Passing the Last Torch: Pharmaceutical Transitions at the End of Life

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Objectives

1. Describe symptoms commonly experienced by patients nearing the end of life and medications frequently used to control these symptoms.
2. Describe specific medication considerations in patients who will be transitioning from an acute care facility to home-based hospice care.
3. Given a simulated case, determine which medications are related to the terminal and related condition, and must be provided by hospice.

IOM Recommendations

- Include **coordinated, efficient, and interoperable information transfer** across all providers and all settings;
- **Seamless, high-quality, integrated**, patient-centered, family-oriented, and consistently accessible around the clock;

Think Pair Share

Think about your a **recent** advanced illness patient you were involved with during a transition

- **Were you satisfied with the experience?**
  - If so, what made it work?
  - If NOT satisfied, why not?
- **What were some of the gaps** in clinical care?
- **What could have been done differently?**

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Who's Going to Drop the Hand Off?

Goes by so fast- Blur

Passing the Torch

- How many health care transitions occur in the last 90 days of life? **3.1**
- What percentage of our patients experience a health care transition occur in the last 3 days of life? **14.2%**

EOL transitions NH with Cognitive Issues

- Patients that died in NH setting (n=474,829)
- 19% had at least one burdensome transition (2.1% AK- 37.5% LA)
- Burdensome transitions defined as:
  - Transitions in the last 3 days of life
  - Lack of continuity in NH s/p hospital in last 90 days
  - Multiple hospitalizations in last 90 days
    - >2 for any reason OR
      >1 for pna, UTI, dehydration, or sepsis

State Variations in the Proportion of Nursing Home Residents with Advanced Cognitive Impairment Who Had at Least One Burdensome Transition.

Gozalo P et al. N Engl J Med 2011;365:1212-1221.

Variation in Rates of Burdensome Transitions among 474,829 Patients, According to State.

Table 2. **Variation in Rates of Burdensome Transitions among 474,829 Patients, According to State.**

Criterion for a Burdensome Transition	Overall Rate for All Patients	State with Lowest Rate*	State with Highest Rate*
	%		
Transition 72 hours before death			
To hospice	4.4	Alaska (0)	Nevada (8.0)
From nursing home to acute care hospital	5.8	Vermont (1.1)	Mississippi (12.7)
From hospital to nursing home	2.3	Alaska (0)	Mississippi (3.9)
Lack of continuity in hospitalization			
From nursing home A to hospital to nursing home B in last 90 days	2.7	Alaska (0)	Louisiana (10.9)
Multiple hospital admissions in the last 90 days of life			
≥2 Episodes of pneumonia	2.3	Alaska (0)	Louisiana (6.0)
≥2 Episodes of urinary tract infection	3.9	Vermont (0.1)	Louisiana (11.8)
≥2 Episodes of dehydration	2.7	Alaska (0)	Louisiana (7.6)
≥2 Episodes of septicemia	2.1	Alaska, Idaho, and Wyoming (0)	Louisiana (5.2)
≥3 Hospitalizations for any reason	4.2	Oregon (0.1)	Louisiana (12.2)

* Values in parentheses are state rates.

Gozalo P et al. N Engl J Med 2011;365:1212-1221.

Association between Residence in a Region with an Increased Rate of Burdensome Transitions and Markers of Poor Quality in End-of-Life Care among 102,620 Patients in 2006–2007.

Table 4. **Association between Residence in a Region with an Increased Rate of Burdensome Transitions and Markers of Poor Quality in End-of-Life Care among 102,620 Patients in 2006–2007.***

Marker of Poor Quality of Care	Quintile of Hospital Referral Regions				
	First Quintile (N=19,679)	Second Quintile (N=21,141)	Third Quintile (N=19,870)	Fourth Quintile (N=21,374)	Fifth Quintile (N=20,556)
In the last 90 days of life					
Feeding-tube insertion					
Percentage of patients†	1.4	1.8	3.9	4.9	9.4
Adjusted risk ratio (95% CI)	Reference	1.14 (0.81–1.62)	1.97 (1.43–2.70)	2.06 (1.51–2.81)	3.38 (2.48–4.60)
In the last 30 days of life					
Stage IV decubitus ulcer					
Percentage of patients‡	5.7	9.5	12.6	17.2	21.9
Adjusted risk ratio (95% CI)	Reference	1.48 (1.31–1.66)	1.65 (1.48–1.85)	2.00 (1.79–2.23)	2.28 (2.04–2.54)
Stay in intensive care unit					
Percentage of patients	3.4	5.9	9.1	11.0	15.8
Adjusted risk ratio (95% CI)	Reference	1.47 (1.34–1.61)	1.85 (1.69–2.01)	1.86 (1.71–2.03)	2.10 (1.93–2.29)
In the last 3 days of life					
Referral to hospice					
Percentage of patients	5.3	6.8	6.9	5.9	5.3
Adjusted risk ratio (95% CI)	Reference	1.33 (1.23–1.44)	1.40 (1.29–1.51)	1.25 (1.15–1.36)	1.17 (1.07–1.28)

* All data have been adjusted for the variables listed in Table 1, as well as scores on the Medicare Minimum Data Set–Changes in Health, End-Stage Disease, and Symptoms and Signs (MDS–CHESS) scale, a score that predicts the rate of death at 1 year. To avoid simultaneity bias, the rates of burdensome transitions in each hospital referral region were calculated for the period from 2003 to 2005 and grouped into quintiles.
† The percentage of patients who received a feeding tube was based on a random sample of 20% of patients for whom both Medicare Part A and B data were available, totaling 20,546 patients (first quintile, 3860; second quintile, 4301; third quintile, 3979; fourth quintile, 4325; and fifth quintile, 4081).
‡ The percentage of patients with a stage IV decubitus ulcer is based on 38,092 nursing home residents with an MDS assessment that was completed in the last 30 days of life (first quintile, 7021; second quintile, 7715; third quintile, 7491; fourth quintile, 8018; and fifth quintile, 7847).

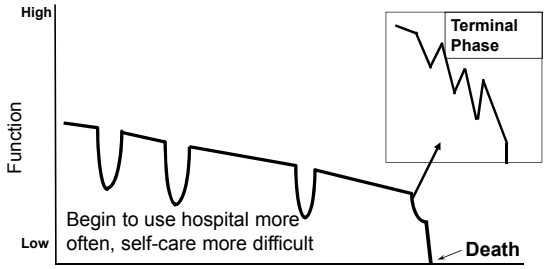
Gozalo P et al. N Engl J Med 2011;365:1212-1221.

At What Expense?

- Consequences of failing to plan for the transition to EOL care include the following:
  - Increased psychological distress.
  - Medical treatments inconsistent with personal preferences.
  - Utilization of burdensome and expensive health care resources of little therapeutic benefit.
  - A more difficult bereavement

http://www.cancer.gov/cancertopics/pdq/supportivecare/transitiontoEOLcare/healthprofessional/page1

Common Chronic Disease Model



Time ~ 2-5 years.
Death usually seems "sudden"

Modified from Lunney JR et al. *JAMA* 2003: 289: 2387.

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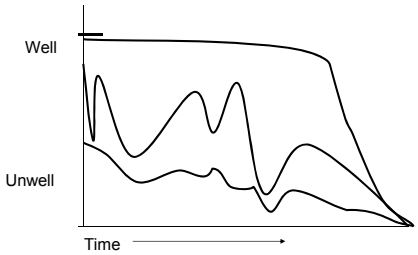
Comparing EOL trajectories



Cancer: Short period of decline
Organ failure (Heart, lung, kidney):
Slow decline with intermittent acute episodes
Frailty and dementia (prolonged dwindling) Joanne Lynn, "Living Long in Fragile Health: The New Demographics Shape End of Life Care" Improving End of Life Care: Why Has It Been So Difficult? Hastings Center Special Report 35, no. 6 (2005): S14-S18.

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Model of Palliative Care

Traditional Care Model

Life-Prolonging Therapy

Diagnosis of life-limiting illness

Hospice benefit

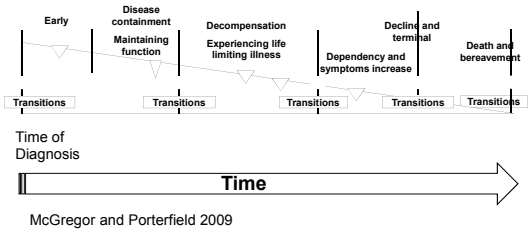
Death

"Integrated" Care Model"

Life-Prolonging Therapy

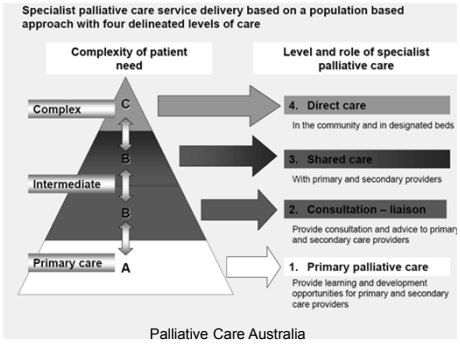
Palliative Care

Transitions in EOL Care



McGregor and Porterfield 2009

Collaborative interdisciplinary approach



Palliative Care Australia

How to Run a Relay Race

1. Prepare yourself - get plenty of rest
2. Know the course and which leg you are running, be prepared for the weather and hills
3. Cheer on your teammates
4. Be consistent to finish strong
5. Don't wait till the last moment to prepare for the race (pack gym bag the night before)
6. Travel together as a team to keep focused
7. Be prepared for blind handoffs
8. Last runner has to make up the distance

In the Zone

- This is where a runner completing their leg passes the baton to the next runner beginning their leg.
  - The team can lose time and position, or be disqualified.
- In the shorter races where the speed is greater, this becomes a delicate issue.
  - If the exchange goes smoothly, the team can continue without hesitation.
  - It not, the team will face the most difficulty.

Best Practices

ASHP-APhA Medication Management in Care Transitions Best Practices. 2013
http://www.ashp.org/DocLibrary/Policy/Transitions-of-Care/ASHP-APhA-Report.pdf

High Risk Situations

- Health Literacy
  - Universal precautions, "teach back"
- Cognitively Impaired
  - Universal precautions, "teach back"
- External Transfers
  - Require:
    1. Patient's list of home medications prior to their hospitalization.
    2. Medications that are being administered to the patient at the outside hospital prior to transfer.
    3. Medications ordered at the receiving hospital.

http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/match/match7.html

Elements of Success

- Team effort and collaboration
- Pharmacy integration
- Data to justify resources
- Electronic patient informatic systems and data transfer process
- Strong partnerships

ASHP-APhA Medication Management in Care Transitions Best Practices. 2013
http://www.ashp.org/DocLibrary/Policy/Transitions-of-Care/ASHP-APhA-Report.pdf

Medication Reconciliation in Hospice

- Regimented, documented review to avoid drug errors during transitions in care
- Where does hospice stand with this?
  - Survey of two hospice programs
  - An average of 8.7 medication discrepancies per patient
    - 81% omitted medications
  - 55 additional drug interactions rated moderate or severe

Kemp LO, et al. *Am J Hosp Palliat Care*. 2009;26(3):193-199

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Engage Patient and Family

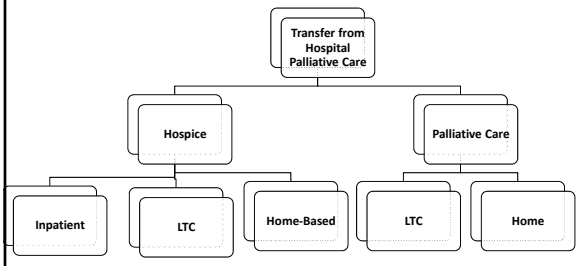
- Encourage keeping updated med list
  - Including herbals, OTC, allergy info
- Medication diaries for symptom management
- Bring medications with them or have in sight for visits

http://www.who.int/patientsafety/solutions/patientsafety/PS-Solution6.pdf

More than Med Rec?!

Include **coordinated, efficient, and interoperable information transfer** across all providers and all settings;
Seamless, high-quality, integrated, patient-centered, family-oriented, and consistently accessible around the clock;

Transferring to Potential Plans of Care



Four Critical Medication issues in Transitions in Care

1. **Medication titration and monitoring**
2. Formulary issues
3. Prioritizing medications based on benefit/burden and goals of care
4. Thinking ahead

Degree of concern

Discharge to:	Med Titration	Formulary / Insurance Considerations	Prioritizing Meds	Thinking Ahead
Inpatient hospice	**Low**	**High**	**High**	**Low**
Home-based hospice	**Moderate**	**High**	**High**	**Moderate**
LTC hospice	**Moderate**	**High**	**High**	**Moderate**
Pall Care LTC	**High**	**Moderate**	**High**	**High**
Pall Care home	**High**	**Moderate**	**High**	**High**

Assess Level of Concern

- Influencing Factors
  - Patient acuity
  - Prognosis
  - Risk of medications
  - Family support
  - Hand off site experience with specific situation of patient

High Risk Medications

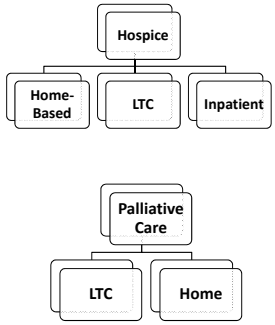
- 67 yo female admitted with lethargy/pain, now in ICU
- PMH: advanced COPD (extubated 2 days ago), DM with severe neuropathy, s/p B/L THR
- Team is worried about her depression and pain, patient is writhing in pain most of the day
  - Started methadone 2.5 mg BID
  - Started Ritalin (methylphenidate) 2.5 mg am/noon and Effexor (venlafaxine)
- Dispo in am…

*not actual pt

Heading to Where?!

Considerations:

- Experience with methadone
  - Protocol
  - Pharmacy support
- Support services for counseling and assessment of depression



Heading to Where?!

Actions:

- Specific timeframes and dosing recommendations for titrations
- Follow up phone calls to monitor
- Family education

Methadone Recommendations:

Converted from low dose opioids (<60 mg/d of PO morphine):
- **No more than 2.5 mg TID initial dose**
- **Do not increase more than 5 mg/d every 5-7 days**

Converted from higher dose opioids:
- **No more than 30-40 mg/d initial dose**
- **Do not increase more than 5 mg/d every 5-7 days**

Assessment during 3-5 day window after initiation or dose increase.

Chou R, et al. J of Pain. 2014. 15 (4); 321-337.

Four Critical Medication issues in Transitions in Care

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Making the Case for Formulary Issues

- Mr. C is a 49 year old man with end-stage lung cancer discharged from the hospital to home-based hospice.
- His analgesic regimen is as follows:
  - OxyContin 20 mg po q12h
  - Fentora 800 mcg four times daily
  - Morphine 10 mg po q2h as needed for additional pain
  - Zofran 8 mg q8h prn nausea
- He has not been on any additional medications

How it all began…

- Cover Related Drugs (COP 418.106)
  - "Drugs and biologicals **related to the palliation and management of the terminal illness** and related conditions; **as identified in the hospice plan of care**, must be provided by the hospice while the patient is under hospice care."

What sounded the alarm?

- …there has been some concern, as noted by the [OIG], that some hospices are not providing the full range of required hospice services, most notably drugs
- Some hospice-related drugs for Medicare hospice beneficiaries are being submitted through Part D prescription programs instead of being covered under the [MHB]...
- …it is evident that many drugs used for hospice pain management are being "unbundled" from the hospice per diem rate...

So what put the ball in play?

- …there has been some concern, as noted by the [OIG], that some hospices are not providing the full range of required hospice services, most notably drugs
- Some hospice-related drugs for Medicare hospice beneficiaries are being submitted through Part D prescription programs instead of being covered under the [MHB]...
- …it is evident that many drugs used for hospice pain management are being "unbundled" from the hospice per diem rate...

78 Federal Register 152 (7 August 2013), p.48245-6

How did we get here?

- OIG report issued in 2012
  - 198,543 hospice beneficiaries received 677,022 prescription drugs through the Medicare Part D
- Part D paid pharmacies $33 M in claims and beneficiaries paid $3,835,557 in copayments after election of Medicare Hospice Benefit (Part A)
  - Analgesics, anti-emetics, laxatives, anxiolytics
- Additional analysis by CMS Center for Program Integrity
- Final guidance issued by CMS on March 10 2014

CMS Memo 12-06-2013

- 4 Medication Scenarios
  - Meds started prior to admission; related; hospice provides
  - Meds started prior to admission; no longer medically necessary; DC med
  - Med is either related but not formulary, or not necessary but patient wants to continue
  - Medication is unrelated

July 2014 Revised Interim Guidance

- Prior authorization is required ONLY for 4 classes of drugs when the drug is NOT related to the terminal prognosis
  - Analgesics
  - Anti-emetics
  - Laxatives
  - Anti-nausea

"We expect that Medicare hospice providers will continue to provide all of the medications that are reasonable and necessary for the palliation and management of a beneficiary's terminal illness and related conditions. We expect that this will routinely include the drugs in the four categories highlighted by the OIG…"

Who pays for what?

Scenario		Who provides medication
Related to terminal diagnosis	→	Hospice
Unrelated, Part D eligible	→	Part D process for payment (no hospice PA process)
Unrelated in 4 categories; may be Part D eligible	→	Part D hospice submits PA process for payment
Related but no longer medically necessary	→	Patient
Related and medically necessary, but not formulary and patient refuses formulary therapeutic alternative	→	Patient
Unrelated but no longer medically necessary	→	Patient

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Thinking Ahead

Original Order	Amended Order
OxyContin 20 mg po q12h	MS Contin 30 mg po q12h (or patient must pay for OxyContin)
Fentora 800 mcg four times daily	Increase morphine oral solution
Ondansetron 8 mg	Haloperidol, prochlorperazine

Cost Effective Medications

- Ondansetron vs. haloperidol
- Tiotropium vs. ipratropium
- Methadone vs. branded LA opioid
- Citalopram vs. escitalopram
- Esomeprazole vs. omeprazole

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Goals of Care/ Benefits and Burdens

- Mrs. J is a 78 year old woman in a LTC facility with dementia who meets hospice guidelines for admission (FAST scale 7C, > 10% weight loss, recent infection)
- She has had repeated falls in past 3 months
- Patient is receiving donepezil (Aricept) and memantine (Namenda)
- Patient has dry heaves after taking donepezil
- Other medications include:
  - Lisinopril 10 mg po qd
  - Pravachol 20 mg po qd

Fast Criteria

1. Normal adult
2. Normal older adult
3. Early dementia
4. Mild dementia
5. Moderate dementia
6. Moderately severe dementia
7. Severe dementia

1984 Barry Reisberg, MD. Psychopharmacology Bulletin 1988;24:653-659.

Fast Criteria

7a. Ability to speak limited to approximately a half dozen different words or fewer, in the course of an average day or in the course of an intensive interview.

7b. Speech ability limited to the use of a single intelligible word in an average day or in the course of an interview (the person may repeat the word over and over).

7c. Ambulatory ability lost (cannot walk without personal assistance).

7d. Ability to sit up without assistance lost (e.g., the individual will fall over if there are no lateral rests (arms) on the chair).

7e. Loss of the ability to smile.

1984 Barry Reisberg, MD. Psychopharmacology Bulletin 1988;24:653-659.

Adverse Effects of Dementia Drugs

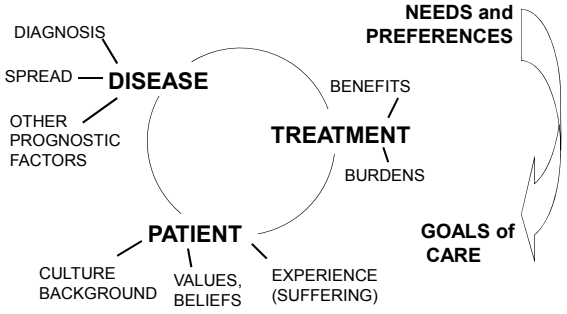
Drug Category	Drug Name(s)	Adverse Effects
Cholinesterase Inhibitors	Donepezil (Aricept) Galantamine (Razadyne) Rivastigmine (Exelon)	Insomnia (up to 14%) Nausea (up to 19%) Diarrhea (up to 15%) Accidents (up to 13%) Infection (up to 11%) Headache (10%), Pain (9% Fatigue (8%), Dizziness (8%) Hallucinations (3%) Anorexia (8%), Vomiting (9%)
NMDA Antagonist	Memantine (Namenda)	Hypertension (4%), Dizziness (7%) Confusion (6%), Hallucinations (3%) Diarrhea (5%), Back pain (3%)

Stopping Statins?

- 381 patients (49% cancer) with life expectancy less than 1 year
- All taking statin for primary or secondary prevention for at least 3 months (69% used > 5 years)
- Randomized to continuing or stopping statin
- Days til death after stopping statin:
  - 229 days with discontinuation
  - 190 with continuation
- Estimated to save $603 million in US

http://www.ascopost.com/issues/july-10,-2014/discontinuing-statins-near-the-end-of-life-is-safe,-can-reduce-symptom-burden,-and-is-generally-acceptable-to-patients.aspx

Assess: Patient and their Illness experience



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Assess: Goals of care

Goals of care change over time and may include:

- Maintaining and improving function.
- Staying in control.
- Relief of suffering (pain and symptom management)
- Prolonging life for as long as possible or until a specific event (time limited trials of care).
- Quality of life/ living well.
- Relieving burden for family members.
- Strengthening relationships.
- Preferences for location of care or death
- Life closure/ dying well.
- Personal wishes for management of dying.

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4. **Thinking ahead**

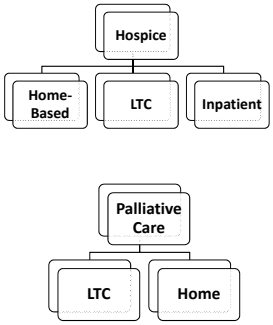
Making the Case to Think Ahead

- Pt leaving hospital s/p extubation with stage IV lung ca (mets to bone, brain, liver)
- Comfortable on BiPAP currently but planning to discharge in the next day
- Patient has been bed bound for 3 months
- Current meds:
  - Morphine 10 mg q4h prn (x4-6/day) for SOB
  - Ativan 0.5 mg q6h prn (x3-4/day)
- Family afraid morphine will kill him and wants it stopped, nurse feels "on the spot" for every dose

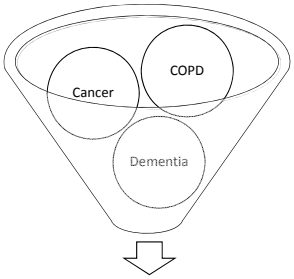
Heading to Where?!

Considerations:

- Common symptoms for EOL picture for this patient
- Response time for quickly emerging sx
- Prognosis/ sx burden



Common EOL Clinical Pathways



SOB, secretions, decreased intake, N/V, pain, fatigue, agitation, delirium, bedridden (ulcers)

Predictable Challenges in the Final Days

What is happening to Patient

- Functional decline- transfers, toileting, fall risk
- Can't swallow meds- route of administration
- Terminal pneumonia
  - dyspnea
  - congestion
  - *delirium:> 80%* (+ agitation)
- Concerns of family and friends

Approach to Care

- Prepare caregivers with proactive" communication
  - Anticipate questions and concerns
  - Be available
  - Don't present "non-choices" as choices
- Aggressive pursuit of comfort
- *Don't be caught off-guard by predictable problems*

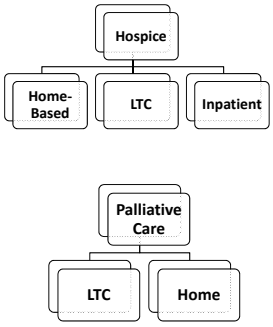
Basic Medication Toolkit

- Opioids
  - Pain, SOB
- Anticholinergic
  - Secretions
- Benzodiazepine
  - Agitation, Seizures
- Antipsychotic
  - Delirium, N/V

Heading to Where?!

Actions:

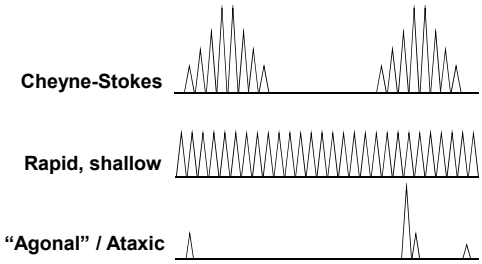
- Addition of prn meds for sx that may emerge
- Optimize dosing for current meds
- Follow up phone calls to monitor
- Family education



Signs of Opioid Overdose

- pinpoint pupils
- Sedation/ unable to arouse
- gradual slowing of the respiratory rate
- breathing is deep (though may be shallow) and *regular*

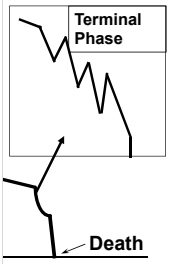
COMMON BREATHING PATTERNS IN THE FINAL HOURS



Common Chronic Disease Model

Common Family Concerns:

- How could this be happening so fast?
- What about food & fluids?
- Things were fine until that medicine was started!
- Isn't the medicine speeding this up?
- Too drowsy! Too restless!
- Confusion… he's not himself, lost him already
- What will it be like? How will we know?
- We've missed the chance to say goodbye



…lden"

Modified from Lunney JR et al. *JAMA* 2003: 289: 2387.

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Family Education

- Prioritized medication list
- External teamwork: Starting the conversation early
- Symptoms to expect
- Anticipate barriers

From the Patient's Point of View

What is our responsibility to them during this challenging time?

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How to Run a Relay Race

1. Prepare yourself - get plenty of rest
2. Know the course and which leg you are running, be prepared for the weather and hills
3. Cheer on your teammates
4. Be consistent to finish strong
5. Don't wait till the last moment to prepare for the race (pack gym bag the night before)
6. Travel together as a team to keep focused
7. Be prepared for blind handoffs
8. Last runner has to make up the distance

Runner's Kick- We need to remember to save something for the last leg of the race!

Key Takeaways

1. Make a specific plan for high risk medications to provide continued monitoring and titration during transitions
2. Engage in goals of care discussions to ensure medications are in line with goals and setting of care
3. Determine need for proactive prescribing for patients at risk for uncontrolled symptoms

THE 2014 midyear CALIFORNIA

Passing the Last Torch:
Pharmaceutical Transitions at the End of Life

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