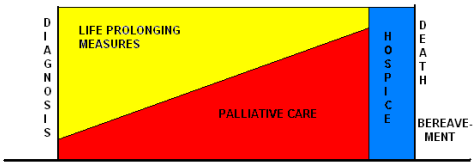
The University of Chicago Medical Center
Section of Geriatrics and Palliative Medicine
Inpatient Consults 188-PALL

DEFINITIONS

Palliative Care (PC) = aims to relieve physical, emotional, and spiritual suffering, and improve quality of life for patients with advanced illness, along with their families.

Hospice = aims to provide aggressive palliative care for patients at the end of their life, usually when life-prolonging treatment options have stopped



COMPARISON OF HOSPICE VS. PALLIATIVE CARE

	HOSPICE	PALLIATIVE CARE
PATIENTS	**Terminal**	**Advanced & Life-threatening illnesses**
PERSONNEL	**Team – RN case manager, SW, chaplain, MD, CNAs**	**APN/MD consultants, others if needed**
MEDICINES	**Covered for comfort for the primary dx**	**Not covered**
MEDICAL EQUIP.	**Covered for primary dx**	**Not covered, work with home care agencies**
INS. COVERAGE	**Benefit package under most insurances**	**Fee-for-service consultant charges**
BEREAVEMENT	**Yes**	**No**
PROGNOSIS	**< 6 months**	**Not needed**
LIFE-PROLONGING MEASURES	**Usually not**	**Are OK to do**

WHAT DOES HOSPICE COVER?

Under Medicare, pt must be eligible for Medicare Part A (hospital benefit)

- Hospice RN visits at least weekly and prn, SW, Chaplain, Hospice MD oversight, CNAs – usually 1hr, 3-5x/week
- Medicines related to the primary diagnosis for comfort
- Medical Equipment for comfort and safety including oxygen
- 24hr coverage by nurses with on-call visits
- Up to 13 months of bereavement for caregivers after the death
- Respite care for 5 days, usually in a nursing home
- Inpatient hospice can be done at certain hospitals, for more aggressive symptom control, usually for up to 7 days.

HOSPICE ELIGIBILITY GUIDELINES

Hospice eligibility defined by 6 months or less life expectancy:

CANCER	Metastatic, stage IV Functional Decline, ECOG 3/4 Nutritional decline, albumin < 2.6 or 10% wt loss in 3mos time
HEART DISEASE	NYHA class IV – symptoms at rest with optimal treatment (30-40% 1yr mortality rates), worse with: - recent cardiac hospital stay (3x/1 yr) - elevated BUN or Cr >1.4 - BPs <100, HR >100 - LVEF <20% - Resistant ventricular arrhythmias - Anemia - Sodium <135 - Cachexia, functional decline - Prior cardiac arrest, unexplained syncope, cardiogenic CVA, HIV
LUNG DISEASE	Dyspnea at rest, unresponsive to treatment Inc ER visits, declining FEV1 (>40 ml/yr) Cor pulmonale or right heart failure PaO2 < 56 mmHg or sat < 89% on oxygen albumin < 2.5 or wt loss > 10% poor function (mainly bed/chairbound)
DEMENTIA	FAST score 7C or worse (bedbound, can't smile, < 6 words/day, can't hold up head) Co-morbidities: aspiration, pyelo, sepsis, multiple decubiti (stage 3-4), fever on abx Nutritional decline, > 10% wt loss in 6 mos
LIVER DISEASE	End-stage cirrhosis with INR >1.5 and albumin < 2.5 Plus: refractory ascites, SBP, hepatorenal syndrome, encephalopathy, or recurring variceal bleeds
HIV	CD4 <25 or viral load > 100,000 off HAART Or: with advanced lymphoma or KS, progressive PML, advanced dementia, cachexia, refractory infections cryptosporidium, toxoplasmosis, MAC
RENAL FAILURE	CrCl <10 cc/min (<15 if diabetic) and serum Cr >8 (>6 if diabetic), uremia, oliguria, intractable fluid overload, no dialysis plans
ALS	VC < 30%, declining ventilation Rapid weight loss or dehydration Infections such as aspiration, pyelo, sepsis, decubiti, recurring fevers
STROKE	Acutely : severe coma over 3 days Chronically: age > 70, dementia FAST > 7A, progressive wt loss

OPIOID EQUIVALENCIES

Drug	IV/SQ	Oral	Duration
Morphine **MSIR tabs 15, 30mg** **Roxanol liquid 20mg/cc**	10mg	30mg	IR 3-4hrs SR 8-12 hrs
Hydromorphone **Dilaudid 2,4mg tabs** **Liquid 1mg/cc**	1.5mg	7.5mg	3-4hrs
Oxycodone **Roxicodone/oxyIR 5mg tabs** **OxyIR liquid 20mg/cc** **Percocet 5oxy/325 acet**	NA	20 - 30mg	IR 3-4hrs SR 8-12 hrs
Fentanyl	0.1 mg	NA	5-10 minutes IV
Codeine **T#3 30 cod/325acet** **T#4 60 cod/325acet**	100mg	200mg	3-4hrs
Hydrocodone **Vicoden/lortab 5hyd/500acet** **Vicoden ES 5hyd/750acet** **Norco 10hyd/325** **Vicuprofen 5hyd/200ibu**	NA	30mg	3-4hrs

OPIOID USE:

LOAD:

1. Start low dose/short acting (5-10mg PO Morphine equivalent for adult)
2. Dose at peak (60-90 min PO, 6-15min IV, 15-30min SQ)
3. PCA = Patient controls the analgesia dosing
4. Re-eval based on duration to adjust dose to the loading level (e.g: if it took three 5mg MSIR doses to relieve the pain, use 15mg MSIR next time in pain)

MAINTENANCE:

5. Go long: convert 24 hrs of total short-acting dose that worked to long acting (e.g. MS Contin/Oramorph SR, OxyContin, Fentanyl)
6. Breakthrough pain: use 10-20% of the total daily dose for break-through. Give prn based on route and peak: PO = every 60-90 min, IV every 10-15 min.
7. Re-evaluate often: if consistently needing 3 or more breakthrough doses daily, need to increase maintenance (by 25-50% mild-mod pain, 50-100% severe). Calculate new breakthrough dose.

CONVERSION: After calculated conversion, start new med at 50-75% of calculated dose to avoid incomplete cross-tolerance. This is less important if the patient is staying on the same medicine and merely changing routes.

Basic Conversion Equation Example:

Pt. received morphine 60 mg IV in past 24 hrs. Switch to oral morphine.

60 mg IV morphine	=	10 mg IV
PO morphine (X)		30 mg PO

Solve for X = 180 mg PO morphine/day = MSContin 90 mg PO q 12 hr

FENTANYL PATCH CONVERSION

25 mcg/hour topically q 72 hours is approximately equal to the following:
Morphine 15 mg IV or 50 mg PO per 24 hours
Hydromorphone 3 mg IV or 12 mg PO per 24 hours
Oxycodone 30 mg per 24 hours
Vicodin or Tylenol #3 ≈ 9 tablets or Norco ≈ 4-5 tablets per 24 hours

Available Transdermal Duragesic Doses = 12, 25, 50, 75, 100 mcg/hr

Fentanyl Patch use and titration

1) Titrate to pain relief with immediate release opioids first
2) Calculate 24 hr opioid dose, convert dose to transdermal fentanyl equivalents
3) Patch takes 12-24 hrs to reach full effect, therefore must continue prior opioid for first 12-24 hrs
4) Patch duration of effect 48-72 hrs, do not increase more frequently then every 2-3 days
5) Must prescribe short-acting opioid for breakthrough pain

Methadone: Conversion varies with daily oral Morphine equivalency dose. Ex. Morphine <100 mg (1:3); 101-300 mg (1:5); 301-600 mg (1:10); 601-800 mg (1:12); 801-1000mg (1:15); >1000mg (1:20)
Has a long and variable half-life (12-120 hrs), potential for drug-drug interaction, and QT prolongation/Torsades.
Therefore should only be used by persons with experience! Call 188-PALL

MANAGEMENT OF OPIOID SIDE EFFECTS

Adverse Effect	Management Considerations
Constipation	Softener plus stimulant (colace + senna, peri-colace), miralax, sorbitol, bisacodyl. If no BM in 4 days consider enemas, beware of fecal impaction
Sedation	Tolerance usually develops. Hold sedatives/anxiolytics, dose reduction, consider CNS stimulants (methylphenidate, caffeine)
Nausea/Vomiting	Dose reduction, opioid rotation, metoclopromide, proclorperazine, scopolamine patch, haloperidol
Pruritis	Dose reduction, opioid rotation, antihistamines, H2 blockers
Delirium	Dose reduction, opioid rotation, antipsychotics (haloperidol, risperidone)
Respiratory depression	Sedation always precedes respiratory depression! Hold opioid. Give low dose naloxone to avoid withdrawal crisis – Dilute 0.4 mg (1 mL of 0.4 mg/mL amp) in 9 cc of saline, use 1 cc q 5 min until respirations improve