The Geriatric Emergency Department

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Overview GED

1. Making a case for a Geriatric Emergency Department (GED)
2. GED Guidelines
3. GEDI-WISE Study
4. The Business Case

St. Joseph's Regional Medical Center

- 641-bed tertiary care teaching hospital
- Paterson, NJ
- Emergency Department - 2014
  - 160,000 total visits/year:
    - 41,000 Pediatric Emergency Department
    - 28,000 Geriatric Emergency Department
      - 24 Bed Unit
    - 200 Emergency Department Palliative Medicine
      - 2 LSMA Rooms

- Comprehensive stroke center
- Trauma center
- Resuscitation center
- Heart Failure center
- Toxicology reference center
- Life Sustaining Management and Alternatives (LSMA)

Before we begin

Outcomes

- Increased patient satisfaction
- Higher rate of postdischarge independence
- Fewer return visits
- Lower admission and readmission rate
- Improved screening for inappropriate medications
- Increased patient volume (16% seniors treated)

The Geriatric ED Dashboard

Saint Joseph's Reg Med Center - Paterson Emergency Department
Geriatirc Key Performance Indicator Dashboard
(Pts > = 65 yrs old)
Filtered for Patients Seen in the Following ED Area:

	Current Month	Trend	6 Months Avg	SMLY	Target
Visits Per Day	48	▲	42	42	40
% Seen in SRED	53.1%				
Admission %	47.5%	▲	46.3%	49.2%	
LWOB%	0.5%	▲	0.2%	0.4%	2.5%
% Triaged w_in 30 min	82%	▼	84%	79%	85%
Median Arrive to First Provider	18	▲	15	18	30
Median TAT - Discharged Pts	225	▲	217	216	180
Median TAT - Admitted Pts	323	▲	291	290	300

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The Geriatric ED Dashboard

	Mar -13	Apr-13	May -13	Jun-13	Jul-13	Aug -13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar -14	Target	Red
Total Visits	1,288	1,226	1,294	1,216	1,264	1,237	1,234	1,275	1,140	1,213	1,308	1,205	1,502		
Visits Per Day	42	41	42	41	41	40	41	41	38	39	42	43	48		
Total Admissions	634	612	606	573	579	572	574	560	539	559	617	551	714		
% Seen in SRED	54.5%	59.2%	57.6%	58.7%	55.0%	57.8%	60.8%	63.1%	61.9%	60.3%	55.4%	57.7%	53.1%		
Admission %	49%	50%	47%	47%	46%	46%	47%	44%	47%	46%	47%	46%	48%		
LWOB%	0.4%	0.3%	0.3%	0.1%	0.4%	0.1%	0.3%	0.2%	0.2%	0.3%	0.2%	0.0%	0.5%	2.5%	3.5%
% Triaged w_in 30 min	79%	83%	85%	84%	84%	83%	82%	87%	86%	84%	82%	84%	82%	85%	70%
Median Arrive to First Provider	18	16	16	16	19	16	13	14	13	14	15	14	18	30	60
Median TAT - Discharged Pts	216	218	218	214	227	221	207	204	216	204	228	223	225	180	240
Median Doc Decision to Pt Admitted	104	91	93	92	92	89	92	83	83	93	120	100.5	122		
Median TAT - Admitted Pts	290	280	289	282	293	290	281	263	267	272	319	300	323	300	330

The data below cannot be sliced by ED area

# of Returns in 72 Hours	59	43	53	45	62	50	52	47	31	60	57	60	67		
# of Returns / All Pt Visits	4.6%	3.5%	4.1%	3.7%	4.9%	4.0%	4.2%	3.7%	2.7%	4.9%	4.4%	5.0%	4.5%		
# of Returns in 72 Hours who are Admitted	17	21	19	20	23	20	21	16	10	18	23	15	34		
Admit % of Returns	28.8%	48.8%	35.8%	44.4%	37.1%	40.0%	40.4%	34.0%	32.3%	30.0%	40.4%	25.0%	50.7%		
# of Returns in 72 Hours who are Admitted / All Pt Visits	1.3%	1.7%	1.5%	1.6%	1.8%	1.6%	1.7%	1.3%	0.9%	1.5%	1.8%	1.2%	2.3%		
Number of 30 Day Returns after Admission	143	83	136	123	125	91	95	105	111	91	107	125	87		
Heart Failure Admissions	60	58	63	52	43	44	43	39	43	20	35	38	52		
# of 30-day readmissions for Heart Failure	10	9	20	11	9	6	9	7	7	10	5	9	4		
Heart Failure Readmission Rate	17%	16%	32%	21%	21%	14%	21%	18%	16%	50%	14%	24%	8%		
Pneumonia Admissions	9	4	10	5	7	8	6	8	9	13	14	4	4		
# of 30-day readmissions for Pneumonia		1	1	1	1	1			2	3	7	1	1		

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LWOB%	0.4%	0.3%	0.3%	0.1%	0.4%	0.1%	0.3%	0.2%	0.2%	0.3%	0.2%	0.0%	0.5%	2.5%	3.5%
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The Geriatric Patient Encounter

- Mrs. Smith is a 78 y/o functionally independent senior. She lives alone and daughter lives 2 blocks away.
- This AM, Mrs. Smith hurt her ankle going down the steps. Has difficulty ambulating.

- Alternative scenario – Weak and Dizzy

The Geriatric ED Difference

Adult ED

- H and P
- Order X-Ray

Geriatric ED

- H and P
- Order X-Ray

The Geriatric ED Difference

Adult ED

- H and P
- Order X-Ray
- Reevaluation
- Discharge

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- H and P
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The Geriatric ED Difference

Adult ED

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- Order X-Ray
- Reevaluation
- Discharge

Geriatric ED

- H and P
- Order X-Ray
- Seen by GED Team
  - PT
  - Social Work
  - Nutrition
  - Geri RN
  - Pharmacy
- Geriatric Screenings
- Discharge Planning
- Care Transition

The Geriatric ED Difference

Adult ED

- H and P
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- Care Transition
- Home Assessment

The Geriatric ED Difference

Adult ED

- H and P
- Order X-Ray
- Reevaluation
- Discharge

Also Senior Patient Has Phone Reassessment on Day 1,3, and, 7

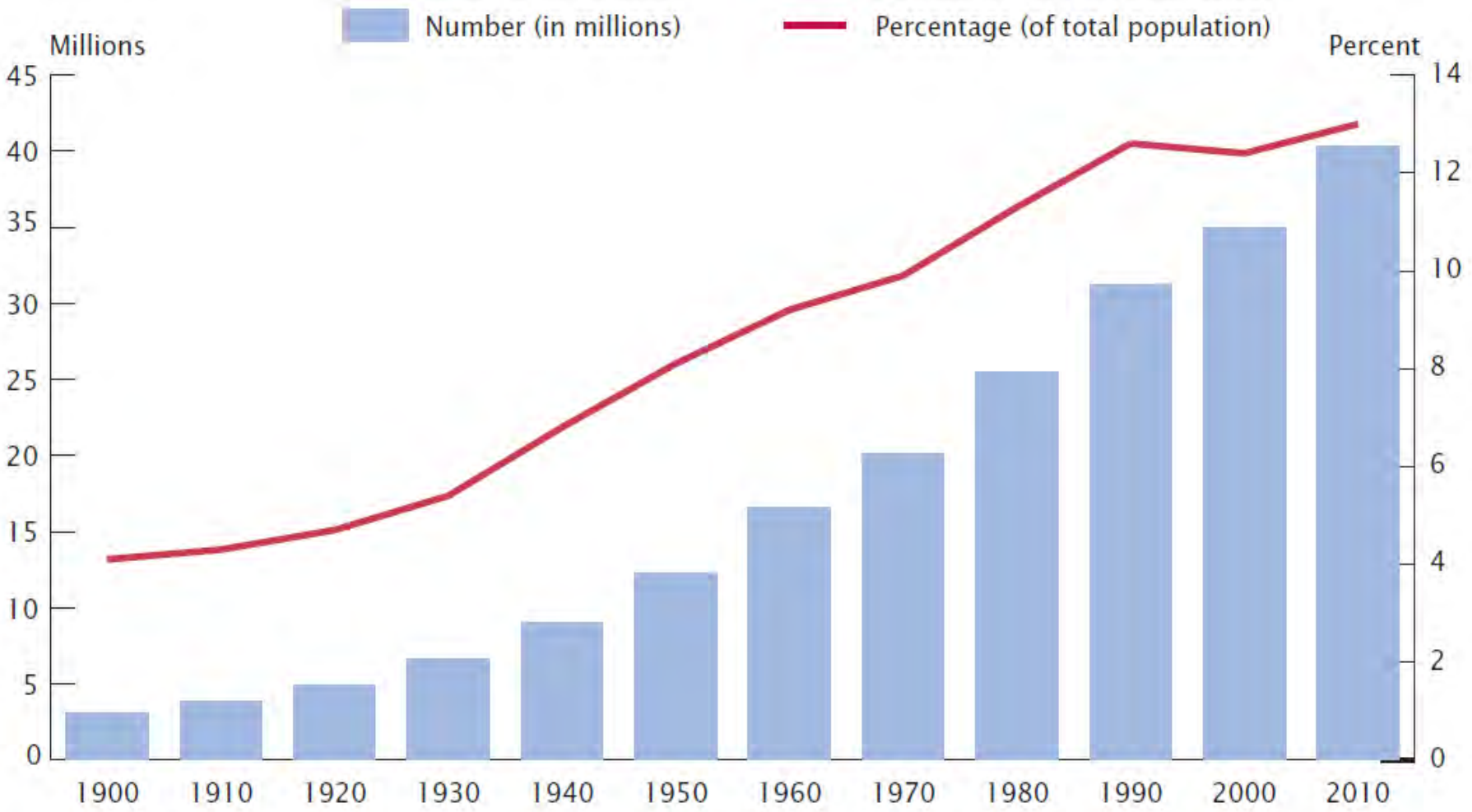
Geriatric ED

- H and P
- Order X-Ray
- Seen by GED Team
  - PT
  - Social Work
  - Nutrition
  - Geri RN
  - Pharmacy
- Geriatric Screenings
- Discharge Planning
- Care Transition
- Home Assessment

Why?

- 79 million Baby Boomers become 65
- Age 65 and over have increased healthcare needs
- ED utilization of seniors
- Contributing factors
- Outcomes
- Paradigm shift
- More likely to fill out patient satisfaction surveys
- More likely to be dissatisfied
- VALUE-BASED PURCHASING

Population ≥65 years by size and % of total population



Sources: U.S. Census Bureau, decennial census of population, 1900 to 2000; *2010 Census Summary File 1.*

Geriatric ED utilization rates

- 7x more usage of ED services
- 43% of all admissions
- 48% of all Critical Care admissions
- 20% longer length of stay
- 50% more lab
- 50% more radiology
- 400% more social service interventions

CMS 2008 Data Set

Contributing Factors

1. Shrinking primary care pool
   - Deficit of 25,000 Gerontologists by 2030
     - FP Residents Decreased by 50%
     - IM Residents choosing Primary Care dropped from 54% to 22%
2. Lack of financial incentives
   - Medicare is primary insurance of the elderly
   - Medicare pays 25-31% less than private insurers
3. Complexity of care
   - Multiple chronic diseases compounded by social issues
   - Outpatient management issues
     - Cognition
     - Mobility
     - Transportation
     - Subspecialist availability
4. ED most appropriate venue
   - One-stop shopping
     - Labs, X-ray, specialists
   - Not more expensive

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Story of two patients
ED work-up vs Outpatient work-up.

Current model: poor outcomes for seniors

1. Delay in diagnosis & treatment

- Acute MI
- Sepsis
- Appendicitis
- Ischemic bowel

2. Unsuspected diagnosis

- Delirium
- Depression
- Cognitive impairment
- Drug & alcohol
- Elder abuse
- Polypharmacy

3. Under-treatment

- Low rate of PCI in MI
- TPA in stroke
- Less surgical intervention
- Inadequate pain management

4. Over-treatment

- High rate of Foley cath
- Adverse drug events
- Overuse of sedation

Two paradigms

Non-geriatric ED Patient	Geriatric ED Patient
Single complaint	Multiple problems Medical Functional Social
Acute	Acute on chronic, subacute
Diagnose and treat	Control symptoms, maximize function, enhance quality of life
Rapid disposition	Continuity of care

The GED Guidelines

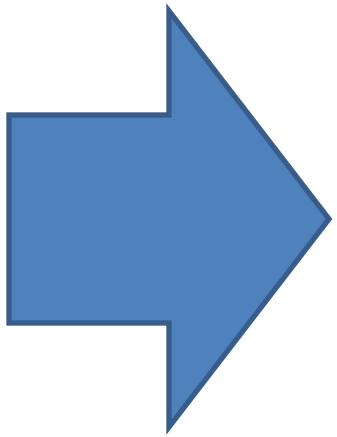
Nationally

More than 80 Geriatric EDs and growing…

…finally there is a standard.

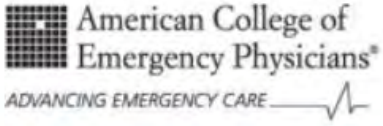
Accreditation Standard and Minimal Requirements Development…

- **ACEP**
- AGS
- ENA
- SAEM
- AIA



JCAHO and DNV

GERIATRIC EMERGENCY DEPARTMENT GUIDELINES



The Geriatric Emergency Department Guidelines

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Goal and program definition

- Marketing
- Quality
- Meeting community need
- What age
- Nursing home
- Decrease or increase admissions
- Decrease readmissions

Improving Health Care and Emergency Care for "Functionally Independent" Seniors

Goal and program definition

- Marketing
- Quality
- Meeting community need
- What age
- Nursing home
- Decrease or increase admissions
- Decrease readmissions

Improving Health Care and Emergency Care for "~~Functionally Independent~~" Seniors

Am I old? *Keep me functional and independent!*

Healthy

Controlled Health Issues

- MI within past six months
- High BP
- High cholesterol
- Prostate Cancer
- Osteoarthritis
- On six medications
- Countless vitamins
- Contact lenses
- Hearing aids

What is a Geriatric ED?

10 Facets of a Geriatric ED

1. Physical plant
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Observation and extended home observation
10. Palliative care

1. Physical plant

- Separate unit? Process? Universal Design?
- Thick mattresses or hospital beds
- Quieter, less crazy environment
- Non-slip floors
- Non-glare floors
- Limiting tethers
- Handrails
- Corridors safe for walking
- Lighting
- Sound proofing
- Family friendly

Why is This Important

BECAUSE MY MOM AND HER FRIENDS SAY SO!

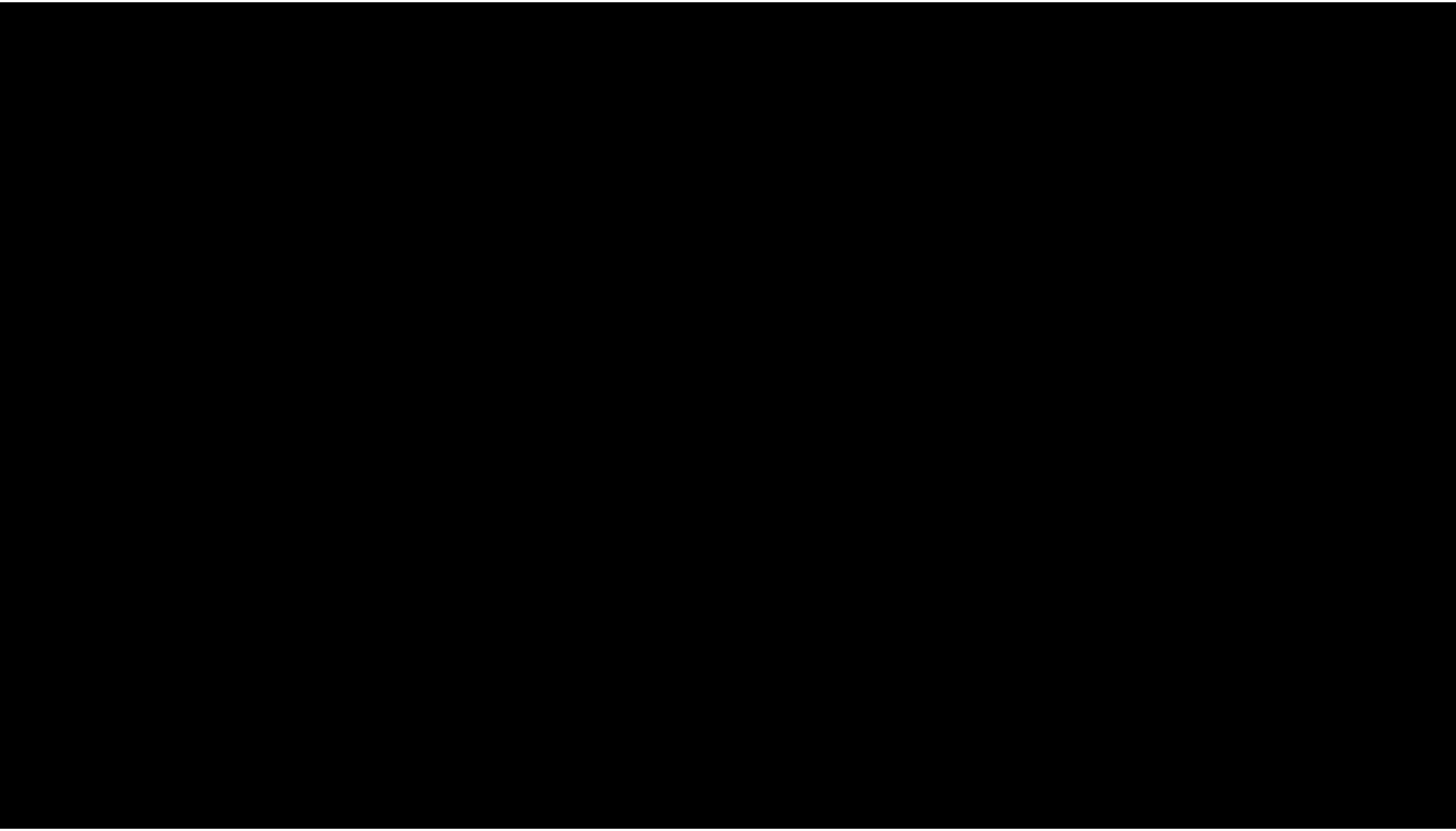
- Less Afraid
- Better History
- Won't Lie


ED40
EXIT
EMERGENCY


ED38
stryker
EMERGENCY


ED34
ED35
ED38
ED39
ED36
ED37


ED41
ED42



Take home message of Universal Design…

"If you don't have space for a Geriatric ED…. make your entire ED a Geriatric ED."

"If the ED is designed for the most frail and vulnerable ….. it will work for the strongest."

2. Quality initiatives

- Drug interactions
  - 5 Meds = 70% chance of drug interactions
  - 7 Meds = 100% chance of drug interaction
- Falls risk assessment
  - Get-up-and-go testing
- Beers criteria
  - AGS 2012
  - Potentially inappropriate medication use in older adults
- Advancing ESI criteria for elderly*
- Liberal EKG policy*
- Abdominal pain awareness*
- Relooking at ESI Triage criteria for elderly*
- Screening Tools

Get Up And Go Test…

Get up and go testing

Instructions:

Ask the patient to perform the following series of maneuvers:

1. Sit comfortably in a straight-backed chair.
2. Rise from the chair.
3. Stand still momentarily.
4. Walk a short distance (approximately 3 meters).
5. Turn around.
6. Walk back to the chair.
7. Turn around.
8. Sit down in the chair.

Scoring:

Observe the patient's movements for any deviation from a confident, normal performance. Use the following scale:

1 = Normal
2 = Very slightly abnormal
3 = Mildly abnormal
4 = Moderately abnormal
5 = Severely abnormal

"Normal" indicates that the patient gave no evidence of being at risk of falling during the test or at any other time. "Severely abnormal" indicates that the patient appeared at risk of falling during the test. Intermediate grades reflect the presence of any of the following as indicators of the possibility of falling: undue slowness, hesitancy, abnormal movements of the trunk or upper limbs, staggering, stumbling.

A patient with a score of 3 or more on the Get-up and Go Test is at risk of falling.

Source:

Mathias S, Nayak USL, Isaacs B. Balance in elderly patients: the "get-up and go" test. *Arch Phys Med Rehabil*. 1986;67:387-389.

American Geriatrics Society Beers Criteria 2012

Source: http://tinyurl.com/BeersMeds2012

AGS BEERS CRITERIA
FOR POTENTIALLY INAPPROPRIATE MEDICATION USE IN OLDER ADULTS

FROM THE AMERICAN GERIATRICS SOCIETY

This clinical tool, based on *The AGS 2012 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults (AGS 2012 Beers Criteria)*, has been developed to assist healthcare providers in improving medication safety in older adults. Our purpose is to inform clinical decision-making concerning the prescribing of medications for older adults in order to improve safety and quality of care.

Originally conceived of in 1991 by the late Mark Beers, MD, a geriatrician, the *Beers Criteria* catalogues medications that cause adverse drug events in older adults due to their pharmacologic properties and the physiologic changes of aging. In 2011, the AGS undertook an update of the criteria, assembling a team of experts and funding the development of the *AGS 2012 Beers Criteria* using an enhanced, evidence-based methodology. Each criterion is rated (quality of evidence and strength of evidence) using the American College of Physicians' Guideline Grading System, which is based on the GRADE scheme developed by Guyatt et al.

The full document together with accompanying resources can be viewed online at www.americangeriatrics.org.

INTENDED USE

The goal of this clinical tool is to improve care of older adults by reducing their exposure to Potentially Inappropriate Medications (PIMs).

- This should be viewed as a guide for identifying medications for which the risks of use in older adults outweigh the benefits.
- These criteria are not meant to be applied in a punitive manner.
- This list is not meant to supersede clinical judgment or an individual patient's values and needs. Prescribing and managing disease conditions should be individualized and involve shared decision-making.
- These criteria also underscore the importance of using a team approach to prescribing and the use of non-pharmacological approaches and of having economic and organizational incentives for this type of model.
- Implicit criteria such as the STOPP/START criteria and Medication Appropriateness Index should be used in a complementary manner with the 2012 *AGS Beers Criteria* to guide clinicians in making decisions about safe medication use in older adults.

The criteria are not applicable in all circumstances (eg, patient's receiving palliative and hospice care). If a clinician is not able to find an alternative and chooses to continue to use a drug on this list in an individual patient, designation of the medication as potentially inappropriate can serve as a reminder for close monitoring so that the potential for an adverse drug effect can be incorporated into the medical record and prevented or detected early.

TABLE 1: 2012 AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults

Organ System/ Therapeutic Category/Drug(s)	Recommendation, Rationale, *Quality of Evidence (QE) & Strength of Recommendation (SR)*
Anticholinergics (excludes TCAs)	
First-generation antihistamines (as single agent or as part of combination products) ■ Brompheniramine ■ Carbinoxamine ■ Chlorpheniramine ■ Clemastine ■ Cyproheptadine ■ Dexbrompheniramine ■ Dexchlorpheniramine ■ Diphenhydramine (oral) ■ Doxylamine ■ Hydroxyzine ■ Promethazine ■ Triprolidine	**Avoid.** Highly anticholinergic; clearance reduced with advanced age, and tolerance develops when used as hypnotic; increased risk of confusion, dry mouth, constipation, and other anticholinergic effects/ toxicity. Use of diphenhydramine in special situations such as acute treatment of severe allergic reaction may be appropriate. *QE = High (Hydroxyzine and Promethazine), Moderate (All others); SR = Strong*
Antiparkinson agents ■ Benztropine (oral) ■ Trihexyphenidyl	**Avoid.** Not recommended for prevention of extrapyramidal symptoms with antipsychotics; more effective agents available for treatment of Parkinson disease. *QE = Moderate; SR = Strong*

Table 1 (continued from page 1)

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Antispasmodics ■ Belladonna alkaloids ■ Clidinium-chlordiazepoxide ■ Dicyclomine ■ Hyoscyamine ■ Propantheline ■ Scopolamine	**Avoid except in short-term palliative care to decrease oral secretions.** Highly anticholinergic, uncertain effectiveness. *QE = Moderate; SR = Strong*
Antithrombotics	
Dipyridamole, oral short-acting* *(does not apply to the extended-release combination with aspirin)*	**Avoid.** May cause orthostatic hypotension; more effective alternatives available; IV form acceptable for use in cardiac stress testing. *QE = Moderate; SR = Strong*
Ticlopidine*	**Avoid.** Safer, effective alternatives available. *QE = Moderate; SR = Strong*
Anti-infective	
Nitrofurantoin	**Avoid for long-term suppression; avoid in patients with CrCl <60 mL/min.** Potential for pulmonary toxicity; safer alternatives available; lack of efficacy in patients with CrCl <60 mL/min due to inadequate drug concentration in the urine. *QE = Moderate; SR = Strong*
Cardiovascular	
Alpha$_1$ blockers ■ Doxazosin ■ Prazosin ■ Terazosin	**Avoid use as an antihypertensive.** High risk of orthostatic hypotension; not recommended as routine treatment for hypertension; alternative agents have superior risk/ benefit profile. *QE = Moderate; SR = Strong*
Alpha agonists ■ Clonidine ■ Guanabenz* ■ Guanfacine* ■ Methyldopa* ■ Reserpine (>0.1 mg/day)*	**Avoid clonidine as a first-line antihypertensive. Avoid others as listed.** High risk of adverse CNS effects; may cause bradycardia and orthostatic hypotension; not recommended as routine treatment for hypertension. *QE = Low; SR = Strong*
Antiarrhythmic drugs (Class Ia, Ic, III) ■ Amiodarone ■ Dofetilide ■ Dronedarone ■ Flecainide ■ Ibutilide ■ Procainamide ■ Propafenone ■ Quinidine ■ Sotalol	**Avoid antiarrhythmic drugs as first-line treatment of atrial fibrillation.** Data suggest that rate control yields better balance of benefits and harms than rhythm control for most older adults. Amiodarone is associated with multiple toxicities, including thyroid disease, pulmonary disorders, and QT interval prolongation. *QE = High; SR = Strong*
Disopyramide*	**Avoid.** Disopyramide is a potent negative inotrope and therefore may induce heart failure in older adults; strongly anticholinergic; other antiarrhythmic drugs preferred. *QE = Low; SR = Strong*
Dronedarone	**Avoid in patients with permanent atrial fibrillation or heart failure.** Worse outcomes have been reported in patients taking dronedarone who have permanent atrial fibrillation or heart failure. In general, rate control is preferred over rhythm control for atrial fibrillation. *QE = Moderate; SR = Strong*
Digoxin >0.125 mg/day	**Avoid.** In heart failure, higher dosages associated with no additional benefit and may increase risk of toxicity; decreased renal clearance may increase risk of toxicity. *QE = Moderate; SR = Strong*

Table 2. (Contd.)

Organ System or Therapeutic Category or Drug	Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Insulin, sliding scale	Higher risk of hypoglycemia without improvement in hyperglycemia management regardless of care setting	Avoid	Moderate	Strong
Megestrol	Minimal effect on weight; increases risk of thrombotic events and possibly death in older adults	Avoid	Moderate	Strong
Sulfonylureas, long duration Chlorpropamide Glyburide	Chlorpropamide: prolonged half-life in older adults; can cause prolonged hypoglycemia; causes syndrome of inappropriate antidiuretic hormone secretion. Glyburide: greater risk of severe prolonged hypoglycemia in older adults	Avoid	High	Strong
Gastrointestinal				
Metoclopramide	Can cause extrapyramidal effects including tardive dyskinesia; risk may be even greater in frail older adults	Avoid, unless for gastroparesis	Moderate	Strong
Mineral oil, oral	Potential for aspiration and adverse effects; safer alternatives available	Avoid	Moderate	Strong
Trimethobenzamide	One of the least effective antiemetic drugs; can cause extrapyramidal adverse effects	Avoid	Moderate	Strong
Pain				
Meperidine	Not an effective oral analgesic in dosages commonly used; may cause neurotoxicity; safer alternatives available	Avoid	High	Strong
Non–COX-selective NSAIDs, oral Aspirin > 325 mg/d Diclofenac Diflunisal Etodolac Fenoprofen Ibuprofen Ketoprofen Meclofenamate Mefenamic acid Meloxicam	Increases risk of GI bleeding and peptic ulcer disease in high-risk groups, including those aged > 75 or taking oral or parenteral corticosteroids, anticoagulants, or antiplatelet agents. Use of proton pump inhibitor or misoprostol reduces but does not eliminate risk. Upper GI ulcers, gross bleeding, or perforation caused by NSAIDs	Avoid chronic use unless other alternatives are not effective and patient can take gastroprotective agent (proton pump inhibitor or misoprostol)	Moderate	Strong

Reglan

What are your Quality Metrics

Figure 2. Sample Geriatric ED Quality Assessment Instrument (Dashboard)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
GLOBAL MEASURES												
Patient volume >65												
% of total admissions												
Readmissions												
72 hour ED revisits												
24 hour admission upgrades												
Geriatric abuse												
Deaths												
DISEASE SPECIFIC												
FALLS												
Hip Fractures												
Traumatic ICH												
Blunt Abdominal Injury												
Death												
Fall-Risk Assessment												
Physical Therapy Eval												
URINARY CATHETERS												
Check List Used												
Catheter Days												
Automatic Discontinue												
CAUTI Stay Length												
MEDICINE MANAGEMENT												
High Risk Meds Noted												
ED High Risk Meds												
Adverse Reaction Revisit												
Non-compliance Revisit												
DELIRIUM												
Screen Documented												
Restraint Indications												
Chemical Restraint Attempt												
Behavior Physical Restraint Used												

Evidence Based Screening Tools

- ISAR Seniors at Risk
- CAM-ICU Delirium
- Fact-G Cancer
- CSI Care Giver Strain
- PHQ-9 Depression
- Short Blessed
- Katz ADL
- Get Up and Go Testing

Screening Tools
CAM-ICU

The 6th VS
BP, P, RR, Temp, Pulse Ox, CAM

CAM-ICU Worksheet

Feature 1: Acute Onset or Fluctuating Course	Score	Check here if Present
Is the pt different than his/her baseline mental status? OR Has the patient had any fluctuation in mental status in the past 24 hours as evidenced by fluctuation on a sedation scale (i.e., RASS), GCS, or previous delirium assessment?	Either question Yes →	☐
Feature 2: Inattention		
Letters Attention Test (See training manual for alternate Pictures) Directions: Say to the patient, *"I am going to read you a series of 10 letters. Whenever you hear the letter 'A,' indicate by squeezing my hand."* Read letters from the following letter list in a normal tone 3 seconds apart. S A V E A H A A R T **Errors are counted when patient fails to squeeze on the letter "A" and when the patient squeezes on any letter other than "A."**	Number of Errors >2 →	☐
Feature 3: Altered Level of Consciousness		
Present if the Actual RASS score is anything other than alert and calm (zero)	RASS anything other than zero →	☐
Feature 4:Disorganized Thinking		
Yes/No Questions (See training manual for alternate set of questions) 1. Will a stone float on water? 2. Are there fish in the sea? 3. Does one pound weigh more than two pounds? 4. Can you use a hammer to pound a nail? **Errors are counted when the patient incorrectly answers a question.** Command Say to patient: "Hold up this many fingers" (Hold 2 fingers in front of patient) "Now do the same thing with the other hand" (Do not repeat number of fingers) *If pt is unable to move both arms, for 2nd part of command ask patient to "Add one more finger" **An error is counted if patient is unable to complete the entire command.**	Combined number of errors >1→	☐

Overall CAM-ICU Feature 1 plus 2 and either 3 or 4 present = CAM-ICU positive	Criteria Met →	☐ CAM-ICU Positive (Delirium Present)
	Criteria Not Met →	☐ CAM-ICU Negative (No Delirium)

Screening Tools Seniors at Risk

THE ISAR TOOL: Initial Screening Questionnaire

To be completed by the staff with the patient or caregiver.

ADDRESSOGRAPH

PLEASE ANSWER YES OR NO TO EACH OF THESE QUESTIONS

		Hospital use only
1. Before the illness or injury that brought you to the Emergency, did you need someone to help you on a regular basis?	☐ YES ☐ NO	1 0
2. Since the illness or injury that brought you to the Emergency, have you needed more help than usual to take care of yourself?	☐ YES ☐ NO	1 0
3. Have you been hospitalized for one or more nights during the past 6 months (excluding a stay in the Emergency Department)?	☐ YES ☐ NO	1 0
4. In general, do you see well?	☐ YES ☐ NO	0 1
5. In general, do you have serious problems with your memory?	☐ YES ☐ NO	1 0
6. Do you take more than three different medications every day?	☐ YES ☐ NO	1 0

TOTAL: _____

Screening Tools Performance Status

ECOG Performance Status

These scales and criteria are used by doctors and researchers to assess how a patient's disease is progressing, assess how the disease affects the daily living abilities of the patient, and determine appropriate treatment and prognosis. They are included here for health care professionals to access.

ECOG PERFORMANCE STATUS*	
Grade	ECOG
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all selfcare but unable to carry out any work activities. Up and about more than 50% of waking hours
3	Capable of only limited selfcare, confined to bed or chair more than 50% of waking hours
4	Completely disabled. Cannot carry on any selfcare. Totally confined to bed or chair
5	Dead

* As published in Am. J. Clin. Oncol.:
Oken, M.M., Creech, R.H., Tormey, D.C., Horton, J., Davis, T.E., McFadden, E.T., Carbone, P.P.: Toxicity And Response Criteria Of The Eastern Cooperative Oncology Group. Am J Clin Oncol 5:649-655, 1982.

Screening Tools
Caregiver Strain

Caregiver Strain Index (CSI)

I am going to read a list of things that other people have found to be difficult. ***Would you tell me whether any of these apply to you?*** (GIVE EXAMPLES)

	Yes = 1	No = 0
Sleep is disturbed (e.g., because . . . is in and out of bed or wanders around at night)		
It is inconvenient (e.g., because helping takes so much time or it's a long drive over to help)		
It is a physical strain (e.g., because of lifting in and out of a chair; effort or concentration is required)		
It is confining (e.g., helping restricts free time or cannot go visiting)		
There have been family adjustments (e.g., because helping has disrupted routine; there has been no privacy)		
There have been changes in personal plans (e.g., had to turn down a job; could not go on vacation)		
There have been emotional adjustments (e.g., because of severe arguments)		
Some behavior is upsetting (e.g., because of incontinence; . . . has trouble remembering things; or . . . accuses people of taking things)		
It is upsetting to find . . . has changed so much from his/her former self (e.g., he/she is a different person than he/she used to be)		
There have been work adjustments (e.g., because of having to take time off)		
It is a financial strain		
Feeling completely overwhelmed (e.g., because of worry about . . . ; concerns about how you will manage)		
Total Score (Count yes responses. Any positive answer may indicate a need for intervention in that area. A score of 7 or higher indicates a high level of stress.)		

Robinson, B. (1983). Validation of a Caregiver Strain Index. *Journal of Gerontology*. 38:344-348.

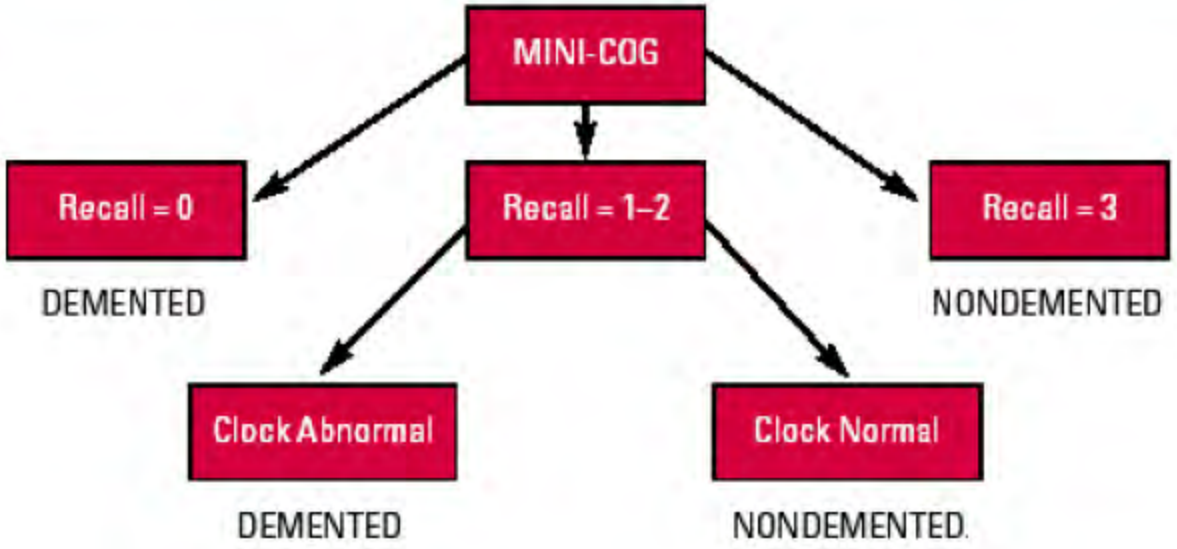
Screening Tools
Katz ADL

KATZ BASIC ACTIVITIES OF DAILY LIVING (ADL) SCALE		
	Independent	
	YES	NO
1. Bathing (sponge bath, tub bath, or shower) Receives either no assistance or assistance in bathing only one part of body		
2. Dressing - Gets clothes and dresses without any assistance except for tying shoes.		
3. Toileting - Goes to toilet room, uses toilet, arranges clothes, and returns without any assistance (may use cane or walker for support and may use bedpan/urinal at night.		
4. Transferring - Moves in and out of bed and chair without assistance (may use can or walker).		
5. Continence - Controls bowel and bladder completely by self (without occasional "accidents").		
6. Feeding - Feeds self without assistance (except for help with cutting meat or buttering bread).		

LAWTON - BRODY INSTRUMENTAL ACTIVITIES OF DAILY LIVING SCALE (I.A.D.L.)			
A. Ability to Use Telephone		**E. Laundry**	
1. Operates telephone on own initiative-looks up and dials numbers, etc.	1	1. Does personal laundry completely	1
2. Dials a few well-known numbers	1	2. Launders small items-rinses stockings, etc.	1
3. Answers telephone but does not dial	1	3. All laundry must be done by others	
4. Does not use telephone at all	0		0
B. Shopping		**F. Mode of Transportation**	
1. Takes care of all shopping needs independently	1	1. Travels independently on public transportation or drives own car	1
2. Shops independently for small purchases	0	2. Arranges own travel via taxi, but does not otherwise use public transportation	1
3. Needs to be accompanied on any shopping trip	0	3. Travels on public transportation when accompanied by another	1
4. Completely unable to shop	0	4. Travel limited to taxi or automobile with assistance of another	0
		5. Does not travel at all	0
C. Food Preparation		**G. Responsibility for Own Medications**	
1. Plans, prepares and serves adequate meals independently	1	1. Is responsible for taking medication in correct dosages at correct time	1
2. Prepares adequate meals if supplied with ingredients	0	2. Takes responsibility if medication is prepared in advance in separate dosage	0
3. Heats, serves and prepares meals, or prepares meals, or prepares meals but does not maintain adequate diet	0	3. Is not capable of dispensing own medication	0
4. Needs to have meals prepared and served	0		
D. Housekeeping		**H. Ability to Handle Finances**	
1. Maintains house alone or with occasional assistance (e.g. "heavy work domestic help")	1	1. Manages financial matters independently (budgets, writes checks, pays rent, bills, goes to bank), collects and keeps track of income	1
2. Performs light daily tasks such as dish washing, bed making	1	2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.	1
3. Performs light daily tasks but cannot maintain acceptable level of cleanliness	1	3. Incapable of handling money	0
4. Needs help with all home maintenance tasks	1		
5. Does not participate in any housekeeping tasks	0		

Screening Tools – Mini Cog

Figure 1. The Mini-Cog scoring algorithm. The Mini-Cog uses a three-item recall test for memory and the intuitive clock-drawing test. The latter serves as an "informative distractor," helping to clarify scores when the memory recall score is intermediate.



Reference
Borson S. The mini-cog: a cognitive "vitals signs" measure for dementia screening in multi-lingual elderly Int J Geriatr Psychiatry 2000; 15(11):1021.

3. Staff and provider education

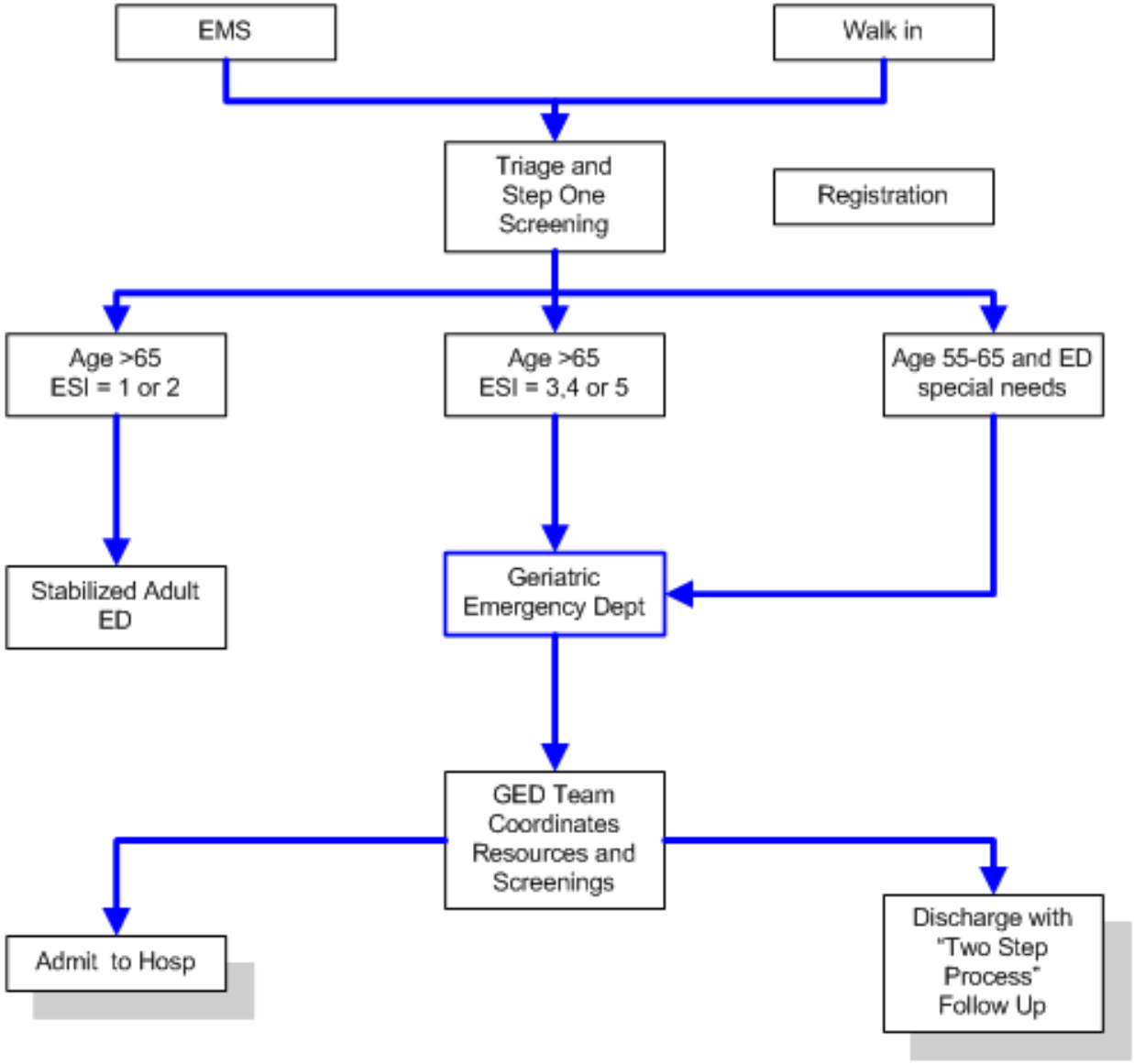
- All staff
- Needs assessment through a quality program
- Geriatric curriculum (ACEP, SAEM, ENA)
    1. Physiology of aging
    2. Abdominal pain
    3. Falls and trauma
    4. Infectious disease
    5. The dizzy patient
    6. Pharmacology
    7. Chest pain and dyspnea
    8. End of life
    9. Delirium
    10. General assessment

Search Google: ACEP Geriatric Videos

4. Operations

- Geriatric triage screening
- Geriatric palliative care program
- Medication reconciliation and interaction screening
- Two-step call back program
  - Step One – ED Visit
  - Step Two – Follow-up Program

The Two Step Process



Step two

- Prevent functional decline within 30 days of ED discharge
- Called by Geriatric Team within 24 hours of ED Discharge
- Risk screening tools used
- Need assessment
- Medication Review
- Hospital and community resources coordinated
- Primary care doctor notified

Step two call back screen

Role of patient call backs

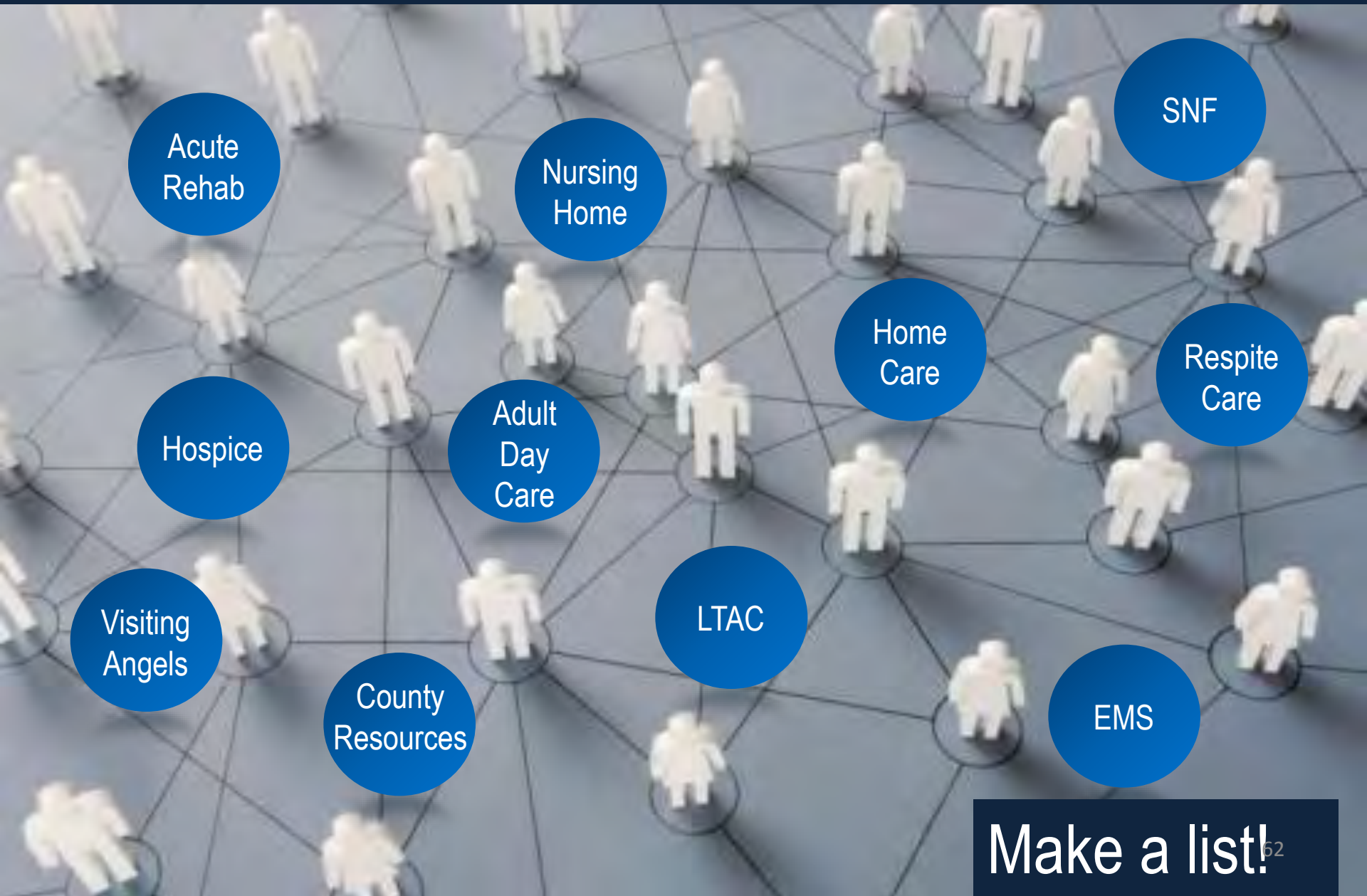
- Five concerns:
  - Status
  - Meds
  - PMD
  - ADL
  - Support

Prescribe Wellness

5. Coordination of hospital resources

- Social workers
- Case managers
- Physical therapy
- Pharmacist
- Toxicologist
- Telemed

6. Coordination of community resources



7. Staffing enhancements

- Program coordinator
- RN Champion*
  - Nurse Coordinator
  - Geriatric Nurse Practitioner
- Physician Champion*
  - Medical Director
  - EM/IM
  - Fellowship Trained
- Social worker
- Case manager
- Pharmacist
- Toxicologist
- Physical therapist

8. Patient satisfaction: Value Based Purchasing

- Addressing by preferred name
- Patient liaison
- Blankets
- Nutrition
- Space for Family
- Internal waiting room
- Reading glasses
- Hearing assist devices
- Holistic Medicine

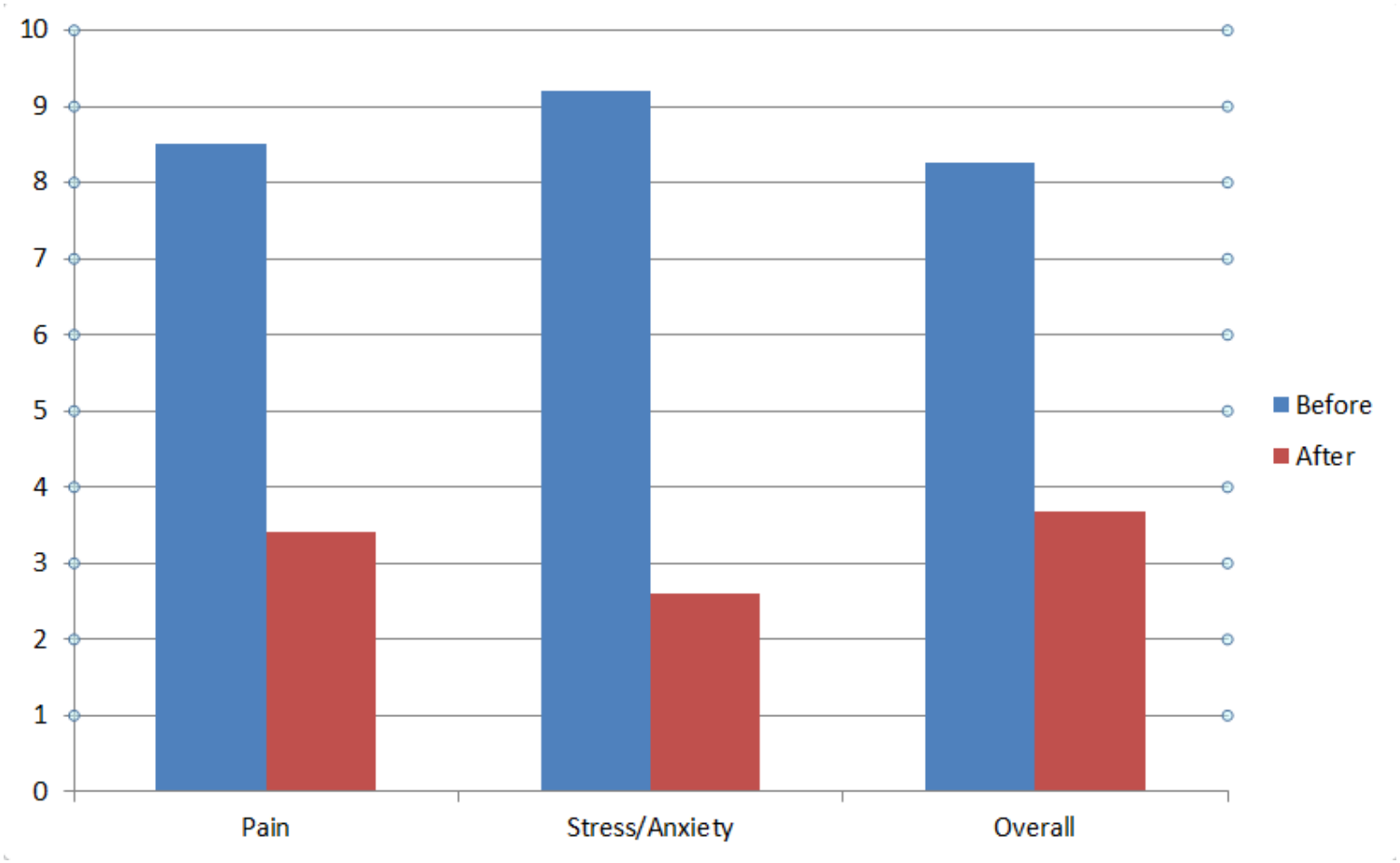
Holistic Medicine

- Reiki Energy
- Pranic Healing Energy
- Aroma Therapy
- Acupressure
- Music Therapy
- Medical Harp Therapy
- Light Therapy

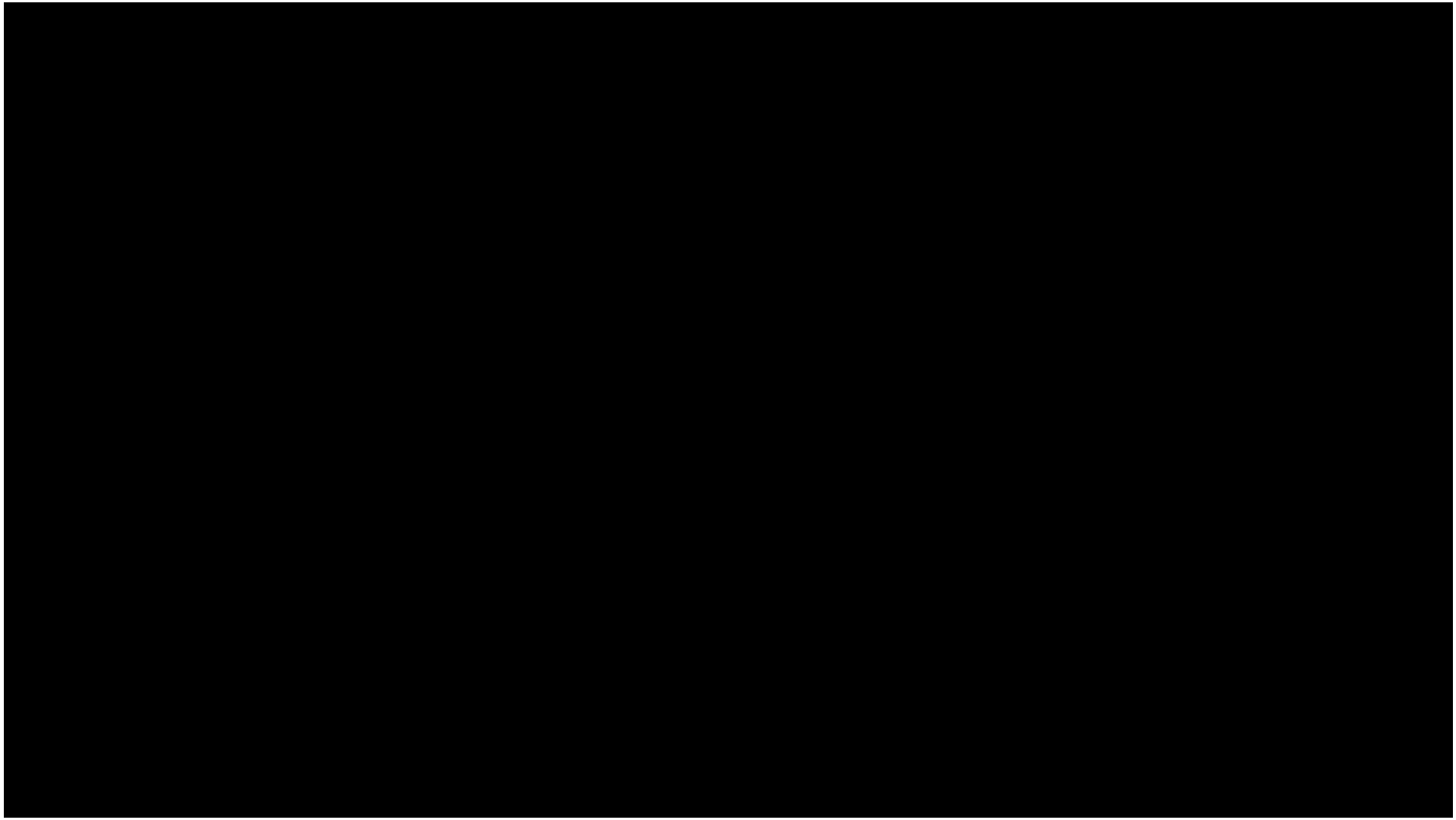
Pranic Healing

Start 1:05

Pranic Healing Results



Aromatherapy



Harp

Harp

Special Bedside Harp Moments

Striking a notable difference in Healthcare since 2002

At Saint Joseph's Regional Medical Center, Paterson, NJ

Highlights of Responses:

FROM PATIENTS:

- "The music is so soothing! It makes me want to fall asleep. I've never heard of something like this in a hospital!"
- "That makes my soul feel so sweet inside!"
- "Music is my stress reliever!"
- "It must be so rewarding to bring smiles to so many people."
- "You have gentle fingers. God bless you for playing for me!"

FROM VISITORS:

- "What a wonderful idea, to have a harpist playing in the ED! Your music is wonderful."
- "That's so peaceful and calming."
- "This is the music of the angels!"
- "The music is really helping to calm me. Thank you for listening and playing for me."
- "You inspire me. The harp music is so beautiful."

FROM STAFF:

- "I wish they'd play harp music during our lunch breaks!"
- "It would be so wonderful to have this relaxing music while taking a bath."
- "It just makes you take a step back and relax."
- "Those who play the harp are angels."

Live Harp Music in a Geriatric Emergency Department: A qualitative study of perception of care and benefits.

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St. Joseph's Regional Medical Center
Paterson, NJ

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Bensalem, PA

Abstract

Objectives: to determine if the presence of a live harpist in the Geriatric Emergency Department was beneficial to patients and their families.

Methods: Study employed a qualitative design utilizing an interview methodology with a convenience sample. Recruitment for potential participants began when the harpist completed the music session and left the patient area. Descriptive statistics were used to provide numbers and percentages of the demographic characteristics as well as the Likert scale responses to each survey question.

Results: There were 61 survey participants (36 females; 25 males). Participants responded that live harp music made them feel relaxed (90%; 55); calm (91.8%; 61) and less anxious (49; 80.3%). The majority (83.6%) responded that the music was valuable to them and 58 (95.1%) participants would recommend the music to someone in their situation.

Conclusions: This qualitative study supports the presence of a live harpist in the Geriatric ED citing positive benefits to patients, family and staff. Participants reported less anxiety and that music served as a distraction during their time in the ED. An overwhelming majority would recommend the use of live music to others in this setting. The addition of this modality adds little cost yet yields enormous benefits in terms of improved patient and family perception of care while decreasing stress and anxiety. As an added indirect benefit, live harp music may also exert a similar effect on the emergency staff.

Results

"After listening to the live harp music today I feel…RELAXED

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Relaxed	26.23% (16)	63.93% (39)	4.92% (3)	3.28% (2)	1.64% (1)

"After listening to the live harp music today I feel…CALM

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Calm	27.9% (17)	63.9% (39)	8.2% (5)		

"After listening to the live harp music today I feel…LESS ANXIOUS

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Less Anxious	23% (14)	57.4% (35)	18% (11)	1.6% (1)	

"On a scale of 1 to 5, how valuable was the live harp music to you today with one ot being valuable at all and five being very valuable?"

	5 (Very valuable)	4 (Moderately Valuable)	3 (Neutral)	2 (Minimally Valuable)	1 (Not valuable at all)
How Valuable	52.45% (32)	31.15% (19)	14.8% (9)		1.6% (1)

Conclusions: This qualitative study supports the presence of a live harpist in the Geriatric ED citing positive benefits to patients, family and staff. Participants reported less anxiety and that music served as a distraction during their time in the ED. An overwhelming majority would recommend the use of live music to others in this setting. The addition of this modality adds little cost yet yields enormous benefits in terms of improved patient and family perception of care while decreasing stress and anxiety. As an added indirect benefit, live harp music may also exert a similar effect on the emergency staff.

Light Therapy


ED40
EXIT
EMERGENCY


ED38
stryker
EMERGENCY


ED34
ED35
ED38
ED39
ED36
ED37

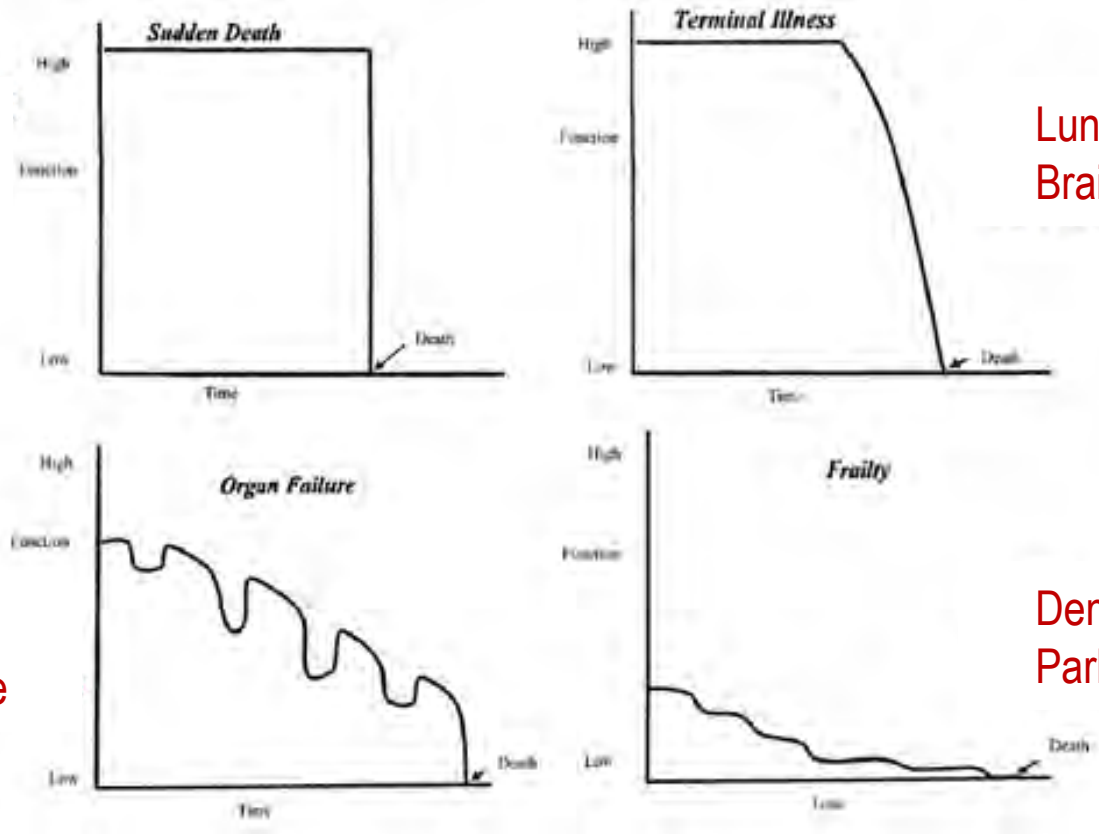
9. Observation and extended home observation

- Observation care in the Geriatric ED
  - Decreases the need for admission
  - Admitted patient are better packaged
- Extended home observation
  - Visiting nurse
  - Paramedics
  - Return ED visit
- Longevity Assessment Program for Seniors (LAPS)

10. Geriatric palliative care, Is it Possible in the ED?

Trajectories of Dying

Heart attack
Stroke



Lung Cancer
Brain Cancer

Heart Failure
Kidney Failure

Dementia
Parkinson's disease

Figure 1. Trajectories of dying. Reproduced with permission of Blackwell Publishing (Lunney JR, Lynne J. Hogan C. Profiles of older Medicare descendants. JAGS. 2002:50;1108-1112).

“Life Sustaining Management and Alternatives”

- A exam room designed for Dying
- A Protocol for the Dying Patient
- Considerations
  - Near Nurses Station
  - Quiet

Have a Protocol

Life Sustaining Management Alternative (LSMA) Room Protocols

Purpose: To provide the patient and their family with dignity and respect, at the patient's end of life. This will be provided through a peaceful and caring environment, with excellent medical and nursing care.

Patients will be moved to room 50 or 51 if the following criteria is met:

- Patient and/or family agrees to Hospice admission.
- Patient and/or family is aware the patient will expire in a short time frame.
- Patient and/or family have a consult with the palliative team or ED physician.

Patient will reside in one of these rooms until a Hospice bed is available or patient expires.

If a patient meets the above criteria, the nurse is to open a room immediately and accept the patient regardless of which ED physician is assigned to them.

When a patient is assigned to a LSMA room, the follow should be performed ASAP:

- Unnecessary medical equipment removed from room(rolling cabinets, biohazard can, etc)
- Extra chairs provided to family
- Lighting dimmed to family's desired setting
- TV channel should be placed on 54, the serenity channel
- Allow additional family at bedside – as long as it does not interfere with patient care.
- Call for clergy, if desired by family.
- Provide comfort care for family as well as patient. (tissues, juice, etc)
- If a patient liaison is present, inform them to provide additional time for the family
- Be observant of the noise level at the nurse's station

Additional care that will be needed:

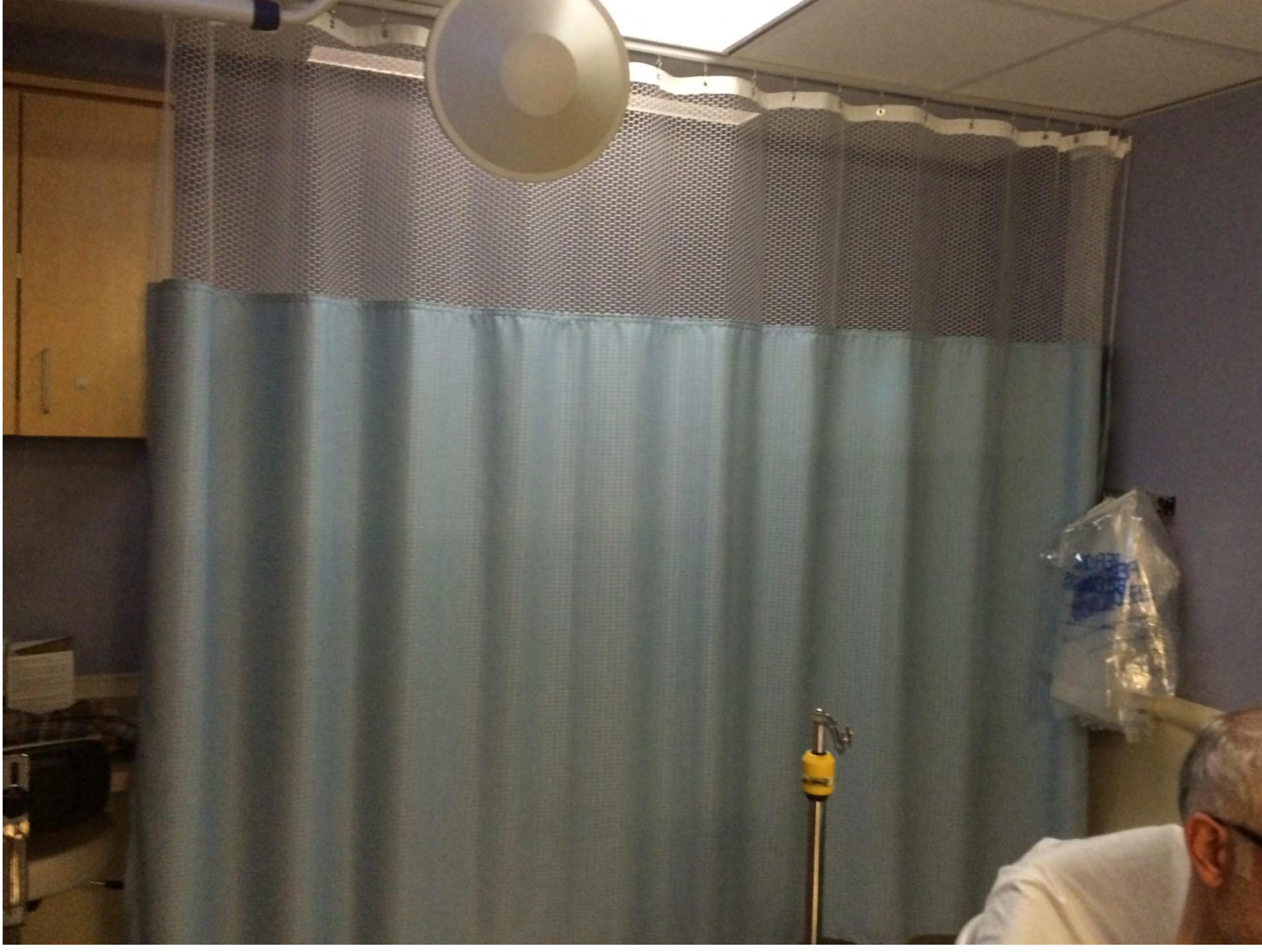
- Turn patient q2h – as indicated
- Oral care q2h - as indicated
- Discontinue vital signs
- Discontinue cardiac monitoring
- Discontinue labs and radiological studies
- Foley catheter as needed for urinary retention
- Consider discontinuing IV fluids or titrating down – prevent edema and congestion
- Rounding q30 minutes
- Avoid suctioning when possible

Please allow family to enter and leave through outpatient registration entrance.

Include Medication

Please ensure that you assess for the following:

1. Pain and Dyspnea
    - Consider Morphine IV drip or Morphine IV bolus – with document a reason for each bolus or titration
2. Nausea/Vomiting
    - Consider Zofran IV and/or Prochlorperazine PR
3. Anxiety/Agitation/Depression
    - Lorazepam IV or PO
4. Delirium
    - Haldol 0.5-1 mg IM
5. Terminal Congestion/Death Rattle
    - Atropine 1% Ophth solution: 2 drops SL q6h or Scopalomine patch 1.5mg
    - Artificial Tears 2 drops OU q2h may be needed




SAMSUNG
FIRE
IT IS THE LAW!
ES LA LEY!


LSMA 2

45 Year Old

09/03/13- Patient is a 45 yo M with a medical history of Seizure disorder, Mental Retardation, Spastic Athetoid Quad, GERD and Dysphagia. Peg tube in place. Patient was a resident of Christian Healthcare Care Center.

Patient presented to ED with SOB, aspiration pneumonia, GI bleed and sepsis.

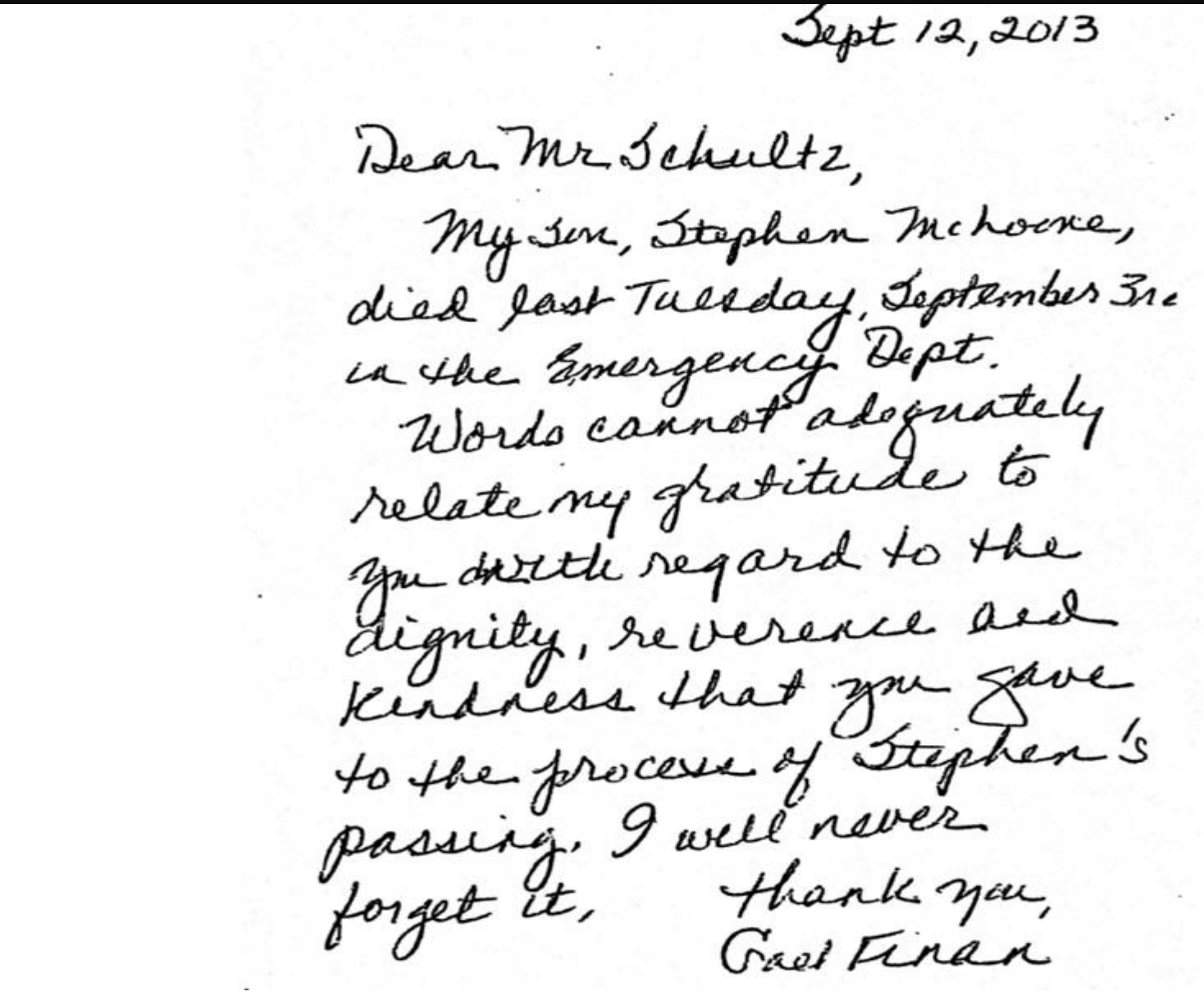
Patient was initially intubated and started on an epi drip in ED.

Palliative consult was obtained and mother decided that she just wanted patient to be comfortable and did not want life support.

Patient remained on ventilator until family arrived. LSMA protocols were started. Patient received morphine IVP. Patient transferred to LSMA room and was extubated. Patient also received Atropine SL, Versed, and an additional dose of Morphine as needed for symptom management.

Patient was pronounced at 1100 with all family at bedside.

Letter from his mom!



Sept 12, 2013

Dear Mr. Schultz,

My son, Stephen McHorse, died last Tuesday, September 3rd in the Emergency Dept.

Words cannot adequately relate my gratitude to you with regard to the dignity, reverence and kindness that you gave to the process of Stephen's passing. I will never forget it,

Thank you,
Gael Finan

Comments From Our Docs

“I have been practicing emergency medicine for more than 30 years. This may be the most moving day in my career. I treated the patient as a person and I felt more like a doctor.”

Nursing Comments

- We made a difference today (tears)
- Wow
- I am so proud to be part of this team.
- That is how I want to be treated.

Program Development Costs

How Much Do You Want to Spend

- $10,000
- $50,000
- $750,000
- $2,400,000
- $10,000,000

Geriatric Emergency Department Development

1. **Environment**
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses
- Non-slip; Non-glare floors
- Limiting tethers
- Handrails
- Lighting
- Sound proofing
- Family friendly

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $ 450 each
- Non-slip; Non-glare floors
- Limiting tethers
- Handrails
- Lighting
- Sound proofing
- Family friendly

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $ 450 each
- Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
- Limiting tethers
- Handrails
- Lighting
- Sound proofing
- Family friendly

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $ 450 each
- Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
- Limiting tethers - $ 0
- Handrails
- Lighting
- Sound proofing
- Family friendly

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $ 450 each
- Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
- Limiting tethers - $ 0
- Handrails – No incremental cost in most states
- Lighting
- Sound proofing
- Family friendly

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $ 450 each
- Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
- Limiting tethers - $ 0
- Handrails – No incremental cost in most states
- Lighting - $ 500 for each six bulb florescent fixture
- Sound proofing
- Family friendly

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $ 450 each
- Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
- Limiting tethers - $ 0
- Handrails – No incremental cost in most states
- Lighting - $ 500 for each six bulb florescent fixture
- Sound proofing - $ 1200 at Home Depot; $ 50/Room
- Family friendly

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $ 450 each
- Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
- Limiting tethers - $ 0
- Handrails – No incremental cost in most states
- Lighting - $ 500 for each six bulb florescent fixture
- Sound proofing - $ 1200 at Home Depot; $ 50/Room
- Family friendly – $225/Chair at Staples Office Furniture

Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $ 450 each
- Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
- Limiting tethers - $ 0
- Handrails – No incremental cost in most states
- Lighting - $ 500 for each six bulb florescent fixture
- Sound proofing - $ 1200 at Home Depot; $ 50/Room
- Family friendly – $225/Chair at Staples Office Furniture

Total Incremental Cost Per Room = $ 1500

10 bed unit = $15,000

Geriatric Emergency Department Development

1. Environment
2. **Quality initiatives**
   - **Geriatric Healthcare Screenings**
   - **Transition of Care**
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care

Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. **Staff and provider education**
   - **ACEP**
   - **ENA**
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care

Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. **Operational enhancements**
   - **Call Back Program**
   - **Pivot and Go Triage**
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care

Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. **Coordination of hospital resources**
   - **Physician Therapy, Nutrition, Social Services, Psychiatric Services**
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care

Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. **Coordination of community resources**
   - **Visiting Nurses, Meal Services, Senior Day Care**
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care

Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. **Staffing enhancements**
   - **Navigator, Social Worker, Pharmacist, Others**
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care

Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. **Patient satisfaction extras**
   - **Patient Liaisons, Holistic Medicine, Vision and Hearing Assist, Blankets**
9. Decreasing Admission and Readmission Strategies
10. Palliative care

Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. **Decreasing Admission and Readmission Strategies**
    - **Admit to Home, Extended Home Observation**
10. Palliative care

Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. **Palliative care**
    - **Protocol Driven Care System**

Defining Triple Aim and Healthcare Reform

The "Triple Aim"

Improve the patient experience of care

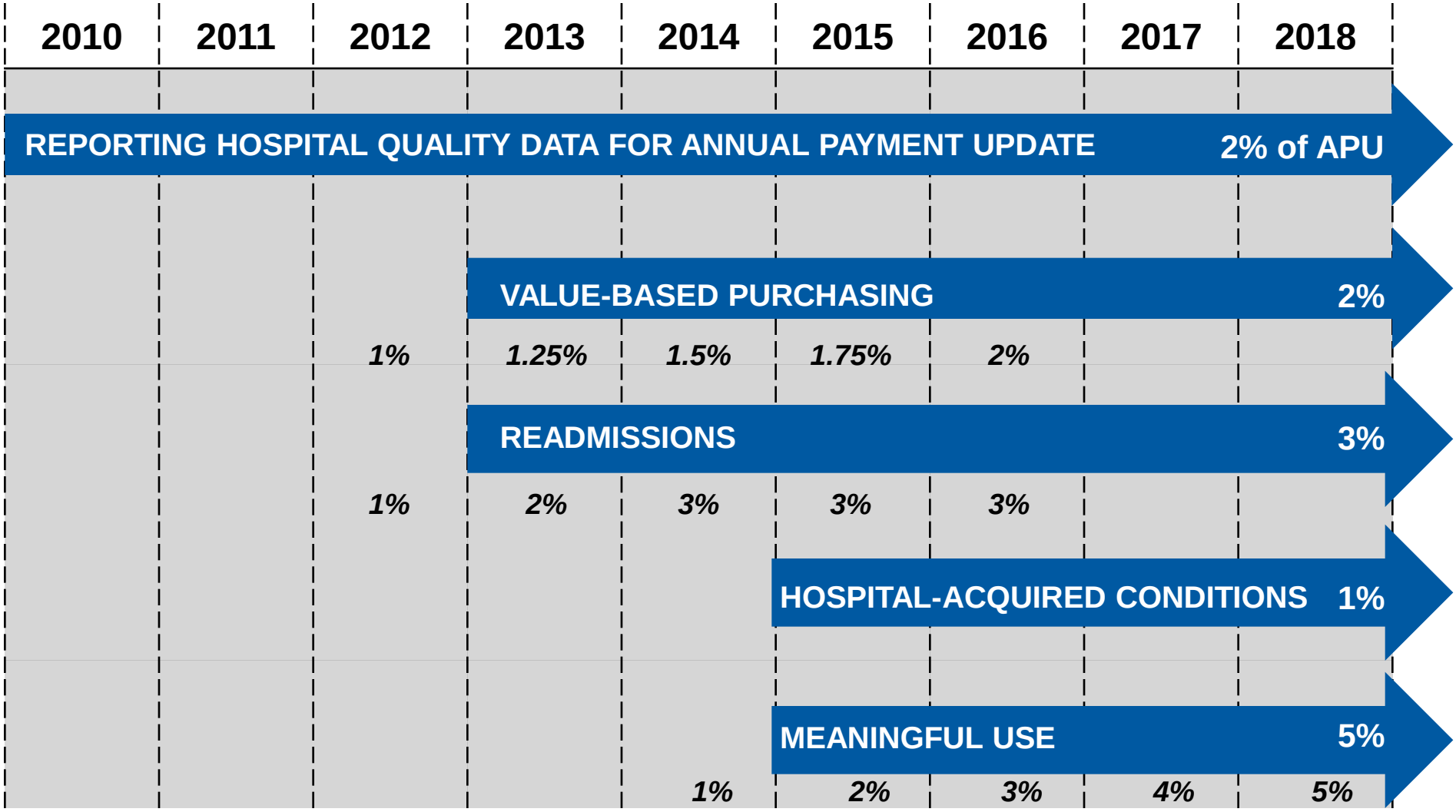
Improve the health of populations

Reduce the per capita cost of healthcare

Care Coordination/Continuum of Care

Value-Based Purchasing Roadmap

CMS quality-based payment initiatives will put more than 13% of payment at risk



Source: Studer Group Taking You and Your Organization to the Next Level presentation

Identify how the GED meets the Triple Aim

The GEDI-WISE Validation Project

GEDI WISE

Geriatric

Emergency

Department

Innovations in care through

Workforce,

Informatics, and

Structural

Enhancements

CMS "Innovation Award" Under the Affordable Care Act to Improve Geriatric Emergency Care

Mount Sinai has received $12,728,753 to fund a Geriatric Emergency Department Innovations in Care Program known as GEDI WISE, which will provide clinical, workforce, and informatics enhancements to geriatric emergency care that are projected to improve patient outcomes while also producing a cost savings to Medicare and Mount Sinai of over $40 million over the next three years.

New York, NY (PRWEB) June 17, 2012

The Mount Sinai Medical Center in New York today received a "Health Care Innovation Award" from the Department of Health & Human Services. The awards are designed to support innovative healthcare projects nationwide that enhance medical care while also reducing costs. Mount Sinai has received $12,728,753 to fund a Geriatric Emergency Department Innovations in Care Program known as GEDI WISE, which will provide clinical, workforce, and informatics enhancements to geriatric emergency care that are projected to improve patient outcomes while also producing a cost savings to Medicare and Mount Sinai of over $40 million over the next three years.

The number of emergency department visits by older adults has doubled over the last decade, but in most cases the special needs of older patients are not well addressed by existing emergency department care and physical designs. The result is that an increasing number of thes
residences after their hospital stays, and readmission ra

Mount Sinai, which recently opened a special geriatric er
a suite of programs to attempt to address these issues,
work best and how they can be exported to other emerge

To achieve the costs savings and better patient outcome
its emergency department staff, adding dedicated geriatr
volunteer coordinators and technicians. The physical spa
satisfaction. And a program of data collection and analys
transitions in the geriatric patient care process that are c
re-hospitalization.

"As the U.S. population ages and the proportion of older
emergency department is situated at the crossroads of c

CMS Goals; The Triple AIM

- **Better Health care**:

Improve individual patient experiences of care along the Institute of Medicine's six domains of quality: *Safety, Effectiveness, Patient-Centeredness, Timeliness, Efficiency,* and *Equity*

- **Better Health/Population Health:**

Encourage better health for entire populations by addressing underlying causes of poor health, such as physical inactivity, behavioral risk factors, lack of preventive care and poor nutrition

- **Lower Costs for Beneficiaries:**

Lower the total cost of care resulting in reduced monthly expenditures for each Medicare, Medicaid or CHIP beneficiary by improving care, ultimately enhancing the health care system

GEDI WISE Goals; The Triple AIM

- **Aim 1 (Better Health Care)**

  Improve the quality of ***geriatric*** emergency patient care with better:

  - care transitions
  - coordination of patient care
  - detection of adverse events
  - pain care
  - delirium and fall risk screening
  - advanced care planning

- **Aim 2 (Better Health)**

  Improve health outcomes in older adults who receive GEDI WISE

  - quality of life and patient satisfaction
  - reduce functional decline, delirium, depression, pain, falls, etc.

- **Aim 3 (Lower Costs)**

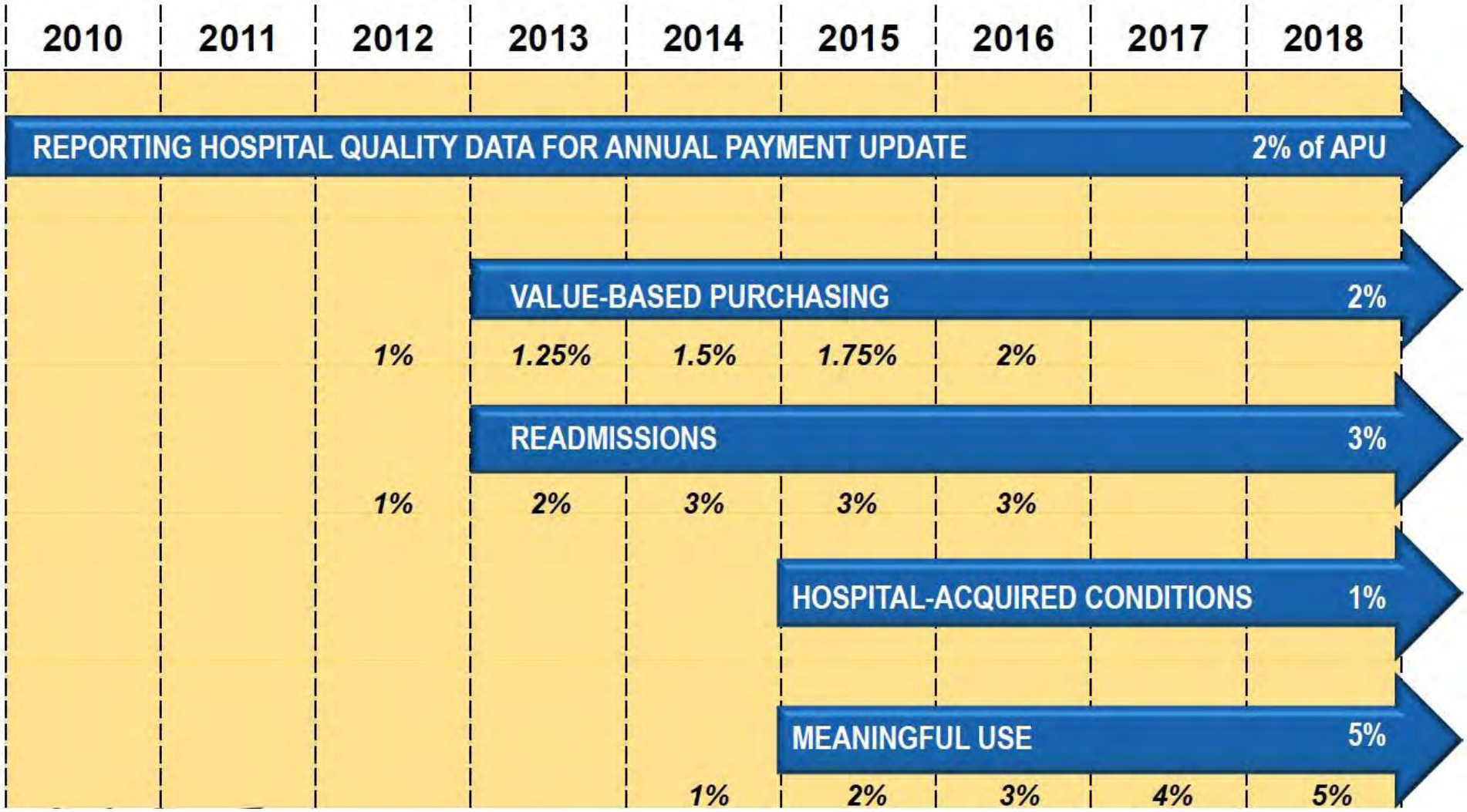
  - ↓ annual rates of hospitalization
  - ↓ 30-day readmission
  - ↓ ED visits and revisits
  - ↓ number of ICU days

Preliminary Outcomes

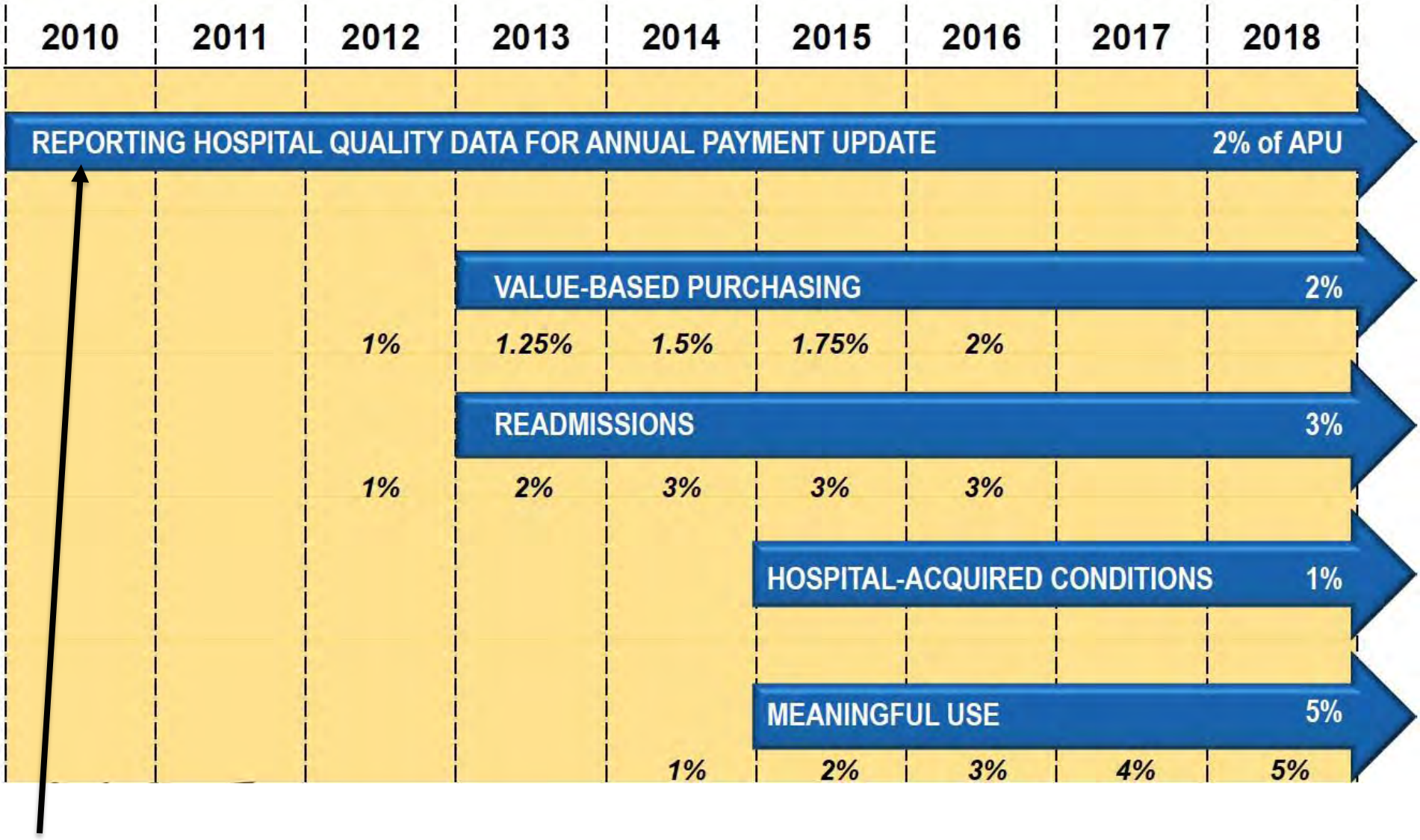
- Increased patient satisfaction
- Higher rate of postdischarge independence
- Fewer return visits
- Lower admission and readmission rate
- Improved screening for inappropriate medications
- Increased patient volume (16% seniors treated)

Loss/Cost Analysis: Improving Health, Spending Less and Improving Satisfaction

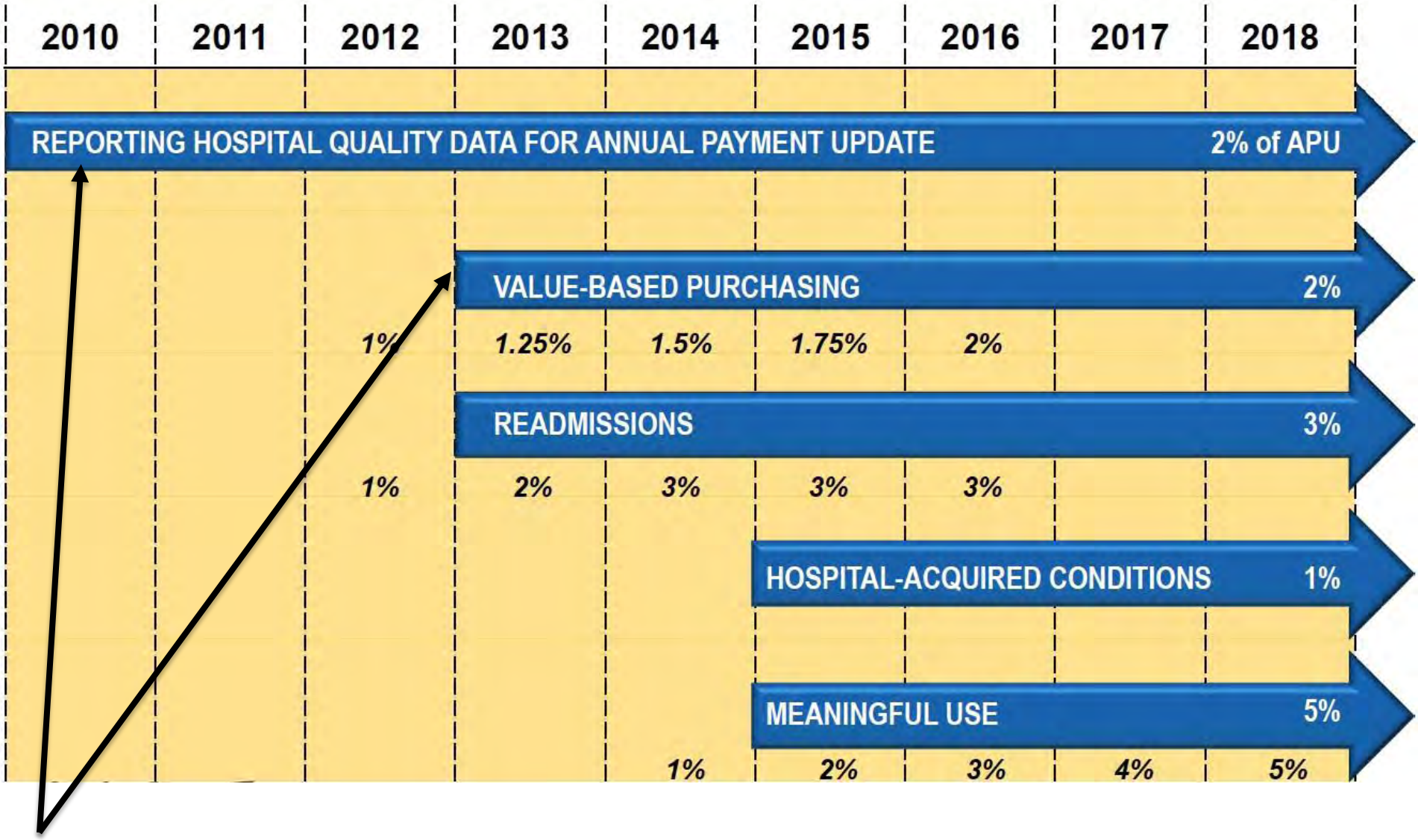
Hospital $$ at risk may climb to 13%



Hospital $$ at risk may climb to 13%



Hospital $$ at risk may climb to 13%



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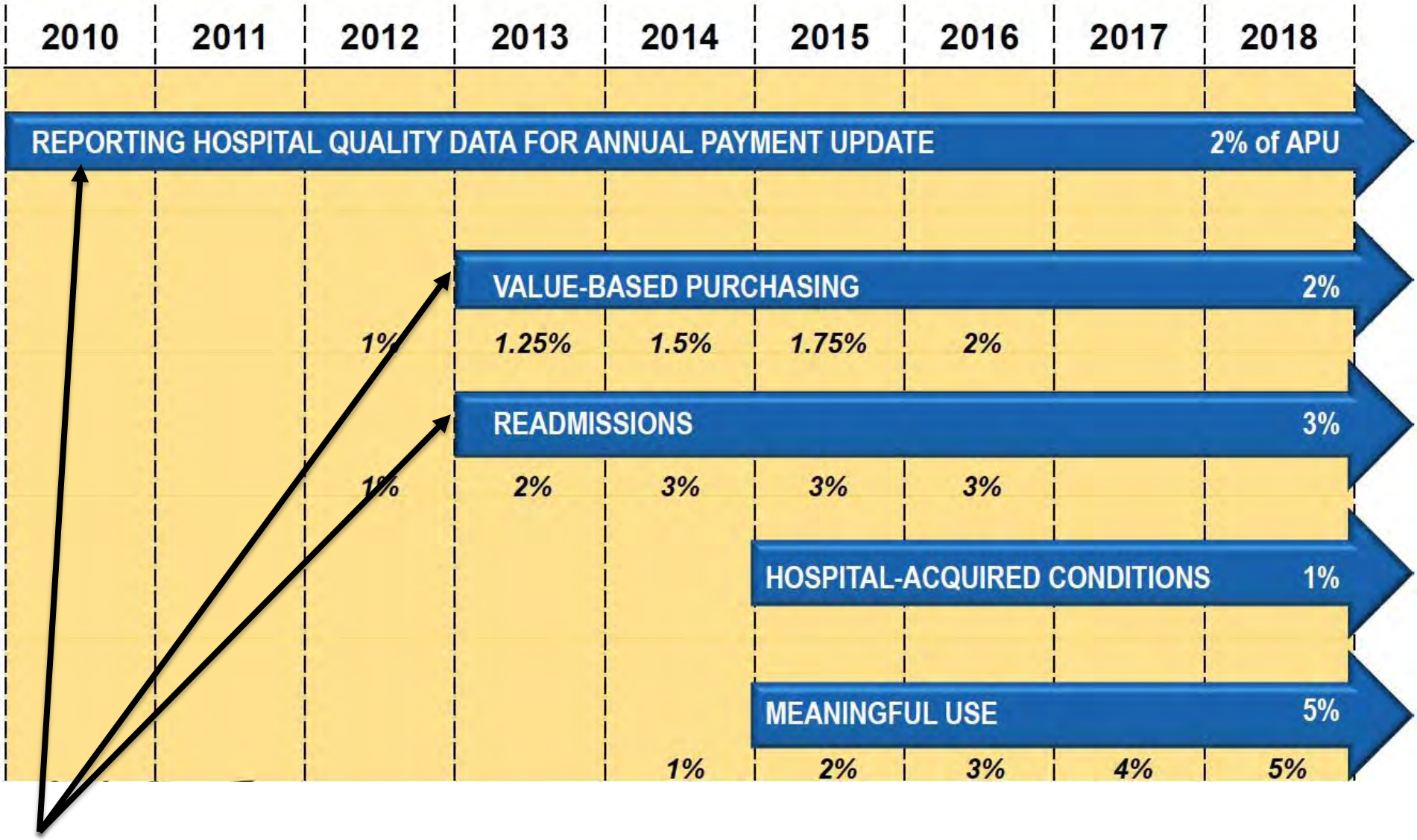

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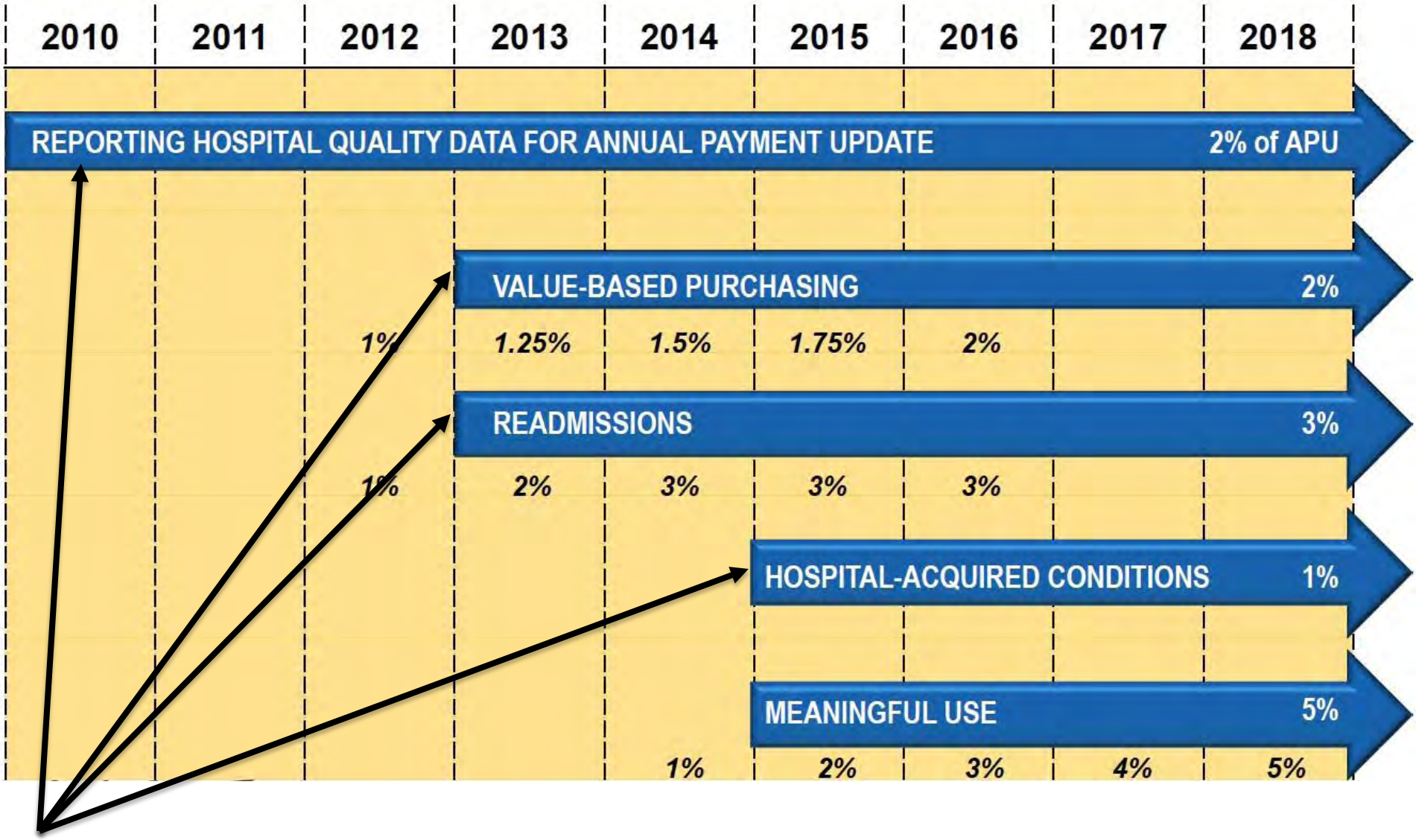
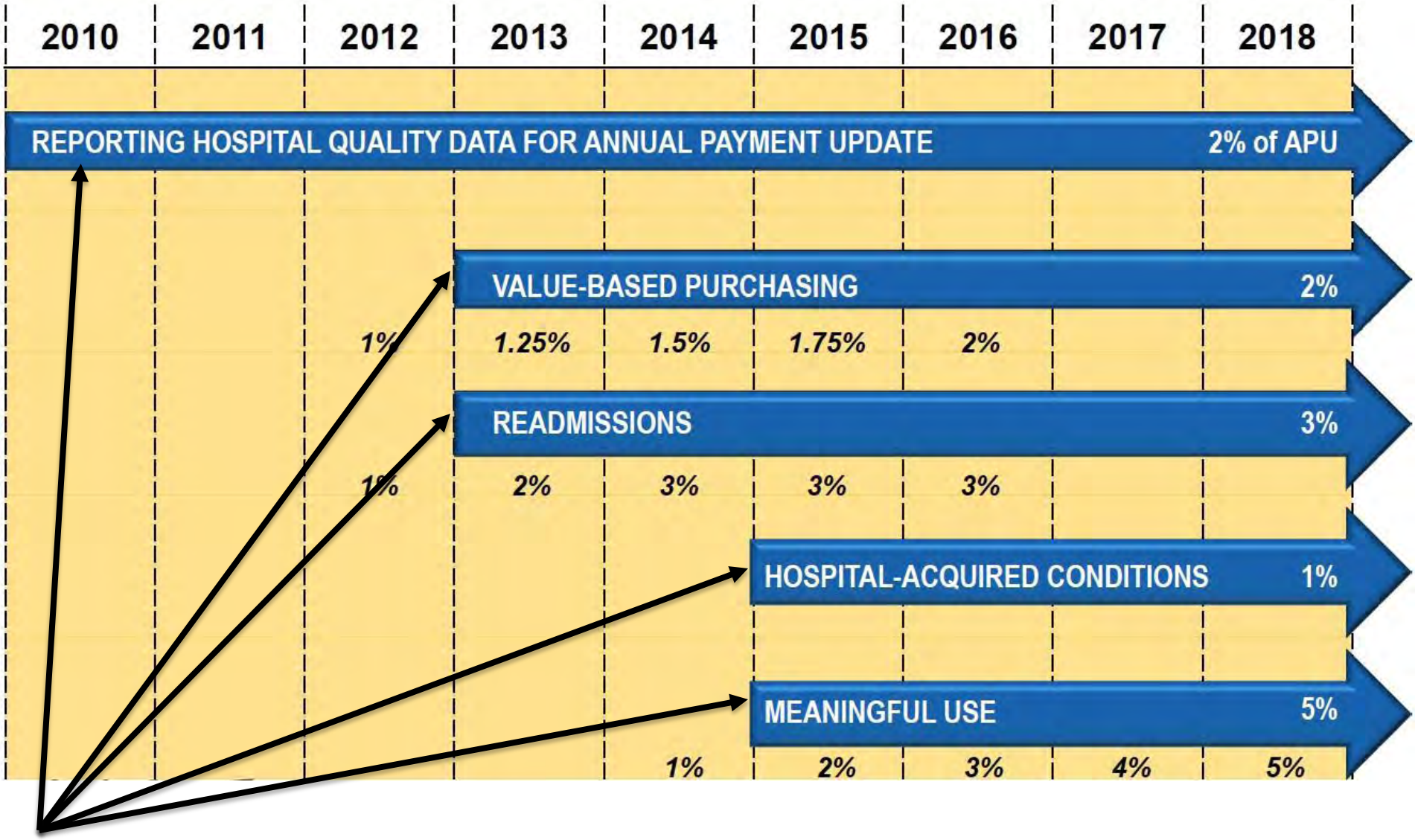
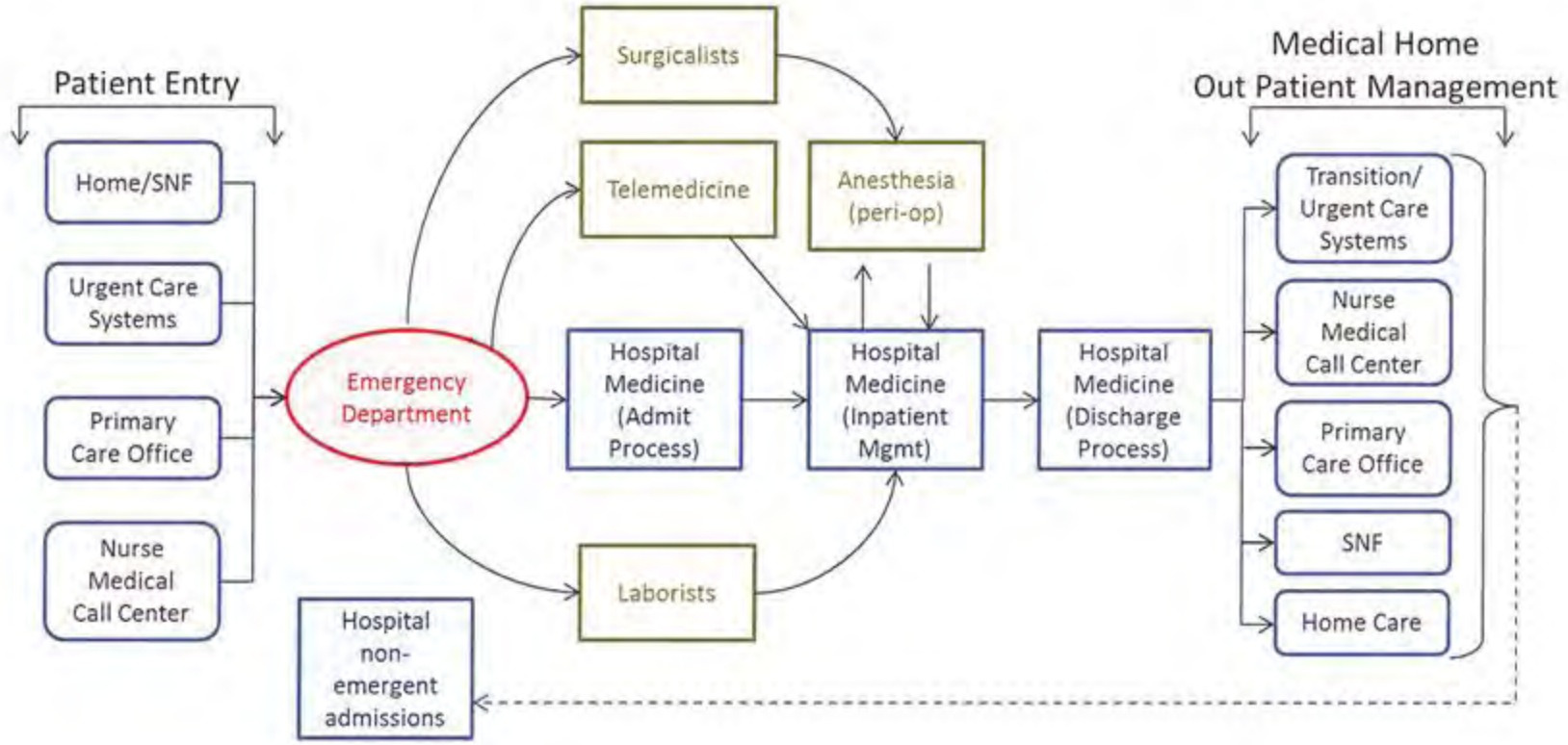


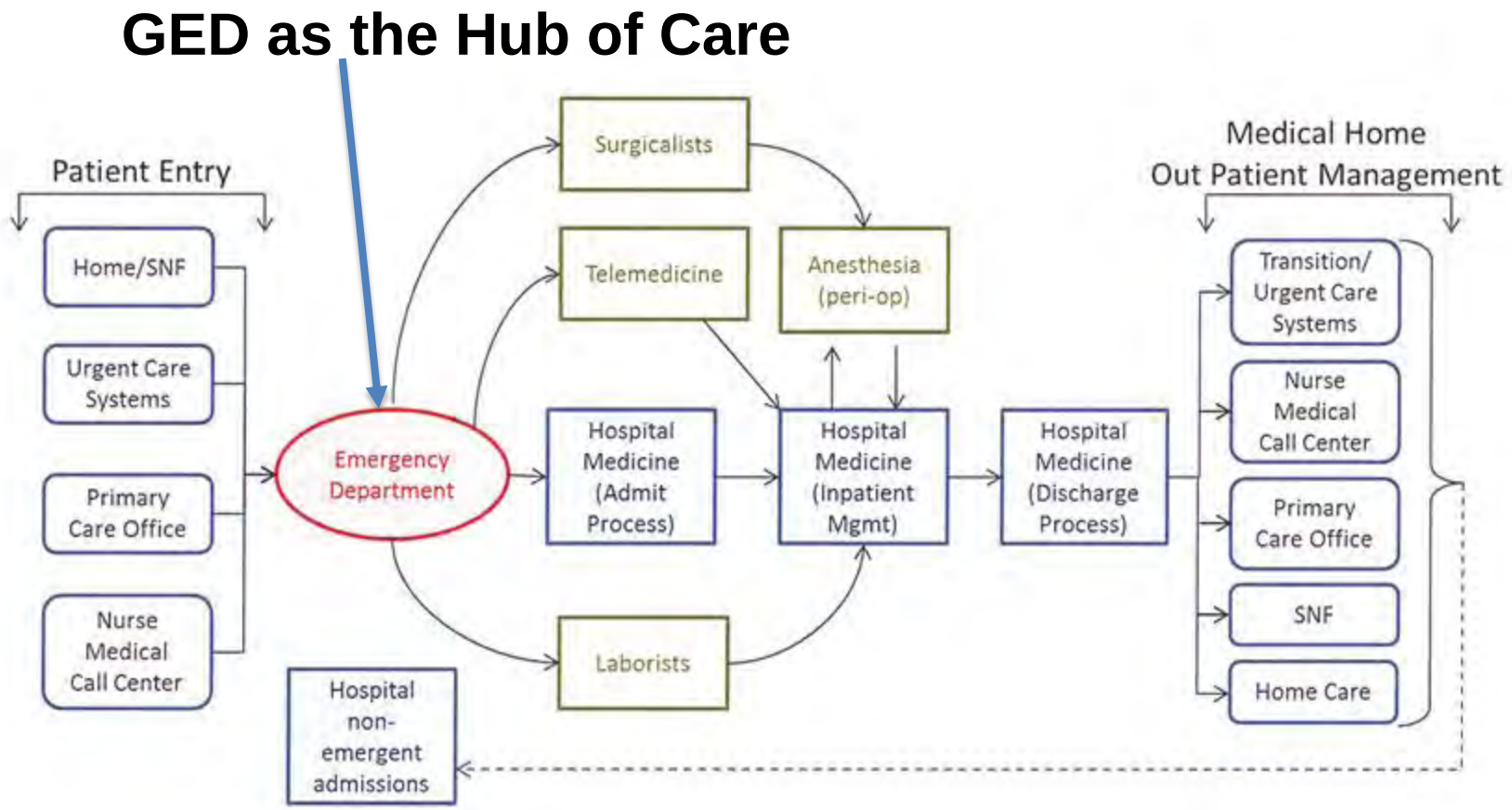
Hospital $$ at risk may climb to 13%



Geriatric ED Continuum of Care



Geriatric ED Continuum of Care



Outcomes

Preliminary Outcomes

- Increased patient satisfaction
- Higher rate of post-discharge independence
- Fewer return visits
- Lower admission and readmission rate
- Improved screening for inappropriate medications
- Increased patient volume (16% seniors treated)

Increase percent of medical beneficiaries = Increase GME reimbursement

WestJEM
Integrating Emergency Care with Population Health

2013 Article by M Rosenberg and L Rosenberg
Geriatric ED with Palliative Care Saves Millions

"An Integrated Model of Palliative Care in the Emergency Department"

Hospice and palliative medicine is the newest subspecialty of Emergency Medicine (EM), which concentrates on life threatening illnesses whether they are curable or not. The illnesses may include terminal illness, organ failure, and/or frailty. Palliative medicine represents "the physician component of the interdisciplinary practice of palliative care" [1].

Published work on palliative care in the ED is limited yet promising. Research supports the use of palliative care interventions early in the disease trajectory to promote quality of life as well as reduce costs associated with treatments [2, 3, 4, 5]. The ability to change the existing paradigm of care for chronic diseases such as cardiac or respiratory diseases, stroke, cancer and diabetes, is an opportunity for palliative medicine - specifically palliative care in the ED - to alter the trajectory of care. There are many ED palliative care delivery systems as providers design programs to meet the needs of diverse stakeholders resulting in three recurring models of

Thank You

1. Making a case for a Geriatric ED
2. GED Guidelines
3. GEDI-WISE Study
4. The Business Case

Questions