

Using assessment tools to improve hospice care

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THE BACK STORY.....

- The Medicare COPs include very specific language about measurement:
 - “The comprehensive assessment must include data elements that allow for measurement of outcomes.”
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The Back Story.....continued

- The hospice must measure and document data in the same way for all patients.
 - The data elements must:
 - take into consideration aspects of care related to hospice and palliation;
 - be documented in a systematic and retrievable way for each patient;
 - be used in individual patient care planning and in the aggregate for the hospice's QAPI program.
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The Back Story.....continued

- In order to meet the COP requirements, each hospice has to decide on specific measures and rating scales
 - Measures and ratings scales should be proven instruments that have been tested and widely used – not “home grown”
 - And now, Dr. Reidy.....
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Objectives

- Understand how assessment tools can improve patient care.
 - Understand and apply the following tools:
 - Palliative performance scale (PPS)
 - Confusion assessment method (CAM)
 - Pain assessment in advanced dementia (PAINAD) and children
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Palliative performance scale

Estimating prognosis in
hospice patients

Why is PPS important?

- Helps estimate prognosis for:
 - Goals of care discussions
 - Hospice eligibility, recertification
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PPS - history

- First published in 1996 as tool for measuring functional changes in palliative care pts
 - Adapted from Karnofsky Performance Scale (ambulation, activity level, evidence of disease)
 - Added self-care, oral intake and level of consciousness
 - Measured from 0-100% in 10% increments
 - 0% = dead, 100% = mobile & healthy
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Use of Palliative Performance Scale in End-of-Life Prognostication

Journal of Palliative Medicine 2006;9:1066-1075

- Retrospective cohort study of 733 pts admitted to a palliative care unit (PCU) in Canada from March 2000-August 2002
 - Outcome was survival time (# days from earliest PCU admission until death)
 - Did initial PPS score accurately predict survival?
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PPS study...

- Results:
 - Mean age 70 yrs
 - 46% male, 54% female
 - 88% cancer, 12% non-cancer diagnosis
 - Overall mean survival = 27 days
 - Overall median survival = 10 days
 - Kaplan-Meier survival curves by admission PPS scores
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PPS study...

- Mortality rates over time
 - All pts with PPS 10% and 94% of pts with PPS 20% died within 2 weeks of admission.
 - 91% pts with PPS 30% died within 45 days
 - 91% pts with PPS 40% died within 90 days
 - 95% pts with PPS 50% died within 180 days
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PPS study...

- Discussion:
 - PPS score is strong predictor of survival, but large validation studies needed
 - This study limited to inpatient palliative care pts
 - Untested utility as general predictor of prognosis for all patients (ie, non-hospice or palliative-care patients)
 - Risk of misinterpretation of PPS tool, which relies on clinician's judgment
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Using the PPS

- Leftward columns are usually stronger determinants of prognosis (ambulation, activity, self-care)
 - Use clinical judgment if one or two columns don't fit the overall PPS score (ie, choose either 40 or 50% -- never 45%)
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Using the PPS...

1. Ambulation
 - Mainly sit/lie vs. mainly in bed (where does pt spend most of her time?)
 - Totally bed-bound (needs total lift to transfer)
 2. Activity & extent of disease
 - Hospice pts with extensive disease
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Using the PPS...

3. Self-care

- "Occasional assistance:" needs minor help at times
 - "Considerable assistance:" needs regular help every day but able to do some self-care
 - "Mainly assistance:" needs help with most ADLs every day
 - "Total care:" needs help with all ADLs every day
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Using the PPS...

4. Intake

- Normal (usual eating while healthy) vs. reduced vs. minimal (very small amounts, usually pureed or liquid)

5. Conscious level

- Full (normal) vs. confusion vs. drowsiness vs. coma (absence of response; may fluctuate)
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Case: John

- 79 yo M with end-stage heart failure
 - Admitted 1 year ago after hospitalization:
 - Out of bed with walker ~10 feet; uses wheelchair – very dyspneic
 - Plays bridge with friends at his home
 - Needs help to get to bathroom but able to brush his teeth, shave
 - Feeds himself, decent appetite
 - Takes 1-hour nap in afternoon; otherwise awake & alert
 - PPS score: 50%
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John...

- At 6 months after admission:
 - Mostly in bed; stands to pivot transfer; can only shuffle a few feet – dyspneic & dizzy
 - Sees visitors for short periods in bedroom
 - Needs help with bathing, dressing, toileting but able to participate somewhat
 - Feeds himself, poor appetite
 - Several naps during day, otherwise alert
 - PPS score 40%
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John...

- Currently (one year after admission)...
 - Completely bedbound; dyspnea at rest
 - Sees family for short periods in bedroom
 - Needs help with all self-care
 - Feeds himself, little appetite
 - Frequent naps (sleeps >50% day); episodes of confusion, agitation
 - PPS 30%
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Confusion Assessment Method (CAM)

Making the diagnosis of delirium

“Terminal Agitation”

- A Symptom or Sign: thrashing or agitation that may occur in the last days or hours of life
 - Broad differential, including:
 - Pain
 - Anxiety
 - Dyspnea
 - Delirium
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DSM-IV Criteria: Delirium

- Disturbance in consciousness
 - Attention
 - Change in cognition
 - eg:memory, orientation, language
 - Develops over a short period of time
 - Caused by the direct physiological consequences of a general medical condition
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Clinical Subtypes

- **Hyperactive**
 - Confusion, agitation, hallucinations, myoclonus
 - **Hypoactive**
 - Confusion, somnolence, withdrawn
 - More likely to be under-diagnosed
 - **Mixed**
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Delirium is Common

- Up to 80% of people experience delirium during the final week of life
 - 15 – 20% hospitalized cancer patients experience some delirium
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Differentiating Delirium from Dementia

Features	Delirium	Dementia
<i>Onset</i>	Acute	Insidious
<i>Course</i>	Fluctuating	Progressive
<i>Duration</i>	Days to weeks	Months to years
<i>Consciousness</i>	Altered	Clear
<i>Attention</i>	Impaired	Normal except in severe dementia
<i>Psychomotor changes</i>	Increased or decreased	Often normal
<i>Reversibility</i>	Usually	Rarely

Recognizing and naming delirium is the first step in its appropriate management

Confusion Assessment Method

- **Feature 1: Acute onset and fluctuating course**
- **Feature 2: Inattention**
- **Feature 3: Disorganized thinking**
- **Feature 4: Altered level of consciousness**

*** The diagnosis of delirium by CAM requires the presence of features 1 and 2 and either 3 or 4.**

What causes delirium?


- **Medication side effect (most common!)**
 - Opioids
 - Corticosteroids
 - Benzodiazepines
 - Scopolamine
 - Hydroxyzine
 - Diphenhydramine
 - Hyoscyamine
 - Tricyclic antidepressants
 - H2 blockers
 - NSAIDs
 - Metoclopramide
 - Alcohol/drug withdrawal
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Causes...

- **Medical contributors**
 - Infection
 - Brain metastases
 - Hepatic encephalopathy
 - Renal failure
 - Hypercalcemia
 - Hyponatremia
 - Hypoxemia
 - Volume depletion
 - Immobilization
 - Pain
 - **Urinary retention**
 - **Constipation**
 - **Psychosocial contributors**
 - Depression
 - Vision/hearing impairment
 - Emotional, spiritual distress
 - Unfamiliar environment
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CAM: summary

- Hallmarks of delirium are inattention, waxing/waning mental status
 - Might NOT include hallucinations
 - Remember HYPOACTIVE delirium
 - Making the diagnosis of delirium is crucial:
 - Consider reversible causes
 - Avoid medications which cause or worsen delirium
 - **Treat with haloperidol, not lorazepam (can worsen delirium)**
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Pain assessment in non-verbal patients

**Providing pain relief to children
and people with advanced
dementia**

Why are alternative pain scales important?

- **Help quantify pain levels in patients who cannot advocate for themselves**
 - **Help monitor response to therapies**
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Pain Assessment in Advanced Dementia: PAINAD scale

- Five-item observation tool with range 0-10
- Created by expert clinicians based on literature review, existing assessment tools
- Widely used, easy to learn
- Needs large validation study
 - Original study limited in size (19 pts – white, male veterans)*

* Warden V, Hurley A, Volicer L. Development and psychometric evaluation of the pain assessment in advanced dementia (PAINAD) scale. *J Am Med Dir Assoc* 2003;4:9-15

Case: Dora

- 85 yo F with advanced Alzheimer's disease
- Long-time resident
- Known for trying to wander, calling out, awakening at night
- More agitated, fighting staff, holding/protecting her abdomen



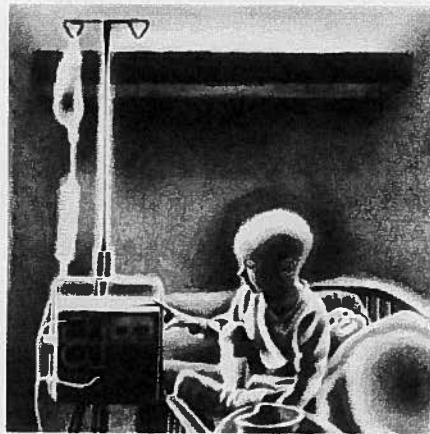
Dora: assessment

- "help me help me help me"
- Can't describe her symptoms; very fearful expression
- Review of chart: low-grade temp yesterday, no BM in four days, poor oral intake
- Temp 100.5, BP 102/70, HR 105, RR 25, O2 sat 97% RA
- Pt curled up on her side → says "ouch!" when you press on her abdomen; hyperactive bowel sounds; rectum w/hard stool

PAINAD scale

	0	1	2	Score
Breathing (independent of vocalization)	Normal	Occasional labored breathing. Short period of hyperventilation.	Noisy labored breathing. Long period of hyperventilation. Cheyne-Stokes respirations.	
Negative vocalization	None	Occasional moan or groan. Low-level speech with negative or disapproving quality.	Repeated troubled calling out. Loud moaning or groaning. Crying.	
Facial expression	Smiling or inexpressive	Sad, frightened, frowning	Facial grimacing	
Body language	Relaxed	Tense, distressed pacing, fidgeting.	Rigid, fists clenched, knees pulled up, pulling or pushing away, striking out.	
Consolability	No need to console	Distracted or reassured by voice or touch	Unable to console, distract or reassure.	

Case: Sarah



- 3 yo girl with acute leukemia
- Hospitalized for chemotherapy
- Episodes of grimacing, kicking, squirming, moaning
- Calms after a while with touch, presence

FLACC: Face, Legs, Activity, Cry, Consolability (Ages 2 months – 7 years)

Score:

Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant quivering chin, clenched jaw
Legs	Normal or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arched, rigid or jerking
	No cry (awake or asleep)	Moans or whimpers; occasional complaint	Crying steadily, screams or sobs, frequent complaints
	Content, relaxed	Reassured by occasional touching, hugging or being talked to, distractible	Difficult to console or comfort

Each of the five categories (F) Face; (L) Legs; (A) Activity; (C) Cry; (C) Consolability is scored from 0-2, which results in a total score between zero and ten.

From *The FLACC: A behavioral scale for scoring postoperative pain in young children*, by S Merkel and others, 1997, *Pediatr Nurse* 23(3), p. 293-297.

Copyright 1997 by Jannetti Co. University of Michigan Medical Center.

Neonatal/Infant Pain Scale (NIPS)

Recommended for children less than 1 year old - A score greater than 3 indicates pain

Pain assessment	Score
Facial Expression 0 – Relaxed muscles, restful face, neutral expression 1 – Grimace, tight facial muscles; furrowed brow, chin, jaw, (negative facial expression – nose, mouth and brow)	
Cry 0 – No Cry, quiet, not crying 1 – Whimper, mild moaning, intermittent 2 – Vigorous cry, loud scream; rising, shrill, continuous (Note: Silent cry may be scored if baby is intubated as evidenced by obvious mouth and facial movement.	
Breathing Patterns 0 – Relaxed, usual pattern for this infant 1 – Change in Breathing, indrawing, irregular, faster than usual; gagging; breath holding	
Arms 0 – Relaxed/Restrained, no muscular rigidity; occasional random movements of arms 1 – Flexed/Extended, tense, straight legs; rigid and/or rapid extension, flexion	
Legs 0 – Relaxed/Restrained, no muscular rigidity; occasional random leg movement 1 – Flexed/Extended, tense, straight legs; rigid and/or rapid extension, flexion	
State of Arousal 0 – Sleeping/Awake, quiet, peaceful sleeping or alert random leg movement 1 – Fussy, alert, restless, and thrashing	

“Ouchers” faces scale

See handout