

Road Tripping Through Acute Change of Condition

CRYSTAL PLANK, BSN, RN, RAC-CTA, IP
Clinical Consultant/Quality Educator
Sinclair School of Nursing
QIPMO
plankcl@missouri.edu
Cell: 573-819-0173



RECOGNITION AND ASSESSMENT



Chronic

CDC broadly defines chronic disease as:

- lasts for a year or longer
- requires on-going medical treatment
- limits a person's daily activities

Chronic conditions have a gradual onset and may have warning signs.

Chronic conditions may have ambiguous symptoms that overlap with or are like those of other conditions.

Chronic conditions often have a lengthy course and may be lifelong.

Chronic conditions may have long-term health effects that may live with the condition for their lifetime.



<https://www.medicalnewstoday.com/articles/acute-vs-chronic-conditions#definitions>



3

ACUTE CHANGE OF CONDITION (ACOC)

Definition:

- A sudden decompensation or clinically significant diversion from a resident's baseline cognitive, behavioral, physical or functional abilities. Often no warning signs.
- It can result from acute illness, or exacerbation of a chronic illness
- May occur abruptly, over several hours or several days
- Without an intervention(s), it may result in complications and/or death.

Goals of Identification:

- To recognize the ACOC, identify the signs/symptoms, severity and possible causes(s)
- To enable staff to evaluate the resident and manage at the facility, avoiding transfer to the emergency department or hospital

It is potentially avoidable and treatable if recognized and responded to promptly.



4

#1 WAY TO IDENTIFY ACUTE CHANGE IN CONDITION—**KNOW YOUR RESIDENTS!!**

Academic research even shows that nursing home staff relied “more on instinct rather than structured tools or guidelines to recognise acute deterioration.

Six studies reported ‘knowing the residents’ and their ‘baseline norms’ as enabling them to identify when a resident became unwell. This was often reported in conjunction with care home staff describing ‘intuition’, a ‘gut feeling’ or ‘just knowing’ when a resident’s health status had deviated from their norm.

Furthermore, identification of acute deterioration was reported as care home staff relying on tacit knowledge and their relationship with residents as opposed to conscious logical rationale” (Hodge, 2023).



Chronic	Acute
Heart disease	Heart attack
Stroke	Appendicitis
Cancer	Broken bones/fracture
Diabetes	Burns
Hypertension	COVID-19
Epilepsy	Pneumonia
Dementia	Delirium
Arthritis	Asthma Attack
Obesity	CHF exacerbation
COPD	Sepsis
CHF	Chest pain
BPH	Dehydration



COSTS OF “AVOIDABLE” TRANSFERS

Monetary Costs to Facility

- Potential Revenue Recapture (PRR)
 - Money is LOST for each non-billable day due to hospitalization
 - MOQI example- “PRR of total short and long stay non-billable days during hospitalizations ranged from \$590,000 to over \$5 million per facility for six years (2014-2019)”

Nurse Workflow

- Less disruption of routine saves time
 - Consider increased workload of transfer/readmission.

Health Costs to Residents

- Physical, mental and overall functional decline of residents
- Relocation trauma
- Information “lost in translation” (i.e., hospital “telephone”)



7

OBSTACLE # 1—LACK OF KNOWLEDGE

“Registered Nurses (RNs) were reported as having limited interactions with residents, with most day-to-day contact from Personal Care Assistants (PCAs) [CNAs in America].

RNs had less opportunity to identify acute deterioration because of limited resident contact and the need to work through intermediaries with varying skills and experience.

Four studies reported RNs concerns about relying on unregistered staff to identify acute deterioration as early clinical indicators might be missed due to PCAs’ lack of clinical acumen or training. (Hodge, 2023).

[So what does this mean? Get out on the floor and know your people!]



8

Role of Nursing Assistants and Licensed Nurses

Your role in a long-term nursing center is important.

Nursing assistants see the residents most often. CNAs are the eyes, ears and the hands of the care team.

LPN
Therapy,
Administrators,
DON,
Social Service,
Activities,
Dietary,
Maintenance,
Housekeepers,
Volunteers,

IT TAKES THE
TEAM!



Opportunities to Detect/Recognize Changes

Detecting/Recognize Change

- Consistent assignments
- Do a shift-to-shift comparison.
- Make sure the needed equipment is available, b/p, stethoscope pulse oximeter, thermometer
- See if a change occurred in any other resident's vital signs.
- Check the resident's records of urination and bowel movements.
- Know the resident's normal (baseline) condition.
- Note the resident's ability to move around.
- Know how the resident does with activities of daily living.
- Know the resident's preferences for activities, eating, and dressing.
- Changes from the resident's normal condition can signal a medical change.



OBSTACLE #2—INFRASTRUCTURE

“Infrastructure, equipment and staff constraints are often cited as barriers to the recognition and rescue of deteriorating patients in resource-limited settings.” (Beane, 2022).

- Who is training your nurses on identifying acute condition changes?
- Who is training your CNAs on the same thing?
- Is the culture of your building simply “to send them out?”
- How does your medical director fit into this picture?



11

IDENTIFICATION OF RESIDENT RISK FACTORS

Learn the resident’s baseline utilizing all sources of information: resident, family, medical record (hospital records, discharge summary) and staff

Identify pre-existing conditions, prior complications and any adverse events occurring during the most recent hospitalization

Possible pre-existing conditions:

- Cardiac: MI, CHF, atrial fibrillation, CVA, HTN
- Respiratory: COPD, asthma
- Infectious: pneumonia, UTI, sepsis, fever
- Metabolic: delirium, dehydration, weight loss/malnutrition, hypo/hyperglycemia
- Functional: fractures, falls, impairment of one, more ADLs



12

SPECIFIC CONDITIONS WITH ASSOCIATED ACOC RISKS

CHF: acute dyspnea, pulmonary edema	Acute MI: Dysrhythmia, DVT/PE	Diabetes: hypoglycemia, fluid/electrolyte imbalance	CVA, TIA: acute bleeding from anticoagulation therapy, recurrent stroke
Neurogenic bladder, urinary retention, UTI	COPD: acute dyspnea, upper/lower respiratory infection	Fractures: pulmonary embolism, venous thrombosis	New medication: falls, delirium (mental status change)



MOST COMMON TRANSFER DIAGNOSIS

Condition	Percentage
Pneumonia	32.8%
Dehydration	10.3%
Congestive Heart Failure (CHF)	11.6%
Urinary Tract Infection (UTI)	14.2%
Skin ulcers, cellulitis	4.9%
COPD, asthma	6.5%
Total	80.3%

>40% of these are "unnecessary"



MOST COMMON REASONS FOR ER VISITS

Condition	Percentage
Sepsis	23.7%
Circulatory Diseases	20.9%
Injury	18.0%
Respiratory Diseases (pneumonia, aspiration pneumonitis and other pulmonary infections)	15.5%
Genitourinary diseases (pyelonephritis, kidney and UTI)	14.9%

Nursing home residents were >6x more likely to present with sepsis
Nursing home residents were >2x as likely to die in the hospital



15

PHYSICAL CHANGES

Walking- how much assistance required for walking, trouble getting started, change in balance, change in mode of transportation.

Urination and bowel patterns- urinating less frequently, new incontinence, odor, constipation or diarrhea.

Skin- swollen, red, dry, cracked, itching, bruising.

Level of weakness- fatigue, difficulty raising his/her arm, leg.







Fall risk- repeated falls in same day, reaching for objects when in w/c, medication changes.

Vital signs- breathing faster than normal, O2 saturation is dropping, elevated respiratory rate with fever.



16

NON-PHYSICAL CHANGES

-  Demeanor—e.g. withdrawn, passive, socializing less often, inattentive
-  Appetite—e.g. change in taste or smell (Covid s/s), not interested in food, stomach or dental issues
-  Sleeping—e.g. falls asleep in unusual places, difficult to arouse, confusion with day/night
-  Speech—e.g. slurred, unintelligible, speaking loudly
-  Confusion or agitation—e.g. talking more/less than usual, short fused, refusal of care
-  Complaints of pain—e.g. grimaces or winces when moves, new pain symptom (chest pain)



17

STEP I: DETECTION/PROACTIVE

- Monitor residents at high-risk for transfer, e.g. first 3 days after admission
- Daily (or at least weekly) rounding with CNAs.
 - Ask *intentional* questions about the residents
- Monthly nursing assessments. Full body—head-to-toe
- Watch residents where they are and not when you are performing a specific task, e.g. med pass.
- Check in with residents, families frequently
- Use (and train!) evidence-based communication tools.
 - INTERACT® (Interventions to Reduce Acute Care Transfers)
 - Stop and Watch
 - SBAR
 - Care Cards
- QA trends with an RCA (root cause analysis) with shared information.
- Use shift-to-shift comparisons



18

Nurse's Assessment

General exam and assessment

When did symptoms began and when

Vitals, Ask the resident even if confused or seems to be “out of it”

Use assessment tools such as:

Brief Interview for Mental Status (BIMS), which evaluates the normal (baseline) mental function.

Modified Confusion Assessment Method (CAM), which is a simple set of questions that help to identify the presence of confusion.

PHQ-9 detects changes in mood, such as depression or anxiety.



19

STOP AND WATCH EARLY WARNING TOOL

Stop and Watch
Early Warning Tool

INTERACT
Version 4.0 Tool

If you have identified a change while caring for or observing a resident/patient, please **circle** the change and notify a nurse. Either give the nurse a copy of this tool or review it with her/him as soon as you can.

S	Seems different than usual; Symptoms of new illness
T	Talks or communicates less
O	Overall needs more help
P	Pain – new or worsening; Participated less in activities
a	Ate less
n	No bowel movement in 3 days; or diarrhea
d	Drank less
W	Weight change; swollen legs or feet
A	Agitated or nervous more than usual
T	Tired, weak, confused, or drowsy
C	Change in skin color or condition
H	Help with walking, transferring, toileting more than usual

Check here if no change noted while monitoring high risk patient

Patient / Resident _____

Your Name _____

Reported to _____ Date and Time (am/pm) _____

Nurse Response _____ Date and Time (am/pm) _____

Nurse's Name _____

Goal:

- Identify early changes in the resident
- Enhance monitoring of condition change
- Encourage open communication at all levels
- Provide a safe environment for residents focusing on resident well-being
- Limit/eliminate unnecessary hospitalizations



20

STEP 2: CONTINUED

What do you do when there is a condition change? Break down the steps to the very first action.

Do you use an SBAR, Stop-Watch, or Care Cards?

Is there a practicing time-line before initiating transfer to the hospital or ER?

Is there a back-up RN to help make the decision?

What is the follow-up and who handles it? *This should include contacting family members and/or POA (and PCP if necessary).*



21

Recognizing Signs and Symptoms of ACOC

- Assess the resident's overall condition, level of consciousness and current functional status
- Inquire of the resident how the symptoms developed, regardless of cognition level, and how he/she is feeling.
- Review past medical history, medications, recent trauma, current diagnoses
- Review and report current medications, including known allergies to medications, food, etc.
- Obtain vital signs, O2 saturation and blood sugar, if applicable
- Seek additional information to assist the physician in his/her assessment: oral intake, urinary output, review hospital discharge summary for similar symptoms
- Consider possible causes (acute or chronic) to determine which body systems to evaluate
- Documentation of signs/symptoms should include a clear description of the nature, extent and severity of symptoms, changes that are *observable* and *measurable*. Document actual observations, not the care giver's interpretation of the observation.



Consider an adverse drug reaction for resident with:

Recurrent falls

Mental status change

Behavior change

Anorexia

Weight loss

Involve your consultant pharmacist in the medication review



22

EXAMPLES OF DESCRIPTIVE STATEMENTS

Poor intake example

General statement: Rose isn't eating or drinking.

Specific statement: Rose ate 25% of breakfast, 25% of lunch today. Rose normally eats 100% of breakfast and 75% of lunch. Her fluid intake was 300 cc at breakfast, 200 cc at lunch. This is 50% of her normal fluid intake.

Offered Rose favorite cold and hot drinks, encouraged high fluid content food- berries, watermelon and apples. Ate 50%.

Agitation example

General statement: Rose is agitated.

Specific statement: Rose is yelling out for her mother and striking out at staff.

Rose was redirected that was successful 2 out of 3 times.

WHEN TO REPORT



Utilize assessment skills and knowledge of the resident when deciding what and when to report.



Follow current policies and procedures, standards of practice, written physician parameters (e.g. blood pressure, pulse, weight, urine output) in decision-making process.



Report immediately any signs, symptoms or apparent discomfort that is sudden onset and marked change (more Severe in relation to usual s/s), or unrelieved by previous prescribed measures.



When in doubt, request a second opinion, Supervisor, ADON, or/ & DON.



Vital Signs *(report why vital signs were taken)*

Vital Sign ¹	Report Immediately*	Non-Immediate
Blood Pressure Pulse Respiratory Rate Temperature ²	<ul style="list-style-type: none"> • Systolic BP > 200 mmHg or < 90 mmHg • Diastolic BP > 115 mmHg • Resting pulse > 100, < 50 • Respirations > 28, < 10/minute • Oral temp > 100.5 F • Oxygen saturation < 90% 	<ul style="list-style-type: none"> • Diastolic BP > 90 mmHg • New irregular pulse
Weight Loss		<ul style="list-style-type: none"> • New onset of anorexia with or without weight loss • 5% or more within 30 days • 10% or more within 6 months
Weight Gain	<ul style="list-style-type: none"> • 3 lbs in 3 days or 5 lbs in 7 days in resident with <ul style="list-style-type: none"> - Heart Failure (HF) - chronic renal failure - other volume overload state 	

*Unless these values are stable **and** known by the primary care clinician

¹ See INTERACT Guidance on Identification and Management of Infections if acute changes in vital signs are noted

² See INTERACT Fever Care Path

©2014 Florida Atlantic University, all rights reserved. Updated June 2018



Laboratory Tests / Diagnostic Procedures *(report why the test or procedure was done)*

Test/Procedure	Report Immediately*	Non-Immediate
Complete Blood Count	<ul style="list-style-type: none"> • WBC > 14,000 ^{1,2} • Hemoglobin (Hb) < 8 • Hematocrit < 24 • Platelets < 50,000 	WBC > 10,000 without symptoms or fever
Chemistry	<ul style="list-style-type: none"> • Blood/urea/nitrogen (BUN) > 60 mg/dl • Calcium (Ca) > 12.5 mg/dl • Potassium (K) < 3.0, > 6.0 mEq/L • Sodium (Na) < 125, > 155 mEq/L • Blood glucose > 300 mg/dl or < 70 mg/dl (diabetic) 	<ul style="list-style-type: none"> • Glucose consistently > 200 mg/dl • Hb A1c (any value) • Albumin (any value) • Bilirubin (any value) • Cholesterol (any value) • Triglycerides (any value) • Other chemistry values
Consult Reports	Consultant report recommending immediate action or changes in management	Routine consultant report recommending routine action or changes in resident's management
Drug Levels	Levels above therapeutic range of any drug (hold next dose)	Any therapeutic or low level
INR (International Normalized Ratio)	• INR > 6 IUs (hold warfarin)	<ul style="list-style-type: none"> • INR 3-6 IUs (hold warfarin) • PT (in seconds) 2x control (hold warfarin)
Urinalysis ³	Abnormal result in resident with signs and symptoms possibly related to urinary tract infection or urosepsis (e.g. fever, burning sensation, pain in suprapubic or flank area)	Abnormal result in resident with no signs or symptoms
Urine Culture ³	> 100,000 colony count with a urinary pathogen with symptoms	Any growth with no symptoms
X-ray	New or unsuspected finding (e.g. fracture, pneumonia, HF)	Old or long-standing finding, no change

*Unless these values are stable **and** known by the primary care clinician

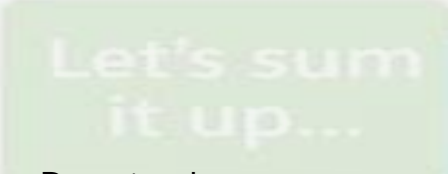
¹ See INTERACT Guidance on Identification and Management of Infections

² See INTERACT Fever Care Path

³ See INTERACT UTI Care Path

©2014 Florida Atlantic University, all rights reserved. Updated June 2018





Summing Up

- › Detecting changes can prevent an illness from getting worse.
- › Nursing staff know the resident best.
- › Nursing staff must be alert to watch for changes.
- › The need to share observations and respond to changes is very important.
- › Staff must know what's normal for the resident so it can be used for comparison when there is a change.
- › Staff must know the different changes they need to watch for.

27

MANAGEMENT AND MONITORING

28

IN-HOUSE MANAGEMENT OF THE ACUTE CHANGE OF CONDITION

- Facility demonstrates the ability to:
 - Evaluate and document the resident's progress with mechanisms to ensure changes reported in timely manner
 - Provide supportive and cause-specific interventions, e.g. maintain fluid balance, stabilize vital signs
 - Recognize and report possible complications in a timely fashion, e.g. resident with recent MI with stent placement develops new complaints of chest pain, diarrhea in resident with recent lengthy course of antibiotic therapy (rule out Cdiff)
 - Determine the feasibility of performing on-site diagnostics, radiology, STAT labs available in 4-6 hours, 24-hour results, initiation IV fluids/medications, providing respiratory support: oxygen, nebulizer treatments. APRN, physician available for on-site evaluation
 - Initiate treatment within few hours of ACOC, e.g. IV therapy for rehydration, PO/IV antibiotic therapy, respiratory treatments (nebulizers), pain management
 - Sufficient staffing to ensure ongoing assessment of condition, recognition and monitoring for possible complications
 - Practitioner available to receive calls, review diagnostic studies and monitor improvement/decline



29

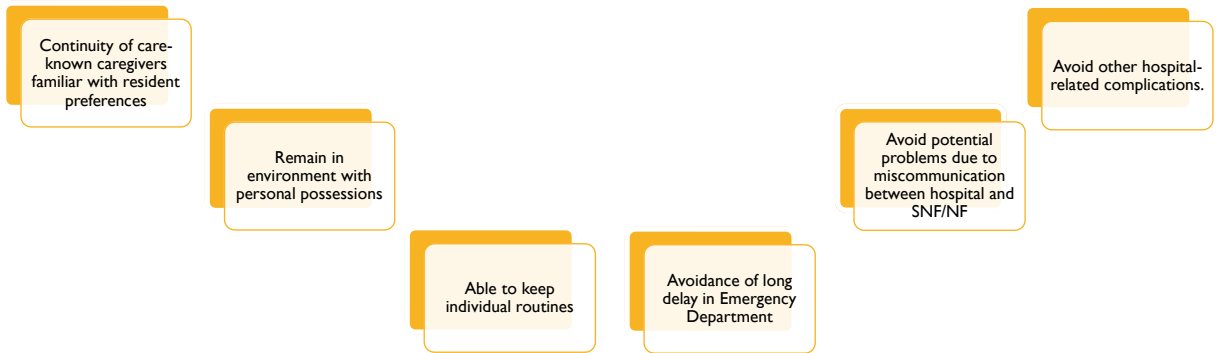
WE CAN DO MORE THAN YOU THINK!

- **Yes**, we can do IVs
- **Yes**, we can get portable x-rays, dopplers, EKGs
- **Yes**, we can do urinalysis via dipsticks
- **Yes**, we can monitor I/Os, blood pressures, orthostatics, labs
- **Yes**, we can give LMW heparin, use incentive spirometers, use inflatable compression pads, and wound vacs.
- **Yes**, we can handle ostomies, stomas, surgical wounds, surgical drains, peritoneal dialysis.
- **Yes**, we can remove PICC lines, butterflies, and clean ports.
- **YES—we CAN do a lot!!**



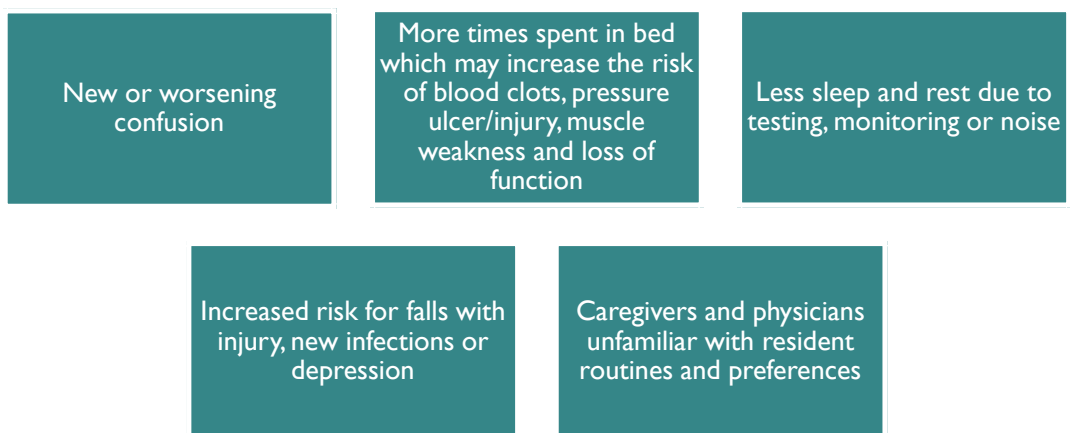
30

BENEFITS OF IN-HOUSE MANAGEMENT



31

RISKS OF HOSPITALIZATION



32



BENEFITS OF HOSPITALIZATION

Availability of sophisticated lab tests, x-rays and scans

Daily access to doctors and specialists

Availability of surgery and other procedures, if needed

Intensive care units for the critically ill



33

MAKING THE DECISION TO SEND TO THE ER



Put yourself in the doctor's shoes—what info would YOU need to make an informed decision? *When they don't get that information and don't trust their resource, they will always err on the side of caution.*



Follow the story—get the background—what changed?



What are their medical goals? Not just “what is their code status.”



Ask yourself: Is the goal of sending them to the ER a diagnosis OR a treatment? *Chances are on some level, you can get the tools to help the doctor diagnose while keeping them in the home.*



Trust your gut—if it feels wrong and they're going south, send them out!.



34

SIGNS & SYMPTOMS-DEHYDRATION

Increased

- pulse
- respirations

Decreased

- blood pressure
- peripheral pulses
- gastric motility (may be constipated)
- urine output (do I/Os!)

Mental status change

Fever

Lethargic

Mouth dry

Poor skin turgor

Labs to watch for dehydration

BUN	normal or increased
Creatinine	normal or increased
Sodium	normal
Hct	increased
HgB	increased
WBCs	increased
Protein	increased
Urine specific gravity	>1.010
Urine osmolarity	increased
Volume	decreased

35

SIGNS & SYMPTOMS-ELECTROLYTE IMBALANCE

1. Are they taking: diuretics, corticosteroids, or digitalis, IV fluids?
2. Are they vomiting? Have diarrhea? Decreased urine output?
3. Do they have appropriate muscle contraction/cramps/muscle twitching/difficulty standing?
4. Is their pulse regular? Thready? Weak?
5. Are they confused? Lethargic? Have a headache? Anxious?
6. Do they have a positive Trousseau sign? (indicative of hypocalcemia—see photo)



36

Suspected Dehydration—what to do Next

Check vitals

Start I/Os

Do core assessment (cardio, respiratory, urinary)

Check blood sugar (even if they aren't diabetic!)

Offer water (e.g., bring it to the room in a cup that's small enough they can handle and wait while they drink it—several times throughout the day and evening)

Add water via tea, coffee, soups, fruit

Monitor mental status

If not improved after 24 hours, ask for CBC and UA.

REMEMBER—we CAN do IV's in the nursing home!
They may just need saline.

Suspected Electrolyte imbalance

Check vitals

Start I/Os to check urine output

Do full head-to assessment with special attention to neuro, pulse, and muscle checks *Remember the heart is a muscle!

Offer water—always a good thing!

Report s/s to the doc and ask for a CBC and CMP.

Monitor at least Q2. These imbalances can truly affect the function of the heart. Watch for changes in cardiac rhythms and be aware if the resident is at risk for throwing a clot.



37

THE UNKNOWN BASIC “ICKS”

Check vital signs.

Check the environment—what's going around in your town, your facility, that hall?

Check the environment of their room—is there a humidifier or dehumidifier in there? O2 concentrator? Bipap or Cpap—all of these things have water that needs to be changed and containers that need to be—but often aren't—cleaned! Perfect breeding ground!

Do they have wound/a port/an IV—anything that breaks that natural skin barrier to infection?

Are they immunocompromised due to cancer or cancer treatments or an autoimmune disorder?

Do a full head-to-toe assessment from the skin out—check the core but also checks for lumps and bumps.

Have they had a good, solid shower lately? Are their fingernails clean? (Fingernails carry a lot of germs!)

Check urine (do I/Os if you think it's appropriate—easy and never hurts!)

Check blood sugar (even if they aren't diabetic)

Are they eating and drinking? WHAT have they been eating? Is there food in their personal frig that's been there for a few months? Did their family bring in something?

Monitor for 24h, increase fluids—if not improved or getting worse—reevaluate all areas and report to doctor. Hopefully you can start with CBC, CMP, and UA.

Infections can come from a lot of places so remember this is a whole story—it's your job to try and understand it!



38

COULD IT BE?...

Signs/symptoms	Possible problem
Massive headache, nausea, wants to keep eyes closed, loss of appetite, tired	Migraine? Close the blinds, eliminate noises, offer a cool washcloth to the forehead and eyes. Offer ibuprofen or Tylenol (unless they have a prescribed Aleve, which is better!)
Mild cough (productive or nonproductive), sinus pressure in the face, headache, runny nose, watery eyes?	Sinus infection? Do they have a hx of allergies? Is it spring? Offer a decongestant, eye drops, encourage water, check the environment for external causes.
Muscle aches, rubbing their hands, knees, legs “bones hurt”	Arthritis? NSAIDs, gentle massage, heat or something cool to the skin
Cough (productive or nonproductive), headache, runny nose, aches and pains, mild fever (101 degrees or less)	Head cold or mild upper respiratory viral infection? Treat the symptoms. Encourage water and rest. Monitor lungs sounds. Encourage patient to be upright as much as possible during the day.

39

SEIZURES

1. Protect the resident from injury.
2. Turn them to their side if possible.
3. Loosen any restrictive clothing, particularly at the neck and chest.
4. Try to time how long the seizure is lasting.

After the seizure...

- Take vital signs.
- Perform neuro checks.
- Settle the resident into a resting position (with head of bed 30 degrees).
- Document—type of seizure, approximate time it lasted, if anything pre-empted it, how the resident felt after the seizure.

Do not need to go to the hospital after one episode of a seizure unless resident presents with other complications. If seizure activity is NEW or UNUSUAL for the resident, alert the physician. Otherwise just document and monitor. *Check if they have anti-seizure meds and if something like Keppra or Dilantin, when were their levels drawn last?



TYPES OF SEIZURES

Myoclonic—brief jerking or stiffing of extremities, either all together or separately, can be symmetric or asymmetric

Atonic—sudden loss of muscle tone usually followed by confusion

Clonic—rhythmic jerking of all extremities

Tonic—abrupt increase in muscle tone, loss of conscious

40

POST-OP ORTHO EMERGENCIES



- Extensive bleeding from surgical site
- Wound dehiscence
- Acute compartment syndrome— increased pressure within the compartments of the extremity and/or the area distal to it build up cutting off circulation. **Watch out for dressings that are too tight!! Check distal pulses!**
- Fat embolism/pulmonary embolism/DVT



41

GI BLEEDS-NEURO ISSUES-THYROID STORM IDENTIFICATION AND TRIAGE CARE

GI BLEEDS

- Watch for coffee ground emesis
- Tarry stools *check—do they take iron supplements?
- Melena—do an occult stool test
- Decreased blood pressure
- Weak, thready pulse
- Vertigo, confusion, dizziness

Capture the stool if you can, obtain an order to send to the lab.

ACUTE NEURO ISSUES

Particularly relevant after acute injury, such as a fall.

- Maintain stable neck/spinal column.
- Check for bruising on head/neck/face.
- Watch for “raccoon eyes.”
- Watch for new onset runny nose that may indicate cerebral spinal fluid leaking.
- Assess for headache, lethargy, and altered mental status.

THYROID STORM

- If this is suspected due to the resident having recently received or changes doses of thyroid medications, etc. it’s important to notify the physician right away. Emergency services may be called for as most nursing homes do not administer iodine or other drugs related to managing this issue.
- Maintain airway
- Monitor vitals
- Apply cool washes to forehead and axilla



42

SELF-CHECK

- Increased respirations
- Decreased oxygenation
- High or low blood pressure
- Heart rate irregular, fast/slow
- Fever
- Low urine output
- Unresponsive or slow to respond

- Did you reposition them?
- Are their fingers cold?
- Are you using the right-sized cuff?
- Did you take it *manually* for 1 full minute?
- Did you take off blankets or excess clothing? Apply a cool washcloth to head, axilla, groin?
- Do they have a diagnosis of end-stage renal disease?
- Did you use the AVPU or Glasgow Coma Scales? (next slides for reference)



GLASCOW COMA SCALE

Behavior	Rating	Observed?	Score
Eye Opening	Spontaneous	<input checked="" type="checkbox"/>	4
	To Sound	<input type="checkbox"/>	3
	To Pressure	<input type="checkbox"/>	2
	None	<input type="checkbox"/>	1
	Not Testable	<input type="checkbox"/>	NT
Verbal Response	Orientated	<input type="checkbox"/>	5
	Confused	<input checked="" type="checkbox"/>	4
	Words	<input type="checkbox"/>	3
	Sounds	<input type="checkbox"/>	2
	None	<input type="checkbox"/>	1
Best Motor Response	Not Testable	<input type="checkbox"/>	NT
	Obey Commands	<input checked="" type="checkbox"/>	6
	Localizing	<input type="checkbox"/>	5
	Normal Flexion	<input type="checkbox"/>	4
	Abnormal Flexion	<input type="checkbox"/>	3
	Extension	<input type="checkbox"/>	2
	None	<input type="checkbox"/>	1
Not Testable	<input type="checkbox"/>	NT	
RESULTS E = 4 V = 4 M = 6 Total = 14			
Notes			

APVU SCALE

- A = the resident is fully awake**
- V = the resident responds to verbal stimulation only**
- P = the resident responds to painful stimulation only**
- U = the resident is completely unresponsive**



MONITORING OF THE RESIDENT WITH AN ACUTE CHANGE OF CONDITION

- Resident evaluation by a nurse every shift, PRN while the resident is unstable or continues with significant symptoms, documenting relevant findings in the medical record
- Daily documentation should include a review of the resident's overall progress until stable and generally asymptomatic . The review should include a summary of the resident's overall condition with a comparison of actual versus expected progress as noted on the original plan of care
- Nurse to practitioner daily communication reporting progress or identified complications
- Onsite evaluation by the practitioner within 24-48 hours if the resident isn't responding to the prescribed treatment
- Interventions should be adjusted based on review of progress, underlying cause of the acute episode, along with the resident's goals, wishes and prognosis
- The resident, family and/or responsible party should be kept informed of resident's condition and progress, complications and changes to the treatment plan



45

CASE STUDIES



46

CASE STUDY #1—CHF

Resident was admitted from NE Hospital, July 15, 2024 due to an exacerbation of CHF.

Ht: 67 inches

Wt: 256 lbs.

Meds:

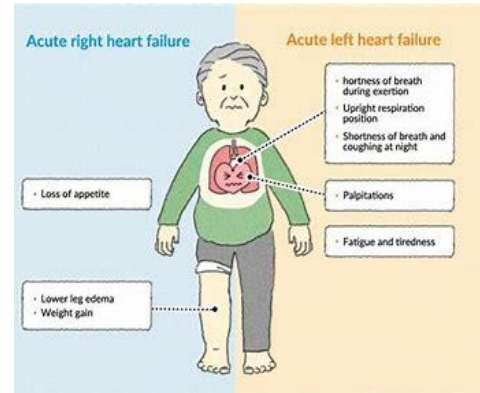
40mg Lasix twice a day

40meQ of potassium daily

Torsemide 20mg daily

Was able to transfer on admission, slowly and with assist x1, used walker for balance, and walked in a hunched position.

Physician asked for daily weight x 2 weeks with a call if weight increased 2-3 lbs/day or 5 lbs/week.



47

CASE STUDY #1: CHF

5 months later

Resident began complaining of her shoes hurting her feet. After about 2 weeks a nurse overheard a CNA telling another CNA that she was having a hard time getting Rose's shoes on. The nurse asked if her feet were swollen. "Not too bad, they're just old shoes." So, the nurse advised the aid to get a shoehorn and let her know if there was any swelling issues.

5 days later

As the nurse was passing meds, she noted that Rose looked like she had gained weight. She also noted Rose had more difficulty in positioning herself in her recliner in order to take her medications. She also complained of back pain. When the nurse asked why, Rose stated she'd been resting easier in her chair than the bed. Knowing this was not uncommon, the nurse offered some Tylenol and went on.



48

CASE STUDY #1: CHF

2 days later

Rose was complaining of shortness of breath. When the nurse assessed her, she had 4+ pitting edema, weeping on the right leg, significant ascites, and oxygen had been placed in her nose at 2 L/NC. No abnormal bowel or lungs were noted. However, the nurse reported to her supervisor that she'd had a hard time hearing the heartbeat.

QUESTION

What can Nurse Sally do at this point?



49

CASE STUDY #1: CHF

Nurse Sally called the doctor and gave a clinical update. Rose was having trouble keeping her oxygen saturation above 90% even with 2L of oxygen.

The doctor told Nurse Sally to send Rose to the ER for evaluation.

Mrs. Smith spent 23 hours in the hospital under observation receiving heavy diuretics via IV. She returned to the nursing home and subsequently was sent out again the next night for "heart" problems. Due to the quick and heavy diuresis, Rose's heart went into atrial flutter and then severe A-fib.



Rose returned from the hospital 6 days later on 4 more heart medications and on compassionate care. She passed away 2 weeks later after filling with fluid and in acute renal failure.



50

CASE STUDY #1



At what timepoints could the nurse have been PROACTIVE?



What tools could have been used?



What are the potential costs to this care scenario?

Monetary?
Workflow?
Resident health outcomes?



51

CASE STUDY #2

9:34 a.m.

You just finished Medicare meeting when you hear one of the CNAs yelling down the hall. "Help! I need help! Please!"

When you arrive, the CNA is scrambling to hold oxygen tubing in the resident's nose and the resident is gasping hard, her eyes are rolling back in her head, and she's holding her chest.

This resident, Mrs. Abernathy, had COVID 2 months ago. What do you do?



52

CASE STUDY #2

What do you see in the room? Is there anything out of place physically? Are there any environmental dangers or visible trauma evident?

Assess

1. Call down the hall for another nurse to assist and bring a mask.
2. Can the resident respond to her name? Is she gasping or struggling for breath?
3. Can the resident state where the pain is?
4. Is the resident a full code?



53

CASE STUDY #2

Mrs. Abernathy is clutching her chest and clearly having difficulty breathing. She is taking rapid, shallow breaths. You calmly talk to her while placing the mask over her and turning her oxygen up a little at a time. You ask her to take deep breaths but as she tries, she moans in pain and hugs a pillow to her chest. You place the pulse oximeter on her finger and hold her hand, trying to take her pulse. Both your own and the pulse ox show her heartbeat at 145. The pulse ox shows her O2 levels at 86%.

Mrs. Abernathy is a full code. She is generally healthy but lately has complained of being short of breath and her chest and side hurting. A chest x-ray 2 weeks ago showed no infection or atelectasis. Mrs. Abernathy had COVID 2 months ago and never really recovered her usual vitality and hasn't been as active as she was prior to COVID.

You ask your fellow nurse to call 911 and the CNA to bring you the crash cart, specifically the Ambu bag just in case she stops breathing. The CNA then waits for the EMTs. You notice Mrs. Abernathy has gone limp and the pulse oximeter is no longer reading results.

What do you suspect is the cause of her symptoms?



54

Case Study: Mrs. Abernathy

Mrs. Abernathy is a mentally intact 79-year-old frail (in a weakened condition) woman who arrived at the Manor Nursing Center after a hip fracture at home. After a stay at an acute rehabilitation center, she is still not able to manage by herself. Mrs. Abernathy walks with difficulty with a walker and needs help with daily living activities. Mrs. Abernathy also has several other medical problems. She has high blood pressure, diabetes, and arthritis. She is also being treated for depression. Her family visits her regularly on weekends. She rarely participates in activities of the Sunshine Haven Nursing Center; at mealtimes she tends to avoid conversation. Recently she had diarrhea, was incontinent of liquid stool, was placed in adult briefs, and nursing assistants had to change her adult briefs once or twice per shift. She began taking meals in her room. Stool tests showed that she had a bowel infection with *Clostridium difficile*. An antibiotic was started. Even with the antibiotic, her bowel movements continued to be liquid and frequent over the next week, and she was eating less. Her blood pressure had been normal for her at 130/80, but her pulse rate was higher than her usual 70-75 at 90-100. Yesterday, she had a fever of 102.5 and was transferred to the acute hospital, where she was admitted to the Intensive Care Unit.

How did Mrs. Abernathy get so sick with only diarrhea? What changes might you have noticed about Ms. A? When might you have decided to do something about it? What could you have done?



55

**EARLY
INTERVENTION
IS KEY**

KEY LESSON

Learn to notice a change early.

Not reporting a change can lead to other things going wrong.

The sooner something is done, the better.



56

PHONE APPS FOR CLINICAL GUIDELINES

- www.epocrates.com Clinical information-online resource, some free information
- [Up-to-Date](#)
- Johns Hopkins Medical University Library for Nurses
https://browse.welch.jhmi.edu/nursing_resources/clinical-tools-and-apps
- [Medscape](#)
- Nursing Central <https://nursing.unboundmedicine.com/nursingcentral>
- Pocket Lab Values (App available)



57

UTILIZING THE SBAR TOOL



58

WHAT IS SBAR?

The **SBAR Communication Tool** is a systematic and structured form which provides a framework for communication between members of the healthcare team

It is an easy and focused way to set expectations for what will be communicated and how the communication is to occur, which is essential for developing teamwork and fostering a culture of resident safety

SBAR promotes shared decision-making and conflict resolution among team members

Most popular handover mnemonic system used



59

SBAR TOOL

Goal

Improve the relationship between practitioners and nurses

Increase overall health of residents

Decrease hospitalizations and deaths

Limitations

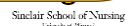
Communication difficulties if unfamiliar with the concept of SBAR

May be a difficult concept to learn and practice

Differences in communication styles between practitioners and nurses leading to communication errors

Differences in training and reporting between practitioners and nurses

Leaves room for confidential information to be disclosed in an area where information could be overheard



60

CONSEQUENCES OF FAILED COMMUNICATION

Omission of detailed resident information

Delayed transfers to acute care

Repetitive testing

Medication errors

Inaccurate resident plans



61

WHAT IS SBAR? S: SITUATION

- The tool consists of standardized prompt questions with four sections to ensure staff are sharing concise and focused information
- **S Situation:** Determine what is going on with the resident at the present time:
 - Identify the problem or concern, signs and symptoms
 - Identify what is the resident experiencing, what makes the s/s better? worse?
 - Prior or similar event? Treatment, if applicable?
 - Provide a brief description
 - Identify why the healthcare professional is needed
 - **Goal:** Communicate what is happening, e.g. chest pain, nausea, shortness of breath



62

WHAT IS SBAR?

B:BACKGROUND

- **B Background:** Identify and provide the diagnoses and reason for the resident's admission, including medical status and history
 - Provide medical-based information to set an assessment of the data
 - Medical-based information includes:
 - Data and reason for admission
 - Most recent vital signs (include any outside of assigned parameters)
 - Medications: Changes? Anticoagulants, Digoxin, insulin, hypoglycemics
 - Allergies
 - Lab results (or drawn and in pending status), blood glucose
 - Pulse oximetry, O2 status
 - Code status
 - Other clinically important information



63

WHAT IS SBAR?

A Appearance (Assessment):

Summarize your observations and evaluation
 What do you think the problem is?
 What is the severity?
 Life Threatening?



R Review and Notify (Recommendations):

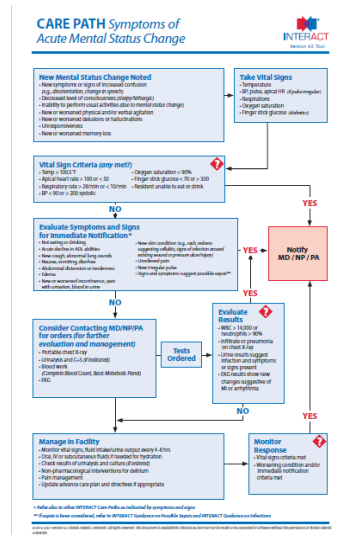
How should the problem be corrected?
 Give a precise and descriptive explanation of what is needed
 What is next?
 Timeframe?
 Urgency?
 Action?
 Can this situation be managed within the facility?
 Practitioner notification
 Practitioner recommendations
 Labs, EKG, UA, X-ray
 Medication changes
 IV fluids
 Oxygen
 Hospital transfer
 Additional nursing notes related to change of condition



64

COMMUNICATION OF A CHANGE OF CONDITION UTILIZING THE SBAR TOOL

- Know your facility policy on physician notification
- Complete the SBAR Communication tool prior to contacting the physician
- **S**ituation
- **B**ackground
- **A**pppearance
- **R**eview and notify
- Review an **Interact Care Path** or **Acute Change of Condition** file card



using

DOCUMENTING AN ACUTE CHANGE OF CONDITION

Every change in a resident's condition or significant care issue(s) should be noted and charted on until the condition stabilizes or is otherwise resolved.

Documentation needs to reflect follow through

- Document:
 - **SBA**: What is your assessment? (Symptoms, subjective/objective data, resident complain(s) pain, vital signs, etc.)
 - **R** What are your recommendations and interventions?
 - Consult with practitioner
 - Medications
 - Support
 - What relieves the symptoms
 - What are you doing to ensure the resident's safety
 - Send off to ED?
- What is your evaluation of the effectiveness of interventions? Results? Consequences?
- What is your next step?
- What are your follow ups to prevent reoccurrence?
- With whom and how did you reach out for collaborative interventions? Request recommendations and input? Family? Healthcare professionals?



FINALLY...



Remember to take credit for what you have done for your resident by documenting properly and completely



No matter what, documentation should reflect:

- Nursing assessment
- Nursing interventions
- Nursing evaluation
- Nursing care follow up



REVIEWING TRANSFERS



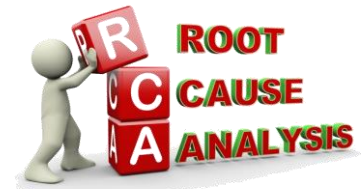
SET THE TONE



69

ROOT CAUSE ANALYSIS

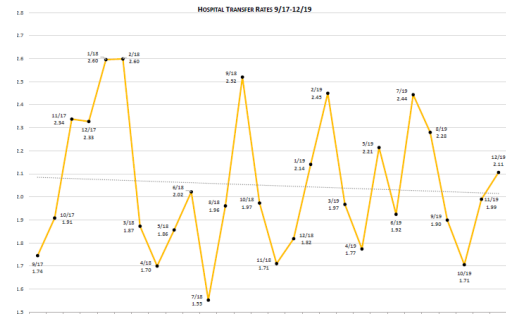
- RCA conducted on every hospitalization
- No shame no blame environment
- Focus on identifying underlying causes of:
 - Resident specific issues
 - System specific issues
- Work with facility staff, families and physicians to influence change



70

QUALITY IMPROVEMENT

- Track progress
 - Transfers
 - Quality Measures
 - Infections
 - Falls
 - Antipsychotic meds
- Celebrate successes...
even small ones



71

KEY POINTS

- Communication
- Consistent Processes of Care
- Engage Everyone
- Learn and transform from challenges



72

FINAL OBSERVATIONS



Changing practice is hard...

But we continue to make progress!!!



73

RESOURCES

- www.pathway-interact.com Interact Version 4.0 Tools for Skilled Nursing Facilities
- www.ahrq.gov AHRQ Agency for HealthCare Research and Quality Module 2 Communicating Change in Resident Condition
- www.paltc.org AMDA Acute Change of Condition in the Long-Term Care Setting Clinical Practice Guideline
- Huffman, Melinda H, Cowan, Jennie Anderton(2004). Redefine care delivery and documentation, *Nursing Management*
- Reta A. Underwood (2005) Demystifying documentation, *nursing home*
- Suzanne C. Beyea (1999), Standardized Language—Making Nursing Practice Count, *AORN Journal*
- AHIMA (2001) LTC Health Information Practice & Documentation Guidelines
- Safety in Health 4, Article Number 7 Situation, Background, Assessment, Recommendation (SBAR) Communication Tool for Handoff in Health Care- A Narrative Review, Shaneela Shahid and Samisa Thomas
- Carol Siem, MSN, RN, BC, GNP, QIPMO Documentation and Communication
- Shari Kist, PhD, RN, CNE, ICP, QIPMO ICAR Team BJCLTC Jan 2020
- Fernandez, Ruben D. Spragley, Fay (2004), Focus on streamlined documentation, *Nursing Management*
- Identifying Acute Changes in Condition, Wendy Boren, BSN, RN, IP & Debbie Pool, BSN, RN, LNHA, QCP, IP QIPMO Clinical Educator/Consultant



74

RESOURCES & WORKS CITED

Beane, A. (2022). Recognising the deterioration of patients in acute care wards: a qualitative study. *Wellcome Open Research*. 7(137). doi: <https://doi.org/10.12688/wellcomeopenres.17624.2>

Center for Medicare and Medicaid Services. Initiative to Reduce Avoidable Hospitalizations Among Nursing Facility Residents: Phase Two. <https://www.cms.gov/priorities/innovation/innovation-models/rahnfr-phase-two>

Hodge, S., Ali, M., Hui, A., Pip, L., and Gordon, A. (2023). Recognising and responding to acute deterioration in care home residents: a scoping review. *BMC Geriatrics*. 6(23), Article 399. [Recognising and responding to acute deterioration in care home residents: a scoping review | BMC Geriatrics | Full Text \(biomedcentral.com\)](https://doi.org/10.1186/s12875-023-01399-9).

Society for Post-Acute and Long-term Care Medicine. *Acute Change of Condition in the Long-term Care Setting*. (Reference book). [Sample of Acute Change of Condition | AMDA | The Society for Post-Acute and Long-Term Care Medicine \(paltec.org\)](https://www.paltec.org/sample-of-acute-change-of-condition-amda)

Wang, H.E., et. Al (2012). "Emergency Department Visits by Nursing Home Residents in the United States" *Journal of American Geriatric Society*, 59(10). doi: 10.1111/j.1532-541.5.2011.03587.x



75

Additional Tools and Resources

A. Early Warning tool (adapted for long term care settings such as nursing centers)
http://www.in.gov/isdh/files/Doc_7_-_Interact_Stop_and_Watch_Tool.pdf. Accessed January 10, 2012.

B. SBAR tool
http://www.interact2.net/docs/Communication%20Tools/SBAR_Communication_Tool_and_Progress_Notec.pdf;
accessed January 30, 2012.

C. Increasing Use of Consistent Assignment. Advancing Excellence in America's Nursing Homes Campaign.
<http://www.nhqualitycampaign.org/files/factsheets/Staff%20Fact%20Sheet%20-%20Consistent%20Assignment.pdf>; accessed January 9, 2012.

D. Minimum Data Set 3.0: Brief Interview for Mental Status (BIMS), Items C0200– C0500; Confusion Assessment Method (CAM), Items C1300 and C1600; and the PHQ-9, Item D0200.
https://cms.gov/NursingHomeQuality/Inits/25_NHQIMDS30.asp#TopOfPage

Wang, H.E., et. Al (2012). "Emergency Department Visits by Nursing Home Residents in the United States"
Journal of American Geriatric Society, 59(10). doi: 10.1111/j.1532-541.5.2011.03587.x

(https://efaidnbmnnnibpcajpcglclefindmkaj/https://www.in.gov/health/files/INTERACT_Stop_and_Watch_Early_Warning_Tool.pdf)



76

CLINICAL EDUCATION NURSES

www.nursinghomehelp.org/qipmo-program
musonqipmo@missouri.edu



Julie Tootle
tootlej@missouri.edu
Region 1



Wendy Boren
borenw@missouri.edu
Region 2



Carolyn Gasser
gasserc@missouri.edu
Region 3, 4



Crystal Plank
plankc@missouri.edu
Regions 5, 6



Debbie Pool
poold@missouri.edu
Region 7



INFECTION CONTROL TEAM

www.nursinghomehelp.org/icar-project
musonicarproject@missouri.edu



Carolyn Gasser
gasserc@missouri.edu
Region 3, 4



Shari Kist
kistse@missouri.edu
Regions 5, 6



Nicky Martin
martincaro@missouri.edu
Region 2 SNFs



Sue Shumate
shumatese@missouri.edu
Region 2 (ALFs/RCFs), 7 (all)



LEADERSHIP COACHES AND ADMIN TEAM

www.nursinghomehelp.org/leadership-coaching
musonqipmo@missouri.edu



Mark Francis
francismd@missouri.edu
Regions 1, 3



Penny Kampeter
kampeterp@missouri.edu
Region 7



Nicky Martin
martincaro@missouri.edu
Region 2



Libby Youse
youseme@missouri.edu
Regions 4, 5, 6



Marilyn Rantz
Project Director



Jessica Mueller
Sr. Project Coordinator
muellerjes@missouri.edu



Ronda Cramer
Business Support Specialist
cramerr@missouri.edu

