*Consider revising activity plan if one or more of following present:*

- Involved in activities little or none of time  
[N2 = 2, 3]
- Prefers change in daily routine  
[N5a = 1,2]  
[N5b = 1,2]

**ACTIVITIES TRIGGERS B (Review)**

*Review of activity plan suggested if both of following present:*

- Awake all or most of time in morning  
[N1a = checked]
- Involved in activities most of time  
[N2 = 0]

**III. GUIDELINES**

The followup review looks for factors that may impede resident involvement in activities. Although many factors can play a role, age as a valid impediment to participation can normally be ruled out. If age continues to be linked as a major cause of lack of participation, a staff education program may prove effective in remedying what may be overprotective staff behavior.

**Issues to be Considered as Activity Plan is Developed.**

*Is Resident Suitably Challenged, Overstimulated?* To some extent, competence depends on environmental demands. When the challenge is not sufficiently demanding, a resident can become bored, perhaps withdrawn, may resort to fault-finding and perhaps even behave mischievously to relieve the boredom. Eventually, such a resident may become less competent because of the lack of challenge. In contrast, when the resident lacks the competence to meet challenges presented by the surroundings, he or she may react with anger and aggressiveness.

- Do available activities correspond to resident lifetime values, attitudes, and expectations?
- Does resident consider "leisure activities" a waste of time - he/she never really learned to play, or to do things just for enjoyment?
- Have the resident's wishes and prior activity patterns been considered by activity and nursing professionals?
- Have staff considered how activities requiring lower energy levels may be of interest to the resident - e.g., reading a book, talking with family and friends, watching the world go by, knitting?
- Does the resident have cognitive/functional deficits that either reduce options or preclude involvement in all/most activities that would otherwise have been of interest to him/her?

Activities RAP (2 of 5)

**Confounding Problems to be Considered.**

*Health-related factors that may affect participation in activities.* Diminished cardiac output, an acute illness, reduced energy reserves, and impaired respiratory function are some of the many reasons that activity level may decline. Most of these conditions need not necessarily incapacitate the resident. All too often, disease-induced reduction of activity may lead to progressive decline through disuse, and further decrease in activity levels. However, this pattern can be broken: many activities can be continued if they are adapted to require less exertion or if the resident is helped in adapting to a lost limb, decreased communication skills, new appliances, and so forth.

- Is resident suffering from an acute health problem?
- Is resident hindered because of embarrassment/unease due to presence of health-related equipment (tubes, oxygen tank, colostomy bag, wheelchair)?
- Has the resident recovered from an illness? Is the capacity for participation in activities greater?
- Has an illness left the resident with some disability (e.g., slurred speech, necessity for use of cane/walker/wheelchair, limited use of hands)?
- Does resident's treatment regimen allow little time or energy for participation in preferred activities?

**Other Issues to be Considered.**

*Recent decline, in resident status — cognition, communication, function, mood, or behavior.* When pathologic changes occur in any aspect of the resident's competence, the pleasurable challenge of activities may narrow. Of special interest are problematic changes that may be related to the use of psychoactive medications. When residents or staff overreact to such losses, compensatory strategies may be helpful - e.g., impaired residents may benefit from periods of both activity and rest; task segmentation can be considered; or available resident energies can be reserved for pleasurable activities (e.g., using usual stamina reserves to walk to the card room, rather than to the bathroom) or activities that have individual significance (e.g., sitting unattended at a daily prayer service rather than at group activity program).

- Has staff or the resident been overprotective? Or have they misread the seriousness of resident cognitive/functional decline? In what ways?
- Has the resident retained skills, or the capacity to learn new skills, sufficient to permit greater activity involvement?
- Does staff know what the resident was like prior to the most recent decline? Has the physical/other staff offered a prognosis for the resident's future recovery, or change of continued decline?
- Is there any substantial reason to believe that the resident cannot tolerate or would be harmed by increased activity levels? What reasons support a counter opinion?
- Does resident retain any desire to learn or master a specific new activity? Is this realistic?
- Has there been a lack of participation in the majority of activities which he/she stated as preference are as even though these types of activities are provided?

*Environmental factors.* Environmental factors include recent changes in resident location, facility rules, season of the year, and physical space limitations that hinder effective resident involvement.

- Does the interplay of personal, social, and physical aspects of the facility's environment hamper involvement in activities? How might this be addressed?
- Are current activity levels affected by the season of the year or the nature of the weather during the MDS assessment period?
- Can the resident choose to participate in or to create an activity? How is this influenced by facility rules?
- Does resident prefer to be with others, but the physical layout of the unit gets in the way? Do other features in the physical plant frustrate the resident's desire to be involved in the life of the facility? What corrective actions are possible? Have any been taken?

*Changes in availability of family/friends/staff support.* Many residents will experience not only a change in residence but also a loss of relationships. When this occurs, staff may wish to consider ways for resident to develop a supportive relationship with another resident, staff member or volunteer that may increase the desire to socialize with others and/or to participate in activities with this new friend.

- Has a staff person who has been instrumental in involving a resident in activities left the facility/been reassigned?
- Is a new member in a group activity viewed by a resident as taking over?
- Has another resident who was a leader on the unit died or left the unit?
- Is resident shy, unable to make new friends?
- Does resident's expression of dissatisfaction with fellow residents indicate he/she does not want to be a part of an activities group?

*Possible Confounding Problems to be Considered for Those Now Actively Involved in Activities.* Of special interest are cardiac and other diseases that might suggest a need to slow down.

## ACTIVITIES RAP KEY (For MDS Version 2.0)

### TRIGGER — REVISION

#### ACTIVITIES TRIGGER A (Revise)

*Consider revising activity plan if one or more of following present:*

- Involved in activities little or none of time  
[N2 = 2, 3]
- Prefers change in daily routine  
[N5a = 1,2]  
[N5b = 1,2]

#### ACTIVITIES TRIGGERS B (Review)

*Review of activity plan suggested if both of following present:*

- Awake all or most of time in morning  
[N1a = checked]
- Involved in activities most of time  
[N2 = 0]

### GUIDELINES

*Issues to be considered as activity plan is developed:*

- Time in facility [AB1]
- Cognitive status [B2, B4]
- Walking/locomotion pattern [G1c,d,e,f]
- Unstable acute/chronic health conditions [J5a,b]
- Number of treatments received [P1]
- Use of Psychoactive medications [O4a,b,c,d]

*Confounding problems to be considered:*

- Performs tasks slowly and at different levels (reduced energy reserves) [G8c,d]
- Cardiac dysrhythmias [I1e]
- Hypertension [I1h]
- CVA [I1f]
- Respiratory diseases [I1hh,I1ii]
- Pain [J2]

*Other issues to be considered:*

- Customary routines [AC]
- Mood [E1, E2] and Behavioral Symptoms [E4]
- Recent loss of close family member/friend or staff [F2f; from record]
- Whether daily routine is very different from prior pattern in the community [F3c]

## RESIDENT ASSESSMENT PROTOCOL: FALLS

## I. PROBLEM

Falls are a common source of serious injury and death among the elderly. Each year, 40% of nursing home residents fall. Up to 5% of falls result in fractures; an additional 15% result in soft tissue injuries. Moreover, most elders are afraid of falling, and this fear can limit their activities.

In about one-third of falls, a single potential cause can be identified; in two-thirds, more than one risk factor will be involved. Risk factors that are internal to the resident include the resident's physical health and functional status. External risk factors include medication side effects, the use of appliances and restraints, and environmental conditions. Identification and assessment of those who have fallen and those who are at high risk of falling are the goals of this RAP.

## II. TRIGGERS

*Potential for Additional Falls [A] or Risk of Initial Fall [R] suggested if one or more of following present:*

- *Fell in past 30 days (Additional) <sup>(c)</sup>*  
[J4a = checked]
- *Fell in past 31-180 days (Additional) <sup>(c)</sup>*  
[J4b = checked]
- *Wandering <sup>(a)</sup> (Risk)*  
[E4aA = 1,2,3]
- *Dizziness (Risk) <sup>(c)</sup>*  
[J1f = checked]
- *Use of trunk restraint (Risk) <sup>(b)</sup>*  
[P4c = 1,2]
- *Use of Antianxiety drugs (Risk)<sup>(d)</sup>*  
[O4b = 1-7]
- *Use of Antidepressant drugs (Risk)<sup>(d)</sup>*  
[O4c = 1-7]

<sup>(a)</sup> Note: This item also triggers on the Behavior Symptom RAP.

<sup>(b)</sup> Note: Code 2 also triggers on the Pressure Ulcer RAP. Both codes trigger on the Physical Restraint RAP.

<sup>(c)</sup> Note: This item also triggers on the Psychotropic Drug Use RAP (when psychotropic drugs present).

<sup>(d)</sup> When present with specific condition, this item is part of trigger on Psychotropic Drug Use RAP.

## III. GUIDELINES

To reach a decision on a care plan, begin by reviewing whether one or more of the major risk factors listed on the RAP KEY are present. Clarifying information on the nature of the risk or type of issue to be considered for the RAP KEY items follows.

*Multiple Falls: Is There a Previous History of Falls, or was the Fall an isolated Event?*

Refer to the MDS, reports of the family, and incident reports.

**Internal Risk Factors.**

Review to determine whether the items listed on the RAP KEY under the following headings are present. Each of these represents an underlying health problem or condition that can cause falls and may be addressed so as to prevent future falls.

- *Cardiovascular*
- *Neuromuscular/functional*
- *Orthopedic*
- *Perceptual*
- *Psychiatric or cognitive*

**External Risk Factors.**

These risk factors can often be modified to reduce the resident's risk of falls.

**Medications.** Certain drugs can produce falls by causing related problems (hypotension, muscle rigidity, impaired balance, other extrapyramidal side effects [e.g., tremors], and decreased alertness). These drugs include: antipsychotics, antianxiety/hypnotics, antidepressants, cardiovascular medications, and diuretics.

- Were these medications administered prior to or after the fall?
- If prior to the fall, how close to it were they first administered?

**Appliances and Devices.**

- If the resident who falls (or is at risk of falling) uses an appliance observe his/her use of the appliance for possible problems.
- Review the MDS and the resident's record to determine whether restraints were used prior to the fall and might have contributed to the fall, (e.g., causing a decline function or an increase in agitation).

**Environmental/Situational Hazards.** Many easily modifiable hazards (e.g., poor lighting, patterned carpeting, poorly arranged furniture) in the environment may cause falls both in relatively healthy and in frail elderly residents.

**For Those Who Have Fallen Previously, Review the Circumstances Under Which the Fall Occurred.**

Attempt to gather information on most recent fall. Needed information includes:

- Time of day, time since last meal.
- Was resident doing usual or unusual activity?
- Was he/she standing still or walking? Reaching up or down? Not reaching?
- Was resident in a crowd of people? Responding to bladder/bowel urgency?
- Was there glare or liquid on floors? Foreign objects in walkway? New furniture placement or other changes in environment?
- Is there a pattern of falls in any of the above circumstances?
- If you know what the resident was doing during the fall, have her/him perform that activity and observe (protect resident to ensure that a fall does not occur during this test).

**Take necessary vital signs:**

- At time of fall, obtain supine and upright blood pressure and heart rate, IF the resident does not have a serious injury such as a fracture of the hip or lower extremity.
- When reproducing circumstances of a fall (e.g., if the resident fell 10 minutes after eating a large meal, take vital signs 10 minutes after the residents eats).
- Measure blood pressure and heart rate when the resident is supine AND 1 and 3 minutes after standing; note temperature and respiratory rate.

**For Residents At Risk of Future Falls, Review Environmental/Situational Factors to Determine Whether Modifications Are Needed**

- Observe resident's usual pattern of interaction with his/her environment – the way he/she gets out of bed, walks, turns, gets in and out of chairs, uses the bathroom. Observations may reveal environmental solutions to prevent falls.
- Observe him/her get out of bed, walking 20 feet, turn in a 360° circle, standing up from a chair without pushing off with his/her arms (fold arms in front), and using the bathroom.

**FALLS RAP KEY (For MDS Version 2.0)**

**TRIGGER — REVISION**

**GUIDELINES**

*Potential for Additional Falls or Risk of Initial Fall suggested if one or more of following present:*

- Fell in past 30 days (*Additional*) <sup>(c)</sup>  
[J4a = checked]
- Fell in past 31-180 days (*Additional*) <sup>(c)</sup>  
[J4b = checked]
- Wandering <sup>(a)</sup> (*Risk*)  
[E4aA = 1,2,3]
- Dizziness (*Risk*) <sup>(c)</sup>  
[J1f = checked]
- Use of trunk restraint (*Risk*) <sup>(b)</sup>  
[P4c = 1,2]
- Use of Antianxiety drugs (*Risk*) <sup>(d)</sup>  
[O4b = 1-7]
- Use of Antidepressant drugs (*Risk*) <sup>(d)</sup>  
[O4c = 1-7]

*Review risk factors for falls to identify problems that may be addressed/resolved:*

- **Multiple Falls.** [J4a, J4b]
- **Internal Risk Factors.**
  - **Cardiovascular:** Cardiac dysrhythmia [I1e]
  - **Neuromuscular/functional:** Loss of arm or leg movement [G4b,d], Decline in functional status [G9], Incontinence [H1], Hypotension [I1i], CVA [I1t], Hemiplegia/Hemiparesis [I1v], Parkinson's [I1y], Seizure disorder [I1aa], Syncope [J1m], Chronic/acute condition makes unstable [J5a, J5b], Unsteady gait [J1n],
  - **Orthopedic:** Joint pain [J3g], Arthritis [I1j], Fracture of the hip [I1m, J4c], Missing limb (e.g., amputation) [I1n], Osteoporosis [I1o]
  - **Perceptual:** Impaired hearing [C1], Impaired vision [D1, D2], Dizziness/vertigo [J1f]
  - **Psychiatric or cognitive:** Delirium [B5], Decline in cognitive skills [B6], Manic depression [I1ff], Alzheimer's [I1q], Other Dementia [I1u]
- **External Factors**
  - **Medications:** Psychotropic meds [O4a,b,c,d] Cardiovascular meds [from record] and Diuretics [O4e]
  - **Appliances/devices** (time started): Pacemaker [from record]; Cane/walker/crutch [G5a]; Devices and restraints [P4a,b,c,d,e]
  - **Environmental/situational hazards and, if relevant, circumstances of recent fall(s):** [Review of situation and environment] glare; poor illumination; slippery floors; uneven surfaces; patterned carpets; foreign objects in walkway; new arrangement of objects; recent move into/within facility; proximity to aggressive resident; time of day; time since meal; type of activity; standing still/walking in a crowded area/ reaching/not reaching; responding to bladder/bowel urgency.

<sup>(a)</sup> Note: This item also triggers on the Behavior Symptom RAP.  
<sup>(b)</sup> Note: Code 2 also triggers on the Pressure Ulcer RAP. Both codes trigger on the Physical Restraint RAP.  
<sup>(c)</sup> Note: This item also triggers on the Psychotropic Drug Use RAP (when psychotropic drugs present).  
<sup>(d)</sup> When present with specific condition, this item is part of trigger on Psychotropic Drug Use RAP

## RESIDENT ASSESSMENT PROTOCOL: NUTRITIONAL STATUS

## I. PROBLEM

Malnutrition is not a response to normal aging; it can arise from many causes. Its presence may signal the worsening of a life-threatening illness, and it should always be seen as a dramatic indicator of the resident's risk of sudden decline. Severe malnutrition is, however, relatively rare, and this RAP focuses on signs and symptoms that suggest that the resident may be at risk of becoming malnourished. For many who are triggered, there will be no obvious, outward signs of malnutrition. Prevention is the goal, and early detection is the key.

Early problem recognition can help to ensure appropriate and timely nutritional intervention. For many residents, simple adjustments in feeding patterns may be sufficient. For others, compensation or correction for food intake problems may be required.

Within a nutrition program, food intake is best accomplished via oral feedings. Tube (enteral) feeding is normally limited to residents who have a demonstrated inability to orally consume sufficient food to prevent major malnutrition or weight loss. Parenteral feeding is normally limited to life-saving situations where both oral and enteral feeding is contraindicated or inadequate to meet nutrient needs. Oral feeding is clearly preferred. Depending on the nature of the problem, residents can be encouraged to use finger foods; to take small bites; to use the tongue to move food in the mouth from side to side; to chew and swallow each bite; to avoid food that causes mouth pain, etc. Therapeutic programs can also be designed to review for the need for adaptive utensils to compensate for problems in sucking, closing lips, or grasping utensils; to help the confused resident maintain a fixed feeding routine, etc.

## II. TRIGGERS

*Malnutrition problem suggested if one or more of following observed*

- Weight loss  
[K3a = 1]
- Complains about taste of many foods  
[K4a = checked]
- Leaves 25% or more food uneaten at most meals  
[K4c = checked]
- Parenteral/IV feeding<sup>(a)</sup>  
[K5a = checked]
- Mechanically altered diet  
[K5c = checked]
- Syringe (oral feeding)  
[K5d = checked]
- Therapeutic diet  
[K5e = checked]
- Pressure ulcer<sup>(b)</sup>  
[M2a = 2, 3, or 4]

<sup>(a)</sup> Note: These items also trigger on the Dehydration/Fluid Maintenance RAP.

<sup>(b)</sup> Note: These items also trigger on the Pressure Ulcer RAP

### III. GUIDELINES

#### RESIDENT FACTORS THAT MAY IMPEDE ABILITY TO CONSUME FOOD

##### *Reduced ability to feed self*

Reduced ability to feed self can be due to arthritis, contractures, partial or total loss of voluntary arm movement, hemiplegia or quadriplegia, vision problems, inability to perform activities of daily living without significant assistance, and coma.

##### *Chewing problems*

Residents with oral abscesses, ill-fitting dentures, teeth that are broken, loose, carious or missing, or those on mechanically altered diets frequently cannot eat enough food to meet their calorie and other nutrient needs. Significant weight loss can, in turn, result in poorly fitting dentures and infections that can lead to more weight loss.

##### *Losses from diarrhea or an ostomy*

##### *Swallowing problems*

Swallowing problems arise in several contexts: the long-term result of chemotherapy, radiation therapy, or surgery for malignancy (including head and neck cancer); fear of swallowing because of COPD/emphysema/asthma; stroke; hemiplegia or quadriplegia; Alzheimer's disease or other dementia; and ALS.

##### *Possible Medical Causes*

Numerous conditions and diseases can result in increased nutrient requirements (calories, protein, vitamins, minerals, water, and fiber) for residents. Among these are cancer and cancer therapies, Parkinson's disease with tremors, septicemia, pneumonia, gastrointestinal influenza, fever, vomiting, diarrhea and other forms of malabsorption including excessive nutrient loss from ostomy, burns, pressure ulcers, COPD/emphysema/asthma, Alzheimer's disease with concomitant pacing or wandering, and hyperthyroidism.

***Malignancy and nutritional consequences of chemotherapy, radiation therapy/surgery.*** For the resident undergoing therapy aimed at remission or cure, aggressive nutritional support is necessary to achieve the goal; for the resident with incurable malignancy who is undergoing palliative therapy or is not responding to curative therapy, aggressive nutritional support is often medically inappropriate.

- Have the wishes of the resident and family concerning aggressive nutritional support been ascertained?

***Anemia*** (nutritional deficiency, not malnutrition). A hematocrit of less than 41% is predictive of increased morbidity and mortality for residents.

- Are shortness of breath, weakness, paleness of mucous membranes and nailbeds, and/or clubbing of nails present?

*Chronic COPD* increases calorie needs and can be complicated by an elevated fear of choking when eating or drinking.

*Shortness of breath* (frequently seen with congestive heart failure, hypertension, edema, and COPD/emphysema/asthma). This is another condition that can cause a fear of eating and drinking, with a consequent reduction in food intake.

*Constipation/intestinal obstruction/pain* can inhibit appetite

*Drug-induced anorexia* often causes decreased or altered ability to taste and smell foods.

### *Delirium*

## PROBLEMS TO BE REVIEWED FOR POSSIBLE RELATIONSHIP TO NUTRITIONAL STATUS PROBLEM (Causal link)

### *Mental problems.*

Mental retardation, Alzheimer's or other dementia, depression, paranoid fears that food is poisoned, and mental retardation can all lead to anorexia, resulting in significant amounts of uneaten food and subsequent weight loss.

### *Behavior patterns and problems.*

Residents who are fearful, who pace or wander, withdraw from activities, cannot communicate, or refuse to communicate, often refuse to eat or will eat only a limited variety and amount of foods. Left untreated, behavior problems that result in refusal to eat can cause significant weight loss and subsequent malnutrition.

- Does resident use food to gain staff attention?
- Is resident unable to understand the importance of eating?

### *Inability to Communicate.*

For most residents, enjoying food and mealtimes crucially affects quality of life. Inability to make food and mealtime preferences known can result in a resident eating poorly, losing weight, and being unhappy. Malnutrition due to poor communication usually indicates substandard care. Early correction of communication problems, where possible, can prevent malnutrition.

- Does the area in which meals are served lend itself to socialization among residents? Is it a place where social communication can easily take place?
- Has there been a failure to provide adequate staff and/or adequate time in feeding or assisting residents to eat?
- Has there been a failure to recognize the need and supply adaptive feeding equipment for residents who can be helped to self-feed with such assistance?
- Is the resident capable of telling staff that he/she has a problem with the food being served- e.g., finds it to be unappetizing or unattractively presented?

### *Amputation*

Weight loss may be due to an amputation.

*Chronic COPD* increases calorie needs and can be complicated by an elevated fear of choking when eating or drinking.

*Shortness of breath* (frequently seen with congestive heart failure, hypertension, edema, and COPD/emphysema/asthma). This is another condition that can cause a fear of eating and drinking, with a consequent reduction in food intake.

*Constipation/intestinal obstruction/pain* can inhibit appetite

*Drug-induced anorexia* often causes decreased or altered ability to taste and smell foods.

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##### *Amputation*

Weight loss may be due to an amputation.

Nutritional Status (3 of 4)

## NUTRITIONAL STATUS RAP KEY *(For MDS Version 2.0)*

### TRIGGER — REVISION

*Malnutrition problem suggested if one or more of following observed*

- Weight loss  
[K3a = 1]
- Complains about taste of many foods  
[K4a = checked]
- Leaves 25% or more food uneaten at most meals  
[K4c = checked]
- Parenteral/IV feeding<sup>(a)</sup>  
[K5a = checked]
- Mechanically altered diet  
[K5c = checked]
- Syringe (oral feeding)  
[K5d = checked]
- Therapeutic diet  
[K5e = checked]
- Pressure ulcer<sup>(b)</sup>  
[M2a = 2, 3, or 4]

### GUIDELINES

*Factors that impede ability to consume foods:*

- Reduced ability to feed self [G1h]
- Ostomy losses [H3i],
- Chewing problems [K1a]
- Swallowing problems [K1b]
- Possible medical causes: Diarrhea [H2c], Anemia [I1oo], Cancer [I1pp], Pneumonia [I2e], Fever [J1h], Shortness of breath [J1i], Chemotherapy [P1a], and nutrient/medication interactions (e.g., anti-psychotics [O4a], cardiac drugs, diuretics [O4e], laxatives, antacids) [from record]

*Problems to be reviewed for possible relationship to nutritional status problem:*

- **Mental problems:** Mental retardation [AB10], Fear that food is poisoned [from record; E1]; Alzheimer's Disease [I1q], Other dementia [I1u]; Anxiety disorders [I1dd]; Depression [I1ee];
- **Behavior problems:** Pacing [E1n], Withdrawal from activities of interest [E1o], Wandering [E4a], Throwing food [E4d], Slowness in self feeding [G8c], Leaves 25% or more food uneaten [K4c]
- **Inability to communicate:** Comatose [B1], Unable to make food and mealtime preferences known [C3g], and Difficulty making self understood [C4], Difficulty understanding others [C6], Aphasia [I1r]
- **Functional problems:** Loss of upper extremity use [G4a,b,c], Amputation [I1n]

<sup>(a)</sup> Note: These items also trigger on the Dehydration/Fluid Maintenance RAP

<sup>(b)</sup> Note: These items also trigger on the Pressure Ulcer RAP

**RESIDENT ASSESSMENT PROTOCOL: FEEDING TUBES****I. PROBLEM**

The efficacy of tube feedings is difficult to assess. When the complications and problems are known to be high and the benefits difficult to determine, the efficacy of tube feedings as a long-term treatment for individuals requires careful evaluation.

Where residents have difficulty eating and staff have limited time to assist them, insertion of feeding tubes for the convenience of nursing staff is an unacceptable rationale for use. The only rationale for such feedings is demonstrated medical need to prevent malnutrition or dehydration. Even here, all possible alternatives should be explored prior to using such an approach for long-term feeding, and restoration to normal feeding should remain the goal throughout the treatment program.

Use of nasogastric and nasointestinal tubes can result in many complications including, but not limited to: agitation, self-extubation (removal of the tube by the patient), infections, aspiration, unintended misplacement of the tube in the trachea or lungs, inadvertent dislodgment, and pain.

This RAP focuses on reviewing the status of the resident using tubes. The Nutritional Status and Dehydration/Fluid Maintenance RAPs focus on resident needs that may warrant the use of tubes. To help clarify the latter issue, the following guidelines indicate the type of review process required to ensure that tubes are used in only the exceptional and acceptable situation. As a general rule, residents unable to swallow or eat food and unlikely to eat within a few days due to physical problems in chewing or swallowing (e.g., stroke or Parkinson's disease) or mental problems (e.g., Alzheimer's depression) should be assessed regarding the need for a nasogastric or nasointestinal tube or an alternative feeding method. In addition, if normal caloric intake is substantially impaired with endotracheal tubes or a tracheostomy, a nasogastric or nasointestinal tube may be necessary. Finally, tubes may be used to prevent meal-induced hypoxemia (insufficient oxygen to blood), which occurs with patients with COPD or other pulmonary problems that interfere with eating (e.g., use of oxygen, bronchodilators, tracheostomy, endotracheal tube with ventilator support).

1. Assess causes of poor nutritional status that may be identified and corrected as a first step in determining whether a nasogastric tube is necessary (see Nutritional Status RAP).
  - (a) Eating, swallowing and chewing disorders can negatively affect nutritional status (low weight in relation to height, weight loss, serum albumin level, and dietary problems) and the initial task is to determine the potential causes and period of time such problems are expected to persist. Recent lab work should also be reviewed to determine if there are electrolyte imbalances, fluid volume imbalances, BUN, creatinine, low serum albumin, and low serum protein levels before treatment decisions are made. Laboratory measurement of sodium and potassium tell whether or not an electrolyte imbalance exists. Residents taking diuretics may have potassium losses requiring potassium supplements. If these types of imbalances cannot be corrected with oral nutrition and fluids or intravenous feedings, then a nasogastric or nasointestinal tube may be considered.
  - (b) Determine whether fluid intake and hydration problems are short-term or long-term.
  - (c) Review for gastrointestinal distention, gastrointestinal hemorrhage, increased gastric acidity, potential for stress ulcers, and abdominal pain.

Feeding Tubes RAP (1 of 5)

- (d) Identify pulmonary problems (e.g., COPD and use of endotracheal tubes, tracheostomy, and other devices) that interfere with eating or dehydration.
  - (e) Review for mental status problems that interfere with eating such as depression, agitation, delirium, dementia, and mood disorders.
  - (f) Review for other problems such as cardiovascular disease or stroke.
2. Determine the need for such a tube. Examine alternatives.

Alternatives to nasogastric and nasointestinal tubes should always be considered. Intravenous feedings should be used for short-term therapy as a treatment of choice or at least a first option. Jejunostomy may have some advantages for long-term therapy, although may increase the risk for infection. A gastrostomy is better tolerated by agitated patients and those requiring prolonged therapy (more than 2 weeks). Gastrostomy with bolus feedings is preferable to nasogastric or nasointestinal tubes for long-term therapy for comfort reasons and to prevent the dislodgement and complications associated with nasal tubes. It is also less disfiguring as it can be completely hidden under clothing when not in use.

3. Assure informed consent and right to refuse treatment. Informed consent is essential before inserting a nasogastric or nasointestinal tube. Potential advantages, disadvantages, and potential complications need to be discussed. Resident preference are normally given the greatest weight in decisions regarding tube feeding. State laws and judicial decisions must also be taken into account. If the resident is not competent to make the decision, a durable power of attorney or living will may determine who has the legal power to act on the resident's behalf. Where the resident is not competent or no power of attorney is in effect, the physician may have the responsibility for making a decision regarding the use of tube feeding. In any case, when illness is terminal and/or irreversible, technical means of providing fluids and nutrition can represent extraordinary rather than ordinary means of prolonging life.
4. Monitor for complications and correct/change procedures and feedings when necessary. Periodic changing of the nasogastric and intestinal tubes is necessary, although the appropriate interval for changing tubes is not clear. Assessment and determination of continued need should be completed before the tube is reinserted. Specific written orders by the physician are required.

Individuals at risk of pulmonary aspiration (such as those with altered pharyngeal reflexes or unconsciousness) should be given a nasointestinal tube rather than a nasogastric tube, or other medical alternative. Those at risk for displacement of a nasogastric tube, such as those with coughing, vomiting, or endotracheally intubated, should also be given a nasointestinal tube rather than a nasogastric tube or other medical alternative.

**II. TRIGGER**

*Consider efficacy and need for feeding tubes if:*

- Feeding Tube present \*
- [K5b = checked]

\* Note This item also triggers on the Dehydration RAP

### III. GUIDELINES

#### COMPLICATIONS OF TUBE FEEDING

To reiterate, serious potential negative consequences include agitation, depression, mood disorders, self-extubation (removal of the tube by the patient), infections, aspirations, misplacement of tube in trachea or lungs, pain, and tube dysfunction. Abnormal lab values can be expected and should be reviewed.

*Infection in the trachea or lungs.* Gastric organisms grow as a result of alkalizing (raising) the gastric pH. Gastric colonization results in transmission of gastric organisms to the trachea and the development of nosocomial pneumonia. In one study, colonization in 89% of patients within 4 days in ventilated patients with enteral nutrition was found with nosocomial respiratory infection in 62% of the patients studied. Symptoms of respiratory infections to be monitored include coughing, shortness of breath, fever, chest pain, respiratory arrest, delirium, confusion, and seizures.

*Aspiration of gastric organisms into the trachea and the lungs.* The incidence is difficult to determine, but most studies suggest it is relatively high.

*Inadvertent respiratory placement of the tube* is the most common side effect of tube placement. In one study, 15% of small-bore nasogastric tubes and 27-50% of nasointestinal tubes were found to be out of their intended position upon radiographic examination without any other evidence of displacement. Respiratory placement can occur in any patient, but is most likely in those who are neurologically depressed, heavily sedated, unable to gag, or endotracheally intubated. Detecting such placement is difficult; the following comments address this issue:

- Radiologic detection is the most definitive means to detect tube displacement. Under this procedure, pneumothorax and inadvertent placement in the respiratory tract can be avoided by first placing the feeding tube in the esophagus with the tip above the xiphoid process and then securing the tube and confirming placement with a chest x-ray. Then the tube may be advanced into the stomach and another x-ray taken to confirm the position. The stylet can then be removed and tube feeding begun. Unfortunately, nursing homes are highly unlikely to have appropriate radiological technology and it is normally unreasonable to expect them to make arrangements to have patients transported to available radiology.
- pH testing of gastric aspirates to determine whether a tube is in the gastric, intestine, or the respiratory area is a promising method for testing feeding tube placement. However, parameters for various secretions from the three areas have not yet been clinically defined.
- Aspiration of visually recognizable gastrointestinal secretions, although a frequently used method of determining placement of tubes, is of questionable value as the visual characteristics of secretions can be similar to those from the respiratory tract.
- Auscultatory method: although "shooshing" or gurgling sounds can indicate placement in the stomach, the same sounds can occur when feeding tubes are inadvertently placed in the pharynx, esophagus and respiratory tract. Although small-bore tubes make the auscultatory method more difficult to use, large-bore nasogastric tubes may also be placed inadvertently in the respiratory tract producing false gurgling.

*Inadvertent dislodgement of the tubes.* Nonweighted tubes appear to be more likely to be displaced than weighted tubes (with an attached bolus of mercury or tungsten at the tip).

*Other complications include:* pain, epistaxis, pneumothorax, hydrothorax, nasal alar necrosis, nasopharyngitis, esophagitis, eustachitis, esophageal strictures, airway obstruction, pharyngeal and esophageal perforations. Symptoms of respiratory infections are to be reviewed.

*Complications of gastric tract infections and gastric problems.* Symptoms include abdominal pain, abdominal distention, stress ulcers, and gastric hemorrhage. There is also a need to monitor for complications including diarrhea, nausea, abdominal distention, and asphyxia. Such complications signal the need for a change in the type of formula or diagnostic work for other pathology.

*Complications for the cardiovascular systems.* Symptoms of cardiac distress or arrest to be monitored include chest pain, loss of heart beat, loss of consciousness, and loss of breathing.

*Periodic tests to assure positive nitrogen balance during enteral feeding.* Where positive balance is not achieved, a formula with high nitrogen density is needed. The absorptive capacity is impaired in many elderly patients so that serum fat and protein should be monitored. Effective nutrients should result in positive nitrogen balance, maintenance or increases in body weight, triceps skinfold and midarm muscle circumference maintenance, total iron binding capacity maintenance, and serum urea nitrogen level maintenance. Caloric intake and resident weight should be monitored on a regular basis.

**FEEDING TUBES STATUS RAP KEY (For MDS Version 2.0)**

**TRIGGER**

**GUIDELINES**

*Consider efficacy and need for feeding tubes if:*

- Feeding Tube present \*  
[K5b = checked]

*Factors that may impede removal of tube:*

- Comatose [B1]
- Failure to eat [K4c] AND Resists assistance in eating [E4e]
- Diagnoses: CVA [I1t], Gastric ulcers [I3], Gastric bleeding [from record]
- Chewing problem [K1a]
- Swallowing problem [K1b]
- Mouth pain [K1c]
- Length of time feeding tube has been in use [from record]

*Potential complications of tube feeding:*

- **Diagnostic conditions:** Delirium [B5], Repetitive physical movements [E1n], Anxiety [I1dd], Depression [I1ee], Recurrent lung aspirations [J1k]
- Self-extubation (removal of tube by resident) [from record]
- Limb restraints in use to prevent self-extubation [P4d]
- **Infections in lung/trachea:** Pneumonia [I2e], Fever [J1h], Shortness of breath [J1i], Placement or dislodgement of tube into lung [from exam, record]
- **Side-effects of enteral feeding solutions:** Constipation [H2b], Diarrhea [H2c], Fecal impaction [H2d], Abdominal distention or pain [exam], Dehydrated [J1c]
- **Respiratory problems:** Pneumothorax, hydrothorax, airway obstruction, acute respiratory distress, respiratory distress [I3; from observation, record]
- **Cardiac distress/arrest:** Chest pain [J3c], loss of heart beat, loss of consciousness, loss of breathing [from observation, record]
- Abnormal lab values [P9]

\* Note: This item also triggers on the Dehydration RAP

**RESIDENT ASSESSMENT PROTOCOL: DEHYDRATION/FLUID MAINTENANCE****I. PROBLEM**

On average, one can live only four days without water. Water is necessary for the distribution of nutrients to cells, elimination of wastes, regulation of body temperature, and countless other complex processes.

Dehydration is a condition in which water or fluid loss (output) far exceeds fluid intake. The body becomes less able to maintain adequate blood pressure, deliver sufficient oxygen and nutrients to the cells, and rid itself of wastes. Many distressing symptoms can originate from these conditions, including:

- **Dizziness on sitting/standing** (blood pressure insufficient to supply oxygen and glucose to brain);
- **Confusion or change in mental status** (decreased oxygen and glucose to brain);
- **Decreased urine output** (kidneys conserve water);
- **Decreased skin turgor, dry mucous membranes** (symptoms of dryness);
- **Constipation** (water insufficient to rid body of wastes); and
- **Fever** (water insufficient to maintain normal temperature).

Other possible consequences of dehydration include: decreased functional ability, predisposition to falls (because of orthostatic hypotension), fecal impaction, predisposition to infection, fluid and electrolyte disturbances, and ultimately death.

Nursing home residents are particularly vulnerable to dehydration. It is often difficult or impossible to access fluids independently; the perception of thirst can be muted; the aged kidney can have a decreased ability to concentrate urine; and acute and chronic illness can alter fluid and electrolyte balance.

Unfortunately, many symptoms of this condition do not appear until significant fluid has been lost. Early signs and symptoms tend to be unreliable and nonspecific; staff will often disagree about the clinical indicators of dehydration for specific cases; and the identification of the most crucial symptoms of the condition are most difficult to identify among the aged. Early identification of dehydration is thus problematic, and the goal of this RAP is to identify any and all possible high risk cases, permitting the introduction of programs to prevent the condition from occurring.

When dehydration is in fact observed, treatment objectives focus on restoring normal fluid volume, preferably orally. If the resident cannot drink between 2500-3000 cc's every 24 hours, water and electrolyte deficits can be made up via other routes. Fluids can be administered intravenously, subcutaneously, or by tube until resident is adequately hydrated and can take and retain sufficient fluids orally.

**II. TRIGGERS**

*Dehydration suggested if one or more of following present:*

- Dehydration  
[J1c = checked]
- Insufficient fluid/did not consume all liquids provided  
[J1d = checked]

Dehydration/Fluid Maintenance RAP (1 of 4)

- UTI  
[I2j = checked]
- Dehydration diagnosis  
[I3 = 276.5]
- Weight fluctuation of 3+ pounds  
[J1a = checked]
- Fever  
[J1h = checked]
- Internal bleeding  
[J1j = checked]
- Parenteral/IV <sup>(a)</sup>  
[K5a = checked]
- Feeding tube <sup>(b)</sup>  
[K5b = checked]
- Taking diuretic  
[O4e = 1-7]

<sup>(a)</sup> Note: This item also triggers on the Nutritional Status RAP

<sup>(b)</sup> Note: This item also triggers on the Feeding Tube RAP

### III. GUIDELINES

#### RESIDENTS FACTORS THAT MAY IMPEDE ABILITY TO MAINTAIN FLUID BALANCE

##### *Moderate/severely impaired decision-making ability.*

- Has there been a recent unexplainable change in mental status?
- Does resident seem unusually agitated or disoriented?
- Is resident delirious?
- Is resident comatose?

##### *Comprehension/Communication problems.*

- Does dementia, aphasia or other condition seriously limit resident's understanding of others, or how well others can understand the resident?

##### *Body control problems.*

- Does resident require extensive assistance to transfer?
- Does resident freely move on the unit?
- Has there been recent ADL decline?

##### *Hand dexterity problem.*

- Can resident grasp cup?

##### *Bowel problems.*

- Does the resident have constipation or a fecal impaction that may be interfering with fluid intake?

Dehydration/Fluid Maintenance RAP (2 of 4)

*Swallowing problems.*

- Does resident have mouth sore(s)/ulcer(s)?
- Does resident refuse food, meals, meds?
- Can resident drink from a cup or suck through a straw?

*Use of Parenteral/IV.*

Are feeding tubes in use?

**RESIDENT DEHYDRATION RISK FACTORS**

Dehydration risk factors can be categorized in terms of whether they decrease fluid intake or increase fluid loss. The higher the number of factors, the greater the risk of dehydration. Ongoing fluid loss through the lungs and skin occurs at a normal rate of approximately 500 cc/day and increases with rapid respiratory rate and sweating. Therefore, decreased fluid intake for any reason can lead to dehydration.

*Purposeful Restriction of Fluid Intake.*

- Has there been a decrease in thirst perception?
- Is resident unaware of the need to intake sufficient fluids?
- Has resident or staff restricted intake to avoid urinary incontinence?
- Are fluids restricted because of diagnostic procedure or other health reason?
- Does sad mood, grief, or depression cause resident to refuse foods/liquids?

*Presence of infection, fever, vomiting/diarrhea/nausea, excessive sweating (e.g., a heat wave).*

*Frequent use of laxatives, enemas, diuretics.*

*Excessive urine output (polyuria).*

Excessive urine output (polyuria) may be due to:

- Drugs (e.g., lithium, phenytoin), alcohol abuse
- Disease (e.g., diabetes mellitus, diabetes insipidus)
- Other conditions (e.g., hypoaldosteronism, hyperparathyroidism)

*Other test results.*

Relevant test result to be considered:

- Does systolic/diastolic blood pressure drop 20 points on sitting/standing?
- On inspection, do oral mucous membranes appear dry?
- Does urine appear more concentrated and/or decreased in volume?

## DEHYDRATION/FLUID MAINTENANCE STATUS RAP KEY *(For MDS Version 2.0)*

### TRIGGER — REVISION

*Dehydration suggested if one or more of following present:*

- Dehydrated  
    [J1c = checked]
- Insufficient fluid/did not consume all liquids provided  
    [J1d = checked]
- UTI  
    [I2j = checked]
- Dehydration diagnosis  
    [I3 = 276.5]
- Weight fluctuation of 3+ pounds  
    [J1a = checked]
- Fever  
    [J1h = checked]
- Internal bleeding  
    [J1j = checked]
- Parenteral/IV <sup>(a)</sup>  
    [K5a = checked]
- Feeding tube <sup>(b)</sup>  
    [K5b = checked]
- Taking diuretic  
    [O4e = 1-7]

<sup>(a)</sup> Note: This item also triggers on the Nutritional Status RAP

<sup>(b)</sup> Note: This item also triggers on the Feeding Tube RAP

### GUIDELINES

*Resident Factors that May Impede Ability to Maintain Fluid Balance:*

- Indicators of Delirium [B5]
- Moderate/severely impaired decision-making ability [B4]
- Comprehension/communication problem [C4, C6]
- Body control problems [G3, G4]
- Hand dexterity problem [G4c]
- Constipation [H2b]
- Fecal impaction [H2d]
- Swallowing problem [K1b]
- Recent (within 7 days) deterioration in ADLs [observe, ask Direct Care Staff]

*Resident Dehydration Risk Factors:*

- Purposeful restriction of fluids [J1d; from record]
- Diarrhea [H2c], Presence of infection [I2], Fever [J1h], Vomiting [J1o], Nausea [from record], Excessive sweating [from record, exam]
- Frequent laxative/enema/diuretic use [from record; H3h, O4e]
- Excessive urine output [from record, exam]
- Other tests: Standing/sitting blood pressure, Status of oral mucous membranes, Urine output volume [from record]

**RESIDENT ASSESSMENT PROTOCOL: DENTAL CARE**

**I. PROBLEM**

Having teeth/dentures that function properly is an important requisite for nutritional adequacy. Having teeth/dentures that are clean and attractive can promote a resident's positive self-image as well as personal appearance thereby enhancing social interactions among residents, residents and staff, and residents and visitors. Good oral health can decrease a resident's risk of oral discomfort and in some instances, systemic illness from oral infections/cancer. Residents at greatest risk due to impaired abilities are primarily those with multiple medical conditions and medications, functional limitations in self-care, and communication deficits. Also at risk are more self-sufficient residents who lack motivation or have no consistent history of performing oral health functions. Residents with a history of alcohol and/or tobacco use have a greater risk of developing chronic oral lesions.

**II. TRIGGERS**

*Dental Care or Oral Health problem suggested if:*

- Mouth Debris (*Dental Care*)  
[L1a = checked]
- Less Than Daily Cleaning of Teeth/Dentures (*Dental Care*)  
[L1f = not checked]
- Mouth Pain (*Oral Health*)  
[K1c = checked]
- Some/All natural teeth lost and does not have or does not use dentures (*Oral Health*)  
[L1c = checked]
- Broken, Loose or Carious Teeth (*Oral Health*)  
[L1d = checked]
- Inflamed Gums, Oral Abscesses, Swollen/Bleeding Gums, Ulcers, Rashes (*Oral Health*)  
[L1e = checked]

**III. GUIDELINES**

**CONFOUNDING PROBLEMS**

Debris on teeth, gums, and oral tissues may consist of food and bacteria-laden plaque that can begin to decay teeth or cause foul denture odors if not removed at least once daily. The purpose of this section is to examine confounding problems (from the MDS) which may be prohibiting a resident from adequately removing oral debris.

*Impaired cognitive skills.*

- Does the resident need reminders to clean his/her teeth/dentures?
- Does he remember the steps necessary to complete oral hygiene?
- Would he benefit from task segmentation or supervision?

*Impaired ability to understand:*

- Can the resident follow verbal directions or demonstrations for mouth care?
- If the resident has language difficulties, does he/she know what to do when handed a toothbrush/toothpaste and placed at the bathroom sink?

*Impaired vision.*

- Is resident's vision adequate for performing mouth care or checking its adequacy? –

*Impaired personal hygiene.*

- Did the resident receive supervision or assistance with oral/dental care during the last 7 days?
- Has he/she been assessed to see if he/she could do it independently?
- Does the resident have partial/total loss of voluntary arm movement or impaired hand dexterity that interferes with self-care?
- What would the resident need to be more independent?

*Resists ADL assistance:*

- Does the resident resist mouth care? If so, why (e.g., would rather do own care, painful mouth, apathy related to depression, not motivated - never cared for teeth/mouth, approach of staff, fear)?

*Motivation/Knowledge of resident who is independent in oral/dental care but still has debris or performs care less than daily.*

- Is he/she brushing adequately?
- Does he/she know that it is most important to brush near the gumline?
- Does he/she need to be shown how or be given reinforcement for maintaining good hygiene?

*Adaptive equipment for oral hygiene.*

- Has the resident tried or would he/she benefit from using a built-up, long-handled, or electric toothbrush, or suction brush for cleaning teeth?
- If resident has dentures, does he/she have denture cleaning devices (e.g., denture brush, soaking bath)?

*Dry mouth from dehydration or medications.*

- Dry mouth can contribute to the formation of debris. Is the resident's lips, tongue, or mouth dry, sticky, or coated with film?
- Is the resident taking enough fluids? Is lip balm being applied to resident who has painful, cracking or bleeding lips?
- Is he/she taking any medications that can cause dry mouth (e.g., decongestants, antihistamines, diuretics, antihypertensives, antidepressants, antipsychotic, antineoplastics)?
- If these medications are necessary, has the resident tried saliva substitutes to stimulate moisture?

**TREATMENT HISTORY AND OTHER RELEVANT FACTORS**

*Mouth pain or sensitivity* can be related to either minor and easily treatable (e.g., gum irritation from ill-fitting dentures, localized periodontal problem) or more serious problems (e.g., oral abscess, cancer, advanced tooth decay or periodontal disease). The presence of pain may prevent the resident from eating adequately.

Residents with cognitive impairment and/or those who have difficulty making their needs known are difficult to assess. They may not complain specifically of mouth pain but may instead have decreased food intake or changes in behavior.

*The presence of lesions, ulcers, inflammation, bleeding, swelling, or rashes* may be representative of a minor problem (e.g., irritation from wearing dentures for 24 hours/day), which resolves when the cause is alleviated (e.g., combination of mouth care and leaving dentures out.) However, these signs may also indicate more serious problems, even dental emergencies (e.g., infection). If the problem does not resolve with specific local treatment after a couple of days OR if these signs are accompanied by pain, fever, lymphadenopathy (swollen glands) and/or signs of local infection (e.g., redness), chewing or swallowing problems, or changes in mental status or behavior, a dental consult should be considered.

*Review mouth for Candidiasis* (white areas that appear to be removable anywhere in mouth, (mostly on tongue) for lethargic residents who have one or more of following diagnoses: stroke, Alzheimer's, Parkinson's, anxiety disorder, depression, diabetes, osteoporosis, or septicemia.

*Broken, loose, or carious teeth* may progress to more severe problems (e.g., dislodging a decayed tooth and swallowing or aspirating it). Although, not emergencies, a dental consult should be considered.

*If a resident has lost some or all of his/her natural teeth and does not have dentures* (or partial plates) staff should consider if the resident has the cognitive ability and motivation to wear dentures.

- Has a dentist evaluated resident for dentures?
- Why doesn't resident use his/her dentures (or partial plates)?
- Are teeth in good repair?
- Do they fit well?
- Are they comfortable to wear when eating or talking?
- Does the resident like the way he/she looks when wearing them?
- Has a dentist evaluated resident for dentures?
- Has a dental hygienist interviewed and made recommendations regarding oral hygiene care?

*Exam by dentist since problem noted.* When evaluating a resident with mouth pain or the presence of any of the other trigger signs, check the record to see if a dentist has examined the resident since the problem was first noted.

- Was the current problem addressed?
- What were the recommendations?

*Use of anticoagulants.*

- Is the resident on coumadin or heparin that would put him/her at risk for bleeding if dental work is necessary?
- Is it noted on the medical record?

*Valvular heart disease or prosthesis (e.g., heart valve, false hip, etc.).*

- Are either of these conditions present?
- If so are they clearly noted in the medical record so that necessary precautions be taken prior to dental work?

- Has a dentist evaluated resident for dentures?
- Why doesn't resident use his/her dentures (or partial plates)?
- Are teeth in good repair?
- Do they fit well?
- Are they comfortable to wear when eating or talking?
- Does the resident like the way he/she looks when wearing them?
- Has a dentist evaluated resident for dentures?
- Has a dental hygienist interviewed and made recommendations regarding oral hygiene care?

*Exam by dentist since problem noted.* When evaluating a resident with mouth pain or the presence of any of the other trigger signs, check the record to see if a dentist has examined the resident since the problem was first noted.

- Was the current problem addressed?
- What were the recommendations?

*Use of anticoagulants.*

- Is the resident on coumadin or heparin that would put him/her at risk for bleeding if dental work is necessary?
- Is it noted on the medical record?

*Valvular heart disease or prosthesis (e.g., heart valve, false hip, etc.).*

- Are either of these conditions present?
- If so are they clearly noted in the medical record so that necessary precautions be taken prior to dental work?

**DENTAL CARE RAP KEY (For MDS Version 2.0)**

**TRIGGER — REVISION**

*Dental Care or Oral Health problem suggested if one or more of the following present:*

- Mouth Debris (*Dental Care*)  
[L1a = checked]
- Less Than Daily Cleaning of Teeth/Dentures (*Dental Care*)  
[L1f = not checked]
- Mouth Pain (*Oral Health*)  
[K1c = checked]
- Some/All natural teeth lost and does not have or does not use dentures (*Oral Health*)  
[L1c = checked]
- Broken, Loose or Carious Teeth (*Oral Health*)  
[L1d = checked]
- Inflamed Gums, Oral Abscesses, Swollen/Bleeding Gums, Ulcers, Rashes (*Oral Health*)  
[L1e = checked]

**GUIDELINES**

*Confounding problems to be considered:*

- Impaired cognitive skills [B1, B4]
- Impaired ability to understand [C1, C6]
- Impaired vision [D1]
- Resists ADL assistance [E4e]
- Impaired personal hygiene [G1j]
- Motivation/knowledge [from observation]
- Adaptive equipment for oral hygiene [from record]
- Dry mouth from dehydration [J1c,d] or from medications [from medication sheet]

*Treatment history/relevant factors:*

- Mouth pain or sensitivity [K1c]
- Presence of lesions, ulcers, inflammation, bleeding, swelling or rashes [L1e]
- Broken, loose or carious teeth [L1d]
- Natural teeth lost/ no dentures [L1c]
- Exam by dentist/dental hygienist since problem noted [from record]
- Use of anticoagulants [from record]
- Valvular heart disease or valvular appliance [I3]

## RESIDENT ASSESSMENT PROTOCOL: PRESSURE ULCERS

## I. PROBLEM

Between 3% and 5% (or more) of residents in nursing facilities have pressure ulcers (pressure sores, decubitus ulcers, bedsores). Sixty percent or more of residents will typically be at risk of pressure ulcer development. Pressure ulcers can have serious consequences for the elderly and are costly and time consuming to treat. However, they are one of the most common, preventable and treatable conditions among the elderly who have restricted mobility. Successful outcomes can be expected with preventive and treatment programs.

Assessment goals are: (1) to ensure that a treatment plan is in place for residents with pressure ulcers; and (2) to identify residents at risk for developing a pressure ulcer who are not currently receiving some type of preventive care program.

## II. TRIGGERS

*Pressure ulcer present or there is a risk for occurrence if one or more of following present:*

- Pressure Ulcer(s) Present (*Present*) <sup>(a)</sup>  
[M2a = 1,2,3,4]
- Bed mobility problem (*Risk*)  
[G1aA = 2,3,4,8] <sup>(b)</sup>
- Bedfast (*Risk*)  
[G6a = checked]
- Bowel Incontinence (*Risk*)  
[H1a = 1,2,3,4]
- Peripheral Vascular Disease (*Risk*)  
[I1j = checked]
- Previous Ulcer (*Risk*)  
[M3 = 1]
- Skin desensitized to pain or pressure (*Risk*)  
[M4e = checked]
- Daily Trunk Restraint (*Risk*) <sup>(c)</sup>  
[P4c = 2]

<sup>(a)</sup> Note: Codes 2, 3, and 4 also trigger on the Nutritional Status RAP

<sup>(b)</sup> Note: Codes 2, 3, and 4 also trigger on the ADL RAP

<sup>(c)</sup> Note: This code also triggers on the Falls RAP and Physical Restraints RAP

## III. GUIDELINES

Review the MDS items listed on the RAP KEY for relevance in understanding the type of care that may be required.

*Diagnoses, Conditions and Treatments that Present Complications.*

Consider carefully whether the resident exhibits conditions or is receiving treatments that may either place the resident at higher risk of developing pressure ulcers or complicate their treatment. Such conditions include:

**Diabetes, Alzheimer's Disease and other dementias.** An impairment in cognitive ability, particularly in severe end-stage dementia, can lead to immobility.

**Edema.** The presence of extravascular fluid can impair blood flow. If prolonged or excess pressure is applied to an area with edema, skin breakdown can occur.

**Antidepressants and antianxiety/hypnotics.** These medications can produce or contribute to lessened mobility, worsen incontinence, and lead to or increase confusion.

*Interventions/Programs to Consider if the Resident Develops a New Pressure Ulcer, or an Ulcer Being Treated is not Resolved.*

A variety of factors may explain this occurrence; however, they may suggest the need to evaluate current interventions and modifications of the care plan.

- Review the resident's medical condition, medications, and other risk factors to determine whether the care plan (for prevention or cure) addresses all potential causes or complications.
- Review the care plan to determine whether it is actually being followed (e.g., is the resident being turned often enough to prevent ulcer formation).

*Things to Consider If The Resident Is At Risk For Pressure Ulcers But Is Not Receiving Preventive Skin Care.*

Even if pressure ulcers are not present, determine why this course of prevention is not being provided to a resident with risk factors.

- Is the resident new to the unit?
- Do few or many risk factors for the development of pressure ulcers apply to this resident?
- Are staff concentrating on other problems (e.g., resolution of behavior problems) so that the risks pressure of ulcers are masked?

## PRESSURE ULCERS RAP KEY (For MDS Version 2.0)

### TRIGGER — REVISION

*Pressure ulcer present or risk for occurrence if one or more of following present:*

- Pressure Ulcer(s) Present (*Present*) <sup>(a)</sup>  
[M2a = 1,2,3,4]
- Bed mobility problem (*Risk*)  
[G1aA = 2,3,4,8] <sup>(b)</sup>
- Bedfast (*Risk*)  
[G6a = checked]
- Bowel Incontinence (*Risk*)  
[H1a = 1,2,3,4]
- Peripheral Vascular Disease (*Risk*)  
[I1j = checked]
- Previous Ulcer (*Risk*)  
[M3 = 1]
- Skin desensitized to pain or pressure (*Risk*)  
[M4e = checked]
- Daily Trunk Restraint (*Risk*) <sup>(c)</sup>  
[P4c = 2]

### GUIDELINES

*Other factors that address or may complicate treatment of pressure ulcers or risk of ulcers:*

- **Diagnoses or conditions:**  
Diabetes [I1a], Alzheimer's disease [I1q], Other dementia [I1u], Hemiplegia/Hemiparesis [I1v], Multiple Sclerosis [I1w], Edema [J1g]
- **Interventions/Programs:**
  - Pressure relieving chair/beds [M5a, M5b]
  - Turning/repositioning [M5c]
  - Nutrition or hydration program to manage skin care problems [M5d] —
  - Ulcer care [M5e]
  - Surgical wound care/treatment [M5f]
  - Application of dressings (with or without topical medications) other than to feet [M5g]
  - Application of ointment/medications (other than to feet) [M5h]
  - Preventative or protective skin care (other than to feet) [M5i]
  - Preventive or protective foot care [M6e]
  - Application of dressings to feet (with or without topical medications) [M6f]
  - Use of restraints [P4c,d,e]
- **Medications:**  
Antipsychotics [O4a]  
Antianxiety [O4b]  
Antidepressants [O4c]  
Hypnotics [O4d]

<sup>(a)</sup> Note: Codes 2, 3, and 4 also trigger on the Nutritional Status RAP

<sup>(b)</sup> Note: Codes 2, 3, and 4 also trigger on the ADL RAP

<sup>(c)</sup> Note: This code also triggers on the Falls RAP and Physical Restraints RAP

**RESIDENT ASSESSMENT PROTOCOL: PSYCHOTROPIC DRUG USE****I. PROBLEM**

Psychotropic drugs are among the most frequently prescribed agents for elderly nursing home residents. Studies in nursing facilities suggest that 35% to 65% of residents receive psychotropic medications.

When used appropriately and judiciously, these medications can enhance the quality of life of residents who need them. However, all psychotropic drugs have the potential for producing undesirable side effects or aggravating problematic signs and symptoms of existing conditions. An important example is postural hypotension, a condition associated with serious and life-threatening side effects. Severity of delirium side effects is dependent on: the class and dosage of drug, interactions with other drugs, and the age, and health status of the resident.

Maximizing the resident's functional potential and well-being while minimizing the hazards associated with drug side effects are important goals of therapy. In reviewing a psychotropic drug regimen there are several rules of thumb:

- Evaluate the need for the drug (e.g., consider amount and type of distress, response to nonpharmacologic interventions, pros and cons of drug side effects in relation to distress without the drug). Distinguish between treating specific diagnosed psychiatric disorders and treating symptoms. Specific psychiatric disorders (e.g., schizophrenia, major depression) have specific drug treatments with published guidelines for dosage and duration of treatment. However, a recorded diagnosis of a psychiatric disorder does not necessarily require drug treatment if symptoms are inactive.
- Start low, go slow. If needed, psychotropic drugs should be started at lowest dosage possible. To minimize side effects, doses should be increased slowly until either there is a therapeutic effect, side effects emerge, or the maximum recommended dose is reached.
- Each drug has its own set of actions and side effects, some more serious than others; these should be evaluated in terms of each user's medical-status profile, including interaction with other medications.
- Consider symptoms or decline in functional status as a potential side effect of medication.

**II. TRIGGERS**

**TO BE TRIGGERED, RESIDENT MUST FIRST USE A PSYCHOTROPIC DRUG [Antipsychotic, antidepressant, or antianxiety] [O4a,b, or c = 1-7]. If used, go to RAP review if one or more of following present:**

*Potential for Drug-Related Hypotension or gait disturbances if:*

- Repetitive physical movement<sup>(a)</sup>  
[E1n = 1,2]
- Balance While Sitting  
[G3b = 1,2,3]
- Hypotension  
[I1i = checked]
- Dizziness/Vertigo<sup>(b)</sup>  
[J1f = checked]
- Syncope  
[J1m = checked]
- Unsteady Gait  
[J1n = checked]
- Fell in past 30 days<sup>(b)</sup>  
[J4a = checked]
- Fell in past 31-180 day<sup>(b)</sup>  
[J4b = checked]
- Hip fracture  
[J4c = checked]
- Swallowing problem  
[K1b = checked]

*Potential for Drug-Related Cognitive/Behavioral Impairment if: <sup>(c)</sup>*

- Delirium/Disordered Thinking
  - Easily distracted  
[B5a = 2]
  - Periods of altered perception or awareness of surroundings  
[B5b = 2]
  - Episodes of disorganized speech  
[B5c = 2]
  - Periods of restlessness  
[B5d = 2]
  - Periods of lethargy  
[B5e = 2]
  - Mental function varies over the course of the day  
[B5f = 2]
- Deterioration in Cognitive Status <sup>(c)</sup>  
[B6 = 2]
- Deterioration in Communication  
[C7 = 2]
- Deterioration in Mood <sup>(c)</sup>  
[E3 = 2]
- Deterioration in Behavioral Symptoms <sup>(c)</sup>  
[E5 = 2]

- Depression  
    [I1ee = checked]
- Hallucinations  
    [J1i = checked]

Potential for Drug Related Discomfort if:

- Constipation  
    [H2b = checked]
- Fecal Impaction  
    [H2d = checked]
- Lung Aspiration  
    [J1k = checked]

- (a) Note: This item also triggers on the Mood RAP  
 (b) Note: These items also trigger on Falls RAP  
 (c) Note: All of these items also trigger on the Delirium RAP

### III. GUIDELINES

If any of the triggered conditions are present complete the following:

*Step One.*

Conduct the following reviews:

**1. Drug review [from record]**

- Length of time between when the drug was first taken and onset of problem
- Dose of drug and how frequently taken
- Number of classes of psychotropics taken
- Reason drug prescribed

**2. Review resident's conditions that impair drug metabolism/excretion**

- Impaired liver/renal function
- Acute condition(s)
- Dehydration

**3. Review behavior/mood/psychiatric status**

- Current problem status
- Recent changes in mood and behavior
- Behavior management program
- Psychiatric conditions

*Step Two.*

Compare the drugs the resident is currently taking with common side effects listed below. Refer to Tables A, B, and C for clarification.

**POTENTIAL PSYCHOTROPIC DRUG-RELATED SIDE EFFECTS****Clarifying Information if Hypotension present**

Postural (orthostatic) hypotension (decrease in blood pressure upon standing) is one of the major risk factors for falls related to psychotropic drugs. It is commonly seen with the low-potency antipsychotic drugs (chlorpromazine, thioridizene) and with tricyclic antidepressants. Both classes of drugs have anticholinergic properties. Within each class, drugs with the most potent anticholinergic properties also seem to produce the greatest hypotensive effects. Symptoms of dizziness/vertigo upon sitting or standing from a lying position, syncope (fainting), and falls/fractures, should be seriously considered as potential indicators of psychotropic-drug-induced hypotension. In addition, these symptoms may be due to a disturbance of heart rhythm, which could be aggravated by a tricyclic antidepressant. The occurrence of any of the aforementioned symptoms requires assessment of postural vital signs and heart rhythm.

- **Measurement of postural vital signs.** Measure blood pressure and pulse when the resident is lying down. Remeasure blood pressure and pulse after the resident has been on his/her feet for one to five minutes (if unable to stand, measure after the resident has been sitting). Occasionally, further drops in blood pressure occur after the person has been up for some time. While a drop of more than 20 mm Hg systolic is always abnormal, it is particularly significant if accompanied by dizziness, loss of balance, or a standing blood pressure of less than 100 mm Hg. A large drop may be clinically significant even if the lower pressure is not abnormally low, particularly in residents who have some degree of cerebrovascular disease.

**Clarifying Information if Movement Disorder Present**

**High fever AND/OR muscular rigidity.** Antipsychotic drugs can interfere with temperature regulation, which can lead to the potentially fatal problem of hyperthermia. Also, when high fever is accompanied by severe muscular rigidity, "neuroleptic malignant" syndrome must be suspected. Fever above 103 degrees in a resident on an antipsychotic drug is a medical emergency because of the disturbed temperature regulation. Even lesser degrees of fever, if accompanied by severe muscular rigidity, are medical emergencies. Temperature must therefore be monitored especially closely in residents on psychotropic drugs with anticholinergic properties. In addition, nonantipsychotic drugs with anticholinergic properties, such as antidepressants, may aggravate fever by impairing sweating.

**Parkinson's disease.** This condition is known to be aggravated by all antipsychotic drugs. At times, it is difficult to know whether parkinsonian symptoms (e.g., tremors, especially of hands; pill-rolling of hands; muscle rigidity of limbs, necks, trunk) are due to Parkinson's disease or to present or recent antipsychotic drug therapy. There should be a strong bias in favor of reducing or eliminating antipsychotic drugs in residents with Parkinson's disease unless there are compelling behavioral or psychotic indications. Antiparkinson drugs should be considered when antipsychotic drugs are clinically necessary in residents with Parkinson's disease.

Psychotropic Drug Use RAP (4 of 11)

Five movement disorders are commonly encountered in residents on antipsychotic drugs. All of these disturbances can adversely affect a resident's quality of life as well as increase his/her risk of accidents. The triggered MDS items in Group 2 are signs/symptoms of these disorders. To clarify whether the resident is suffering from one of these disorders, all residents on antipsychotic drugs should be periodically screened for the following conditions:

***Parkinsonism.*** As with Parkinson's disease, this condition may involve ANY combination of tremors, postural unsteadiness, and rigidity of muscles in the limbs, neck, or trunk. Although the most common is a pill-rolling or alternating tremor of the hands, other kinds of tremors are occasionally seen. At times, a resident with Parkinsonism will have no tremor, only rigidity and shuffling gait. Symptoms respond to antiparkinson drugs, but not always completely. Dosage reduction or substitution of nonantipsychotic drug, when feasible, is the preferred management.

***Akinesia.*** This condition is characterized by marked decrease in spontaneous movement, often accompanied by nonparticipation in activity and self-care. It is managed by reducing the antipsychotic drug or adding an antiparkinson drug.

***Dystonia.*** This disorder is marked by holding of the neck or trunk in a rigid, unnatural posture. Usually the head is either hyperextended or turned to the side. The condition is uncomfortable and prompt treatment with an antiparkinson drug can be helpful.

***Akathisia*** — the inability to sit still. The resident with this disorder is driven to constant movement, including pacing, rocking, or fidgeting, which can, at times persist for weeks, even after the antipsychotic drug is stopped. The condition responds occasionally to antiparkinson drugs, but less consistently than parkinsonism or dystonia. Sometimes benzodiazepines or beta-blockers are helpful in treating the symptom, although dosage reduction is the most desirable treatment when possible.

***Tardive dyskinesia*** — persistent, sometimes permanent movements induced by long-term antipsychotic drug therapy. Most typical are thrusting movements of the tongue, movements of the lips, or chewing or puckering movements. These involuntary movements can clearly interfere with chewing and swallowing. When they do, the dyskinesia can be suppressed by raising the dose of the antipsychotic drug, but this will make the problem more permanent. When possible, it is usually preferable to reduce or eliminate the antipsychotic drug, because the symptoms of dyskinesia will often decrease over time after drug discontinuation.

Other variations of tardive dyskinesia include abnormal limb movements, such as peculiar and recurrent postures of the hands and arms, or rocking or writhing trunk movements. There is no consistently effective treatment. Withdrawal of the antipsychotic drug leads to eventual reversal of the symptoms over many months, in about 50% of cases.

#### **Clarifying Information if Gait Disturbance Present (Other Than That Induced by Antipsychotics)**

Long-acting benzodiazepine antianxiety drugs have been implicated in increasing the risk of falls and consequent injury by producing disturbances of balance, gait, and positioning ability. They also produce marked sedation, often manifested by short-term memory loss, decline in cognitive abilities, slurred speech,

drowsiness in the morning/daytime sedation, and little/no activity involvement. If an antianxiety drug is needed to treat an anxiety disorder, a short-acting benzodiazepine or buspirone would be preferable to a long-acting benzodiazepine. Buspirone is nonsedating and takes several weeks to work. Dosage should be increased slowly.

#### **Clarifying Information if Cognitive/Behavior Impairment Present**

**Acute confusion/delirium.** The MDS items which tap the syndrome of acute confusion or delirium, can all be caused or aggravated by psychotropic drugs of any of the major classes. If the resident does not have acute confusion related to a medical illness or severe depression consider the psychotropic drug as a cause. The most helpful information in establishing a relationship is the linkage between starting the drug and the occurrence of the change in cognitive status.

**Depression.** Both anti-anxiety and antipsychotic drugs may cause symptoms of depression as a side effect, or may aggravate depression in a resident with a depressive disorder who receives these drugs rather than specific antidepressive therapy.

**Hallucinations/delusions.** While these are often symptoms of mental illness, all of the major classes of psychotropic drugs can actually produce or aggravate hallucinations. The antidepressant drugs, the more anticholinergic antipsychotic drugs, and the shorter-acting benzodiazepines such as triazolam and lorazepam are most implicated in causing visual hallucinations. Visual hallucinations in the aged are virtually always indicative of brain related disturbance (e.g., delirium) rather than a psychiatric disorder.

**Major differences in AM/PM self-performance.** All classes of psychotropic drugs can have an effect on a resident's ability to perform activities of daily living. Establishing a link between the time a drug is taken and the change in self-performance is helpful in evaluating the problem.

**Decline in cognition/communication.** Decline in these areas signals the possibility that the decline is drug-induced and the need to review the relationship of the decline with initiation or change in drug therapy. All major classes of psychotropics can cause impairment of memory and other cognitive skills in vulnerable residents. While memory loss in nursing facility residents is caused primarily by dementing disorders and other neurologic disease, psychotropic drugs, particularly those with anticholinergic side effects, and long-acting benzodiazepines, definitely contribute to memory impairment. In contrast, treatment of depression or psychosis can actually improve usable memory, which is very much disrupted by severe psychiatric illness. If memory worsens after initiating or increasing the dose of a psychotropic drug, consider reducing or discontinuing the drug, or substituting a less anticholinergic drug. For a resident with anxiety, a short-acting benzodiazepine or buspirone is preferable to a long-acting benzodiazepine.

**Decline in mood.** (See reference to Depression above.)

**Decline in behavior.** Problem behaviors may be aggravated and worsened by psychotropic drugs as they can contribute to confusion, perceptual difficulties, and agitation.

**Decline in ADL status.** Drug side effects must always be considered if a resident becomes more dependent in ADLs. In addition, psychotropic drugs can precipitate or worsen bladder incontinence either through a change in cognition or through a direct action on bladder function.

**Clarifying Issues if Drug-Related Discomfort Present**

*Dehydration; Reduced dietary bulk; Lack of exercise.*

**Constipation/fecal impaction.** Any psychotropic drug with anticholinergic effects can cause or aggravate constipation; the effects are pronounced with tricyclic antidepressants and with low-potency antipsychotic drugs such as chlorpromazine or thioridazine. Milder cases of constipation can be treated with stool softeners, bulk-forming agents, and increased fluid; more severe constipation is best managed by substituting a less anticholinergic agent, or decreasing or discontinuing the psychotropic drug if possible. Antianxiety drugs can contribute to constipation if they sedate the resident to the point that fluid intake or exercise is impaired. The problem can be handled by switching to a less sedating drug, decreasing dosage, or discontinuing the drug if possible.

**Urinary retention.** This condition may be manifested by the inability to urinate, or new onset or worsening of urinary incontinence (caused by overflow of urine from a full bladder that cannot empty properly). Any psychotropic drug with anticholinergic properties can produce or aggravate urinary retention. The problem is best managed by substituting a less anticholinergic agent, or decreasing or discontinuing the psychotropic drug if possible.

**Dry mouth.** This symptom is a common side effect of any psychotropic drug with anticholinergic properties. Dry mouth can aggravate chewing and swallowing problems. Substituting a less anticholinergic drug may be helpful. Other remedies include artificial saliva or sugar-free mints or candies (sugar contributes to cavity formation).

**WHEN TO DISCONTINUE DRUG TREATMENT**

1. Drug treatment that is ineffective after a reasonable trial should be discontinued or changed. The definition of a reasonable trial depends on the drug class and therapeutic indication.
2. When a medication is effective, but produces troublesome side effects, either the dose should be reduced or the medication should be replaced by a therapeutically equivalent agent less likely to cause the problematic side effect. If this is not feasible, or if doing it leads to a recurrence of symptoms, specific medical therapy for the troublesome side effects should be considered. For example, if the best drug for treating a resident's depression causes constipation, stool softeners, laxatives, or bulk-forming agents can be prescribed.
3. When a medication is effective and does not cause troublesome side effects, it should be continued for a defined period, and then efforts should be made to taper and eventually discontinue the drug.
4. Psychotropic medication should be prescribed on a permanent basis only if symptoms have recurred on at least two previous attempts to taper the medication after a defined period of therapy.

## COMMONLY PRESCRIBED PSYCHOTROPIC DRUGS AND THEIR SIDE EFFECTS

TABLE A. ANTIPSYCHOTIC (NEUROLEPTIC) DRUGS

Generic Name	Brand Name	Incidence of Side Effects			
		Sedation	Hypotension	Anticholinergic Symptoms <sup>1</sup>	Extrapyramidal Symptoms <sup>2</sup>
Chlorpromazine	Thorazine	Marked	Marked	Marked	Mild
Thioridazine	Mellaril	Marked	Marked	Marked	Mild
Acetophenazine	Tindal	Mild	Mild	Moderate	Mild
Perphenazine	Trilafon	Mild	Mild	Moderate	Moderate
Loxapine	Loxitane	Mild	Mild	Moderate	Moderate
Molindone	Moban	Mild	Mild	Moderate	Moderate
Trifluoperazine	Stelazine	Mild	Mild	Mild	Marked
Thiothixene	Navane	Mild	Mild	Mild	Marked
Fluphenazine	Prolixin	Mild	Mild	Mild	Marked
Haloperidol	Haldol	Minimal	Minimal	Mild	Marked

TABLE B. ANTIDEPRESSANT DRUGS

Generic Name	Brand Name	Incidence of Side Effects		
		Sedation	Hypotension	Anticholinergic Symptoms <sup>1</sup>
<b>Cyclic antidepressants</b>				
Imipramine	Tofranil	Mild	Moderate	Mod-strong
Desipramine	Norpramin	Mild	Mild-mod	Mild
Doxepin	Adapin	Mod-strong	Moderate	Strong
	Sinequan			
Amitriptyline	Elavil	Strong	Moderate	Very Strong
	Triavil			
Nortriptyline	Aventyl	Mild	Mild	Moderate
	Pamelor			
Maprotiline	Ludiomil	Mod-strong	Moderate	Moderate
Amoxapine*	Asendin	Mild	Moderate	Moderate
Fluoxetine	Prozac	Variable	Nil	Nil
<b>Triazolopyridine Antidepressant</b>				
Trazodone	Desyrel	Mod-strong	Moderate	Mild
<b>MAO inhibitors<sup>+</sup></b>				
Phenelzine	Nardil	Mild	Moderate	Mild
Tranlycypromine	Parnate	Mild	Moderate	Mild
<b>Other</b>				
Bupropion	Wellbutrin	None May cause agitation High incidence of seizures	Nil	Nil

COMMONLY PRESCRIBED PSYCHOTROPIC DRUGS AND THEIR SIDE EFFECTS (cont.)

TABLE C. ANTIANXIETY AND HYPNOTIC DRUGS

Generic Name	Brand Name	Duration of Action
<b>Benzodiazepines</b>		
Triazolam	Halcion	Very short
Oxazepam	Serax	Short
Temazepam	Restoril	Short
Lorazepam	Ativan	Short
Alprazolam	Xanax	Medium
Chlordiazepoxide	Librium	Long
Diazepam	Valium	Long
Clorazepate	Tranxene	Long
Flurazepam	Dalmane	Very long
<b>Barbiturates</b>		
<b>Antihistamines</b>		
Diphenhydramine	Benadryl	Moderate
Hydroxyzine	Vistaril	Moderate
<b>Chloral hydrate</b>		
	Noctec	Long
<b>Other</b>		
Buspirone	BuSpar	Not meaningful

\* Also a neuroleptic drug with all the neuroleptic side effects.

+ Special diet required; many drug interactions.

1 Anticholinergic symptoms include: dry mouth, constipation, urinary retention, blurred vision, confusion, disorientation, short-term memory loss, hallucinations, insomnia, agitation and restlessness, picking behaviors, fever.

2 Extrapyramidal symptoms include: movement disorder, such as Parkinsonism, dyskinesias, and akathisia (described in text). Antidepressants (except Amoxapine) and antianxiety/hypnotics do not produce extrapyramidal side effects.

**PSYCHOTROPIC DRUG USE RAP KEY (For MDS Version 2.0)**

**TRIGGER — REVISION**

**GUIDELINES**

**TO BE TRIGGERED, MUST FIRST USE PSYCHOTROPIC DRUG** [Antipsychotic, antidepressant, or anti-anxiety] [O4a,b, or c = 1-7]. If used, go to RAP review if one or more of following present:

**Potential for Drug-Related Hypotension or gait disturbances**

- Repetitive physical movements<sup>(a)</sup>  
[E1n = 1,2]
- Balance While Sitting  
[G3b = 1,2,3]
- Hypotension  
[I1i = checked]
- Dizziness/Vertigo<sup>(b)</sup>  
[J1f = checked]
- Syncope  
[J1m = checked]
- Unsteady Gait  
[J1n = checked]
- Fell in past 30 days<sup>(b)</sup>  
[J4a = checked]
- Fell in past 31-180 day<sup>(b)</sup>  
[J4b = checked]
- Hip fracture  
[J4c = checked]
- Swallowing problem  
[K1b = checked]

**Potential for Drug-Related Cognitive/Behavioral Impairment if:** <sup>(c)</sup>

- Delirium/Disordered Thinking
  - Easily distracted  
[B5a = 2]
  - Periods of altered perception or awareness of surroundings  
[B5b = 2]

<sup>(a)</sup> Note: This item also triggers on the Mood RAP  
<sup>(b)</sup> Note: These items also trigger on Falls RAP  
<sup>(c)</sup> Note: All of these items also trigger on the Delirium RAP

*If resident is triggered, review the following:*

- Drug review [from record]
  - Length of time between when drug first taken and onset of problem;
  - Doses of drug and how frequently taken;
  - Number of classes of psychotropics taken;
  - Reason drug prescribed
- Review resident's condition that affect drug metabolism/excretion  
 Impaired liver/renal function [I1qq, I3]; Acute condition [J5b]; Dehydration [J1c]
- Review Behavior/Mood Status: Current problem status [E1, E2, E4], Recent changes [E3, E5], Behavior management program [P1be, P2]; Psychiatric Diagnoses [I1dd, ee, ff, gg]

*Clarifying Information if Hypotension present:*

- Postural changes in vital signs [from exam]
- Drugs with marked anticholinergic properties [from record]

*Clarifying Information if Movement Disorder present:*

- High Fever [J1h] AND/OR Muscular rigidity [from record, observation]
- Tremors, especially of hands; pill-rolling of hands; muscle rigidity of limbs, neck, trunk (Parkinsonism) [I1y; from record, observation]
- Marked decrease in spontaneous movement (Akinesia) [from record, observation]
- Rigid, unnatural, uncomfortable posture of neck or trunk (Dystonia) [from record, observation]
- Restlessness, inability to sit still (Akathisia) [from record, observation]
- Persistent movements of the mouth (e.g., thrusting of tongue, movements of lips, chewing/puckering) AND/OR peculiar and recurrent postures of limbs, trunk (Tardive Dyskinesia) [from record, observation]

## PSYCHOTROPIC DRUG USE RAP KEY (continued)

## TRIGGER — REVISION

- Episodes of disorganized speech  
[B5c = 2]
- Periods of restlessness  
[B5d = 2]
- Periods of lethargy  
[B5e = 2]
- Mental function varies over the course of the day  
[B5f = 2]
- Deterioration in Cognitive Status <sup>(c)</sup>  
[B6 = 2]
- Deterioration in Communication  
[C7 = 2]
- Deterioration in Mood <sup>(c)</sup>  
[E3 = 2]
- Deterioration in Behavioral Symptoms <sup>(c)</sup>  
[E5 = 2]
- Depression  
[I1ee = checked]
- Hallucinations  
[J1i = checked]

*Potential for Drug Related Discomfort if:*

- Constipation  
[H2b = checked]
- Fecal Impaction  
[H2d = checked]
- Lung Aspiration  
[J1k = checked]

## GUIDELINES

*Clarifying Information if Gait Disturbances present:*

- Long-acting benzodiazepines [from med record]  
— Recent dosage increase [from med record]
- Short-term memory loss; Decline in cognition [B6]; Slurred speech [C5]
- Decreased AM wakefulness [E1k; N1a]; Little/no activity involvement [N2]

*Clarifying Information if Cognitive/Behavioral Impairment present:*

If neither of following are present, psychotropic drug side effects can be considered as a major cause of problem:

- Acute confusion (delirium) related to medical illness [B5]
- Depression [I1ee]

*Clarifying Issues if Drug-Related Discomfort present:*

- Dehydration [J1c]; Reduced dietary bulk; Lack of exercise [from record], Constipation [H2b], Fecal impaction [H2d], Urinary retention [I3; from record]
- Other potential drug-related discomforts that may require resolution: Dry mouth, if on antipsychotic or antidepressant [observation]

## RESIDENT ASSESSMENT PROTOCOL: PHYSICAL RESTRAINTS

## I. PROBLEM

Studies of nursing homes show that between 30 and 40% of residents are physically restrained. This is quite serious since negative effects of restraint use include declines in residents' physical functioning (e.g., ability to ambulate) and muscle condition, contractures, increased incidence of infections, and development of pressure sores, delirium, agitation, and incontinence. Moreover, restraints have been found in some cases to increase the incidence of falls and other accidents (e.g., strangulation). Finally, residents who are restrained face the loss of autonomy, dignity and self-respect. In effect, the use of physical restraints undercuts the major goals of long-term care — to maximize independence, functional capacity, and quality of life. Thus, the goal of minimizing or eliminating restraint use has become central to both clinical practice and federal law.

The primary reason given for applying restraints is to protect residents from falls and accidents. Facilities are also concerned about potential lawsuits and malpractice claims that might result if residents should fall. Other reasons cited for restraint use include to provide postural support or positioning for residents, to facilitate treatment (e.g., preventing residents from pulling out IV lines or NG tubes), and to manage behaviors such as wandering or physical aggressiveness.

The experience of many health care providers suggests that facility goals can often be met without the use of physical restraints and their negative side effects. In part, this involves identifying and treating health, functional, or psychosocial problems that may be causing the condition for which restraints were ordered (e.g., falls, wandering, agitation). Minimizing use of restraints also involves care management alternatives, such as: modifying the environment to make it safer; maintaining an individual's customary routine; using less intrusive methods of administering medications and nourishment; and recognizing and responding to residents' needs for psychosocial support, responsive health care, meaningful activities, and regular exercise.

## II. TRIGGERS

**Definition:** Physical restraints are any manual method or physical or mechanical device, material, or equipment attached or adjacent to the resident's body that the resident cannot easily remove and that restricts freedom of movement or normal access to his/her body.

- Use of trunk restraint <sup>(a)</sup>  
[P4c = 1,2]
- Use of limb restraint  
[P4d = 1,2]
- Use of chair that prevents rising  
[P4e = 1,2]

<sup>(a)</sup> Note: Code 2 also triggers on the Pressure Ulcer RAP. Both codes trigger on the Falls RAP

## III. GUIDELINES

In evaluating and reconsidering the use of restraints for a resident, consider needs, problems, conditions, or risk factors (e.g., for falls) which, if addressed, could eliminate the need for using restraints. Refer to the RAP KEY for specific MDS items to consider as you review the following issues.

Physical Restraints RAP (1 of 5)

**WHY ARE RESTRAINTS USED?**

The first step in determining whether use of a restraint can be reduced or eliminated is to identify the reasons a restraint was applied.

- Review the resident's record and consult primary caregivers to determine reason for use.

Ask the following questions:

- *Why* is the resident restrained?
- *What type(s)* of restraint is used?
- *During what time of day* is each type(s) used?
- *Where* is the resident restrained (e.g., own room in bed, chair in hallway)?
- *How long* is the resident restrained each day?
- *Under what circumstances* (e.g., when left alone, after family leave, when not involved in structured activity, when eating)?
- *Who* suggested that the resident be restrained (e.g., staff, family, resident)?

**CONDITIONS ASSOCIATED WITH RESTRAINT USE.**

It may be possible to identify and resolve health/functional/psychosocial needs, risks, or problems that caused restraints to be used. By addressing the underlying condition(s) and cause(s), the facility may eliminate the apparent need for the restraint(s). In addition, a review of underlying needs, risks, or problems may help to identify other potential kinds of treatments. After determining why and how a restraint is used, review the appropriate areas described below.

***Problem Behavioral Symptoms.***

To determine presence of a behavioral symptom, review the MDS. If the behavioral symptom for which the resident is restrained was not exhibited in the last 7 days, was it because the restraint prohibited the behavior from occurring (e.g., resident was restrained and could not wander)? If a behavioral symptom was present during the last 7 days or the resident was restrained to prevent a behavioral symptom, consider the resident to have a behavioral symptom and review Behavioral Symptom RAP as indicated.

***Risk of Falls.***

Although restraints have not been shown to safeguard residents from injury, one of the most common reasons given by facilities for restraining residents is to prevent falls. In some instances, restraints have been reported to contribute to falls and injuries. Because of the complications associated with restraint use, many physicians and geriatric clinicians recommend exploring alternatives for preventing falls, such as treating health problems and making environmental modifications.

- Review risk factors for falls on RAP KEY. Refer to Falls RAP if these risks are present or if the restraint is being used to prevent falls.

*Conditions and Treatments.*

Another reason facilities give for using restraints is to prevent a resident from removing tubes.

If the resident is being restrained to manage resistance to any type of tube or mechanical device (e.g., indwelling/external catheter, feeding tube, intravenous line, oxygen mask/cannula, wound dressing), review the following to facilitate decision-making:

- Is the tube/mechanical device used to treat a life-threatening condition?
- Does the resident actually need a particular intervention that may be potentially burdensome to him/her? Are there less intrusive treatment options?
- Why is the resident reacting to the tube/mechanical device with resistance? (e.g., Does the device produce discomfort or irritation? Is the resident really resisting or is the device just something to fidget with? Is the treatment compatible with the resident's wishes? Does the resident understand the reason for the method of treatment? Has the resident/family been informed about the risks and benefits of treatment options?)

**HCFA Guideline:** "If there are medical symptoms which are life threatening (such as dehydration, electrolyte imbalance, urinary blockage) then a restraint may be used temporarily to provide necessary lifesaving treatment. Physical restraints may be used for brief periods to allow medical treatment to proceed, if there is documented evidence of resident or legal approval of the treatment."

- If an indwelling or external catheter is present, review the Urinary Incontinence RAP for alternatives.
- If a feeding tube is present, review the Feeding Tube RAP

*ADL Self-Performance.*

In rare instances, a restraint can enhance a resident's ability to be more self-sufficient, IF the restraint use is supportive and time-limited.

Review the MDS, to determine if the restraint contributes to the resident's self-performance of an activity (e.g., wheelchair belt supports trunk while resident wheels self, geri-chair used only at meals enables wandering resident to attend to feeding self).

*Confounding problems to be considered:*

Many problem behaviors are manifestations of unmet health, functional, and/or psychosocial needs that can often be reduced, eliminated, or managed by addressing the conditions that produced them. (See RAP on Behavioral Symptoms). Conditions associated with behavioral symptoms and restraint use include:

- Delirium (acute confusional state)
- Impaired cognition
- Impaired communication (e.g., difficulty making needs/wishes understood or understanding others)

- Unmet psychosocial needs (e.g., social isolation, disruption of familiar routines, anger with family members)
- Sad or anxious mood
- Resistance to treatment, medication, nourishment
- Psychotropic drug side effects (e.g., motor agitation, confusion, gait disturbance)
- If a behavior management program is in place, does it adequately address the causes of the resident's particular problem behaviors?

*Other Factors to be Considered.*

*Resident's Response to Restraints*

In evaluating restraint use, it is important to review the resident's reaction to restraints (e.g., positive and negative, such as passivity, anger, increased agitation, withdrawal, pleas for help, calls for help, constant attempts to untie/release self). This will help determine whether presumed benefits are outweighed by negative side effects.

Review MDS items on other potential negative effects of restraint use, such as declines in functional self-performance, body control, skin condition, mood and cognition, since restraints have been in use.

*Alternatives to Restraints*

Many interventions may be as effective or even more effective than restraints in managing a resident's needs, safety risks, and problems. To be effective the intervention must address the underlying problem.

- Review resident's record and confer with staff to determine whether alternatives to restraints have been tried.
- If alternatives to restraints have been tried, what were they?
- How long were the alternatives tried?
- What was the resident's response to the alternatives at the time?
- If the alternative(s) attempted were ineffective, what else was attempted?
- How recently were alternatives other than restraints attempted?

*Philosophy and Attitudes*

In reconsidering the use of restraints for a resident, consider the philosophy, values, attitudes, and wishes of the resident regarding restraint use, as well as those of his family/significant others, and caregivers. Consider the impact of restraints on facility environment and morale.

- Is there consensus or differences among affected parties in choosing between resident independence and freedom in favor of presumed safety?

**PHYSICAL RESTRAINTS RAP KEY (For MDS Version 2.0)**

**TRIGGER — REVISION**

*Review for efficacy, side effects and alternatives if one or more of the following:*

- Use of trunk restraint <sup>(a)</sup>  
[P4c = 1,2]
- Use of limb restraint  
[P4d = 1,2]
- Use of chair that prevents rising  
[P4e = 1,2]

**GUIDELINES**

*Review factors and complications associated with restraint use:*

- **Behavioral Symptoms:** Repetitive physical movements [E1n], Any behavioral symptoms [E4], Part of behavior management program [P1be, P2; from record]
- **Risk of Falls:** Dizziness [J1f]; Falls [J4a, J4b];  
Antianxiety [O4b]; Antidepressant [O4c]
- **Conditions and Treatments:**— Catheter [H3c,d]; Hip fracture [J4c, I1m]; Unstable/acute condition [J5a,b]; Parenteral/IV and/or feeding tube [K5a,b]; Wound care/treatment [M5f,g,h,i]; IV meds [P1ac]; Respirator/Oxygen [P1ag, P1al]
- **ADL Self performance** [G1]
- **Confounding problems to be considered:**
  - Delirium [B5]
  - Cognitive loss/dementia [B2, B4]
  - Impaired communication [C4, C6]
  - Sad/anxious mood [E1, E2]
  - Resistance to treatment/meds/nourishment [E4e]
  - Unmet psychosocial needs [F1, F2, F3]
  - Psychotropic drug side effects [see record, J1e,f,h,i,m,n]
- **Other factors to be considered:** Resident's response to restraint(s); use of alternatives to restraints; resident/family/staff philosophy, values, wishes, attitudes about restraints [record, observation, discussion]

<sup>(a)</sup> Note: Code 2 also triggers on the Pressure Ulcer RAP. Both codes trigger on the Falls RAP

4. Know what you want to cover. Leave a few minutes for staff to provide open-ended comments that may pertain to the well-being of the resident.
5. Provide other staff members with a list of areas you wish to cover to expedite the process.
6. Key your questions to the time period for which resident performance is being assessed.

You will often need to discuss a resident with more than one facility staff member. For example, an individual staff member who has been on a 3 week vacation may recall the resident's function a month ago instead of during the last 7 days. A nurse that floats from unit to unit may not know the residents well enough to respond appropriately. If a facility staff respondent struggles with answers or seems vague in referring to the time period in question, you should consider seeking another respondent.

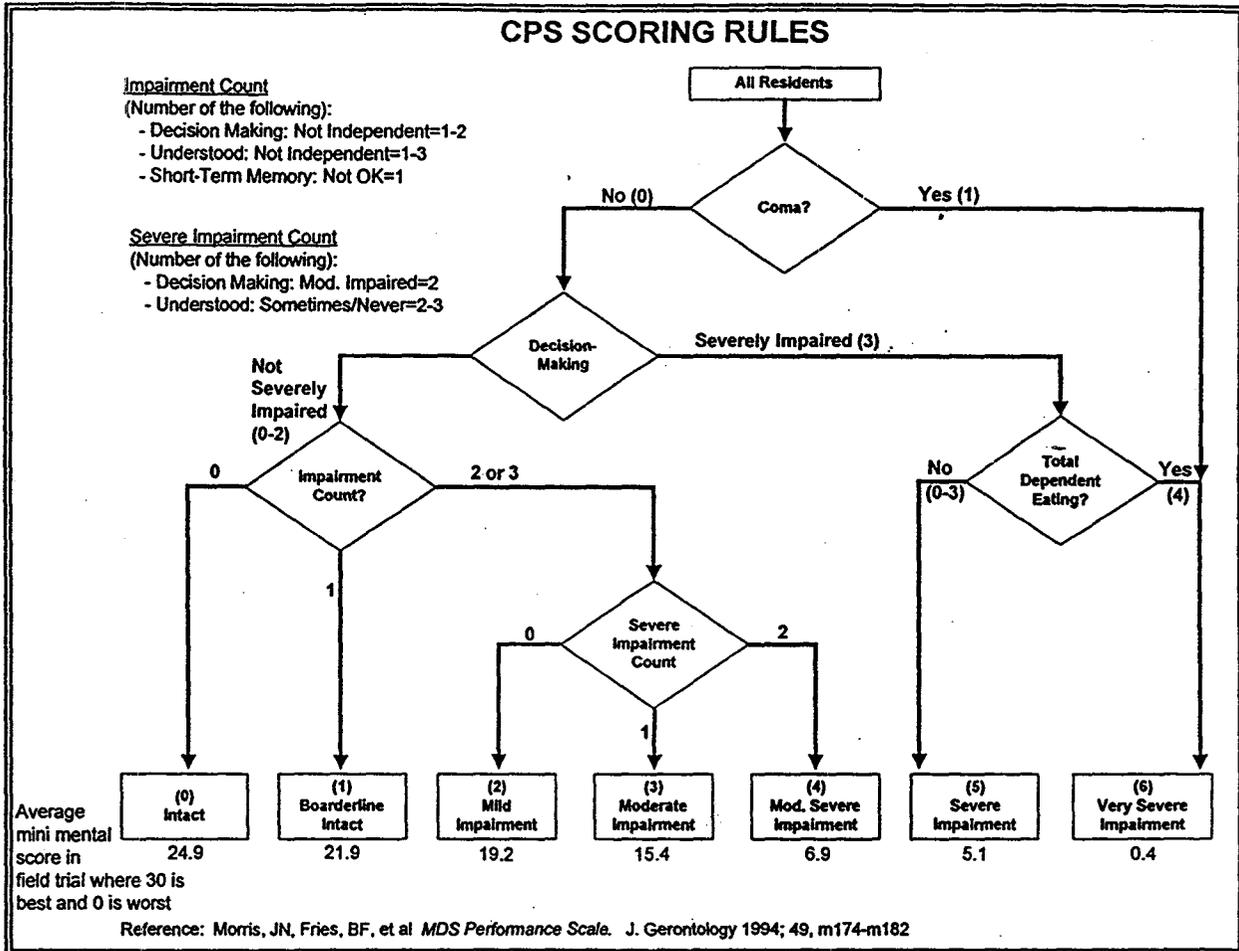
Reinforce to all staff at the onset of the interview that you are gathering information to learn as much about the resident as possible to best plan for the resident's care. Reassure any staff that your purpose is the RAI process and not an evaluation of their job performance.

This list includes examples of diuretics (brand name and generic equivalents) likely to be seen in a nursing home population. This list is not inclusive; consult your pharmacist, the resident's physician, or a drug reference manual, as necessary.

**Brand (generic)**

Aldactazide (spironolactone/hydrochlorothiazide)  
Aldactone (Spironolactone)  
Aqua-Ban  
Aquatensen (Methyclothiazide)  
Bumex (Bumetanide)  
Diamox (Acetazolamide)  
Diuril (Chlorothiazide)  
Dyazide (Triamterene/hydrochlorothiazide)  
Dyrenium (Triamterene)  
Edecrin (Ethacrynic Acid)  
Enduron (Methyclothiazide)  
Esidrix (Hydrochlorothiazide)  
Hydrodiuril (Hydrochlorothiazide)  
Hydromox (Quinethazone)  
Hygroton (Chlorthalidone)  
Lasix (Furosemide)  
Lozol (Indepamide)  
Mannitol (Mannitol)  
Maxzide (Triameterene/hydrochlorothiazide)  
Midamor (Amiloride)  
Moduretic (Amiloride HCl/hydrochlorothiazide)  
Neptazane (Methazolamide)  
Oretic (Hydrochlorothiazide)  
Zaroxolyn (Metolazone)

# APPENDIX F



## APPENDIX G

**STATUTORY AND REGULATORY REQUIREMENTS FOR  
LONG TERM CARE FACILITIES - RESIDENT ASSESSMENT  
AND CARE PLANNING**

The following table displays the statutory requirements and the Federal regulations related to the Resident Assessment Instrument (RAI), the Minimum Data Set (MDS) and care planning for Medicare or Medicaid certified long term care facilities.

Section 1819 of the Social Security Act is the Federal law regarding the requirements for skilled nursing facilities (SNFs) participating in the Medicare program. Section 1919 of the Social Security Act is the Federal law regarding the requirements for nursing facilities (NFs) participating in the Medical Assistance program.

Part 483 of Title 42 of the code of Federal Regulations (CFR) are the requirements for Long Term Care Facilities (SNFs and NFs). "F" tags are Health Care Financing Administration (HCFA) data tags assigned to each of the requirements in 42 CFR 483.

REQUIREMENT AREA	STATUTORY RE- QUIREMENT (MEDICARE)	STATUTORY REQUIREMENT (MEDICAID)	FEDERAL REGULATION/ HCFA "F" TAG
Specification of MDS Core Elements	1819 (f)(6)(A)	1919 (f)(6)(A)	
Designation of RAI Instruments	1819 (f)(6)(B)	1919 (f)(6)(B)	
Services to be Provided in Accordance with Plan of Care	1819 (b)(2)	1919 (b)(2)	42 CFR 483.20 (d)(1-3) F 279, F 280, F 281
Requirement for Resident Assessments	1819 (b)(3)(A)	1919 (b)(3)(A)	42 CFR 483.20 (a- b) F 271, F 272

Certification of Resident Assessment i. Completion and Signature(s)  ii. Penalty for Falsification  iii. Use of Independent Assessors	1819 (b)(3)(B)	1919 (b)(3)(B)	42 CFR 483.20 (c)(1-2) F 278 42 CFR 483.20 (c)(3) F 278 42 CFR 483.20 (c)(4) F 278
Frequency of Assessments	1819 (b)(3)(C)	1919 (b)(3)(C)	42 CFR 483.20 (b)(4-5) F 273, F 274, F 275, F 276
Use of Assessments	1819 (b)(3)(D)	1919 (b)(3)(D)	42 CFR 483.20 (c)(6) (Refer to F 279)
Coordination with State-Required Preadmission Screening Program	1819 (b)(3)(E)	1919 (b)(3)(E)	42 CFR 483.20 (c)(7) F 277
State Specification of Resident Assessment Instrument	1819 (e)(5)	1919 (e)(5)	
Clinical Record Requirements for Resident Assessment and Plan of Care	1819 (b)(6)(C)	1919 (b)(6)(C)	42 CFR 483.75 (n)(6) F 516