

Disseminating Evidence-Based Practice: A Staff Nurse Council Takes Charge

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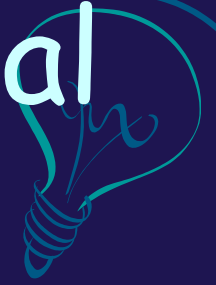
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California Pacific Medical Center



- One of the largest, not-for-profit, academic medical centers in California
- Comprised of the four oldest hospitals in San Francisco dating back to 1852
- Affiliated with Sutter Health



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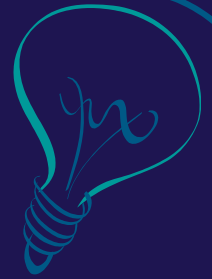
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Pacific Campus



- Founded in 1857 as West's First Medical School



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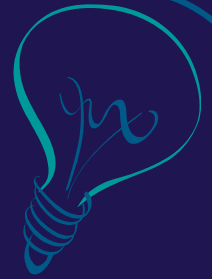
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California Campus



- Founded in 1875 as the Pacific Dispensary for Women & Children
- A hospital run by women for women



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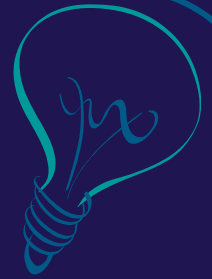
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Davies Campus



- Founded in 1852 to help SF German-speaking immigrants



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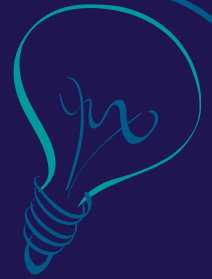
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St. Luke's Campus



- Founded in 1871 by the Episcopal Church with a mission to serve all in need



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Gordon and Betty Moore Foundation



- Environmental conservation
- Cutting edge scientific research
- San Francisco Bay Area
 - Betty Irene Moore Nursing Initiative
 - Betty Irene Moore School of Nursing Commitment



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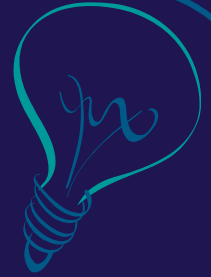
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Background



- Goal: utilize a staff-nurse led council to disseminate evidence-based practice
- Gordon and Betty Moore Foundation grant to Bay Area Sutter hospitals
- Five practices to be developed and disseminated over four years



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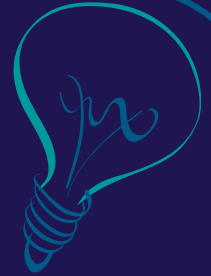
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Initiatives



- GBMF List
 - AMI mortality
 - VAP
 - CLBSI
 - Failure to rescue
 - 5th initiative to be chosen by facility
- CPMC List
 - CLBSI
 - Hospital acquired aspiration pneumonia (failure to rescue)
 - Pressure ulcer prevention
 - Sepsis mortality
 - DVT/VTE



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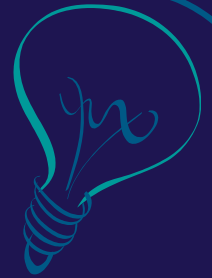
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Methodology



- Partners Advancing Clinical Excellence - PACE - Councils formed
- Education provided to council members
- Staff RN Co-chair leads meetings
- Director oversees and guides council activities



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- Council has full authority to implement strategies and solutions
 - Within evidence-based nursing practice
 - Budget neutral
 - No impact on other disciplines
- If impact on budget or other disciplines, council must work with appropriate other parties



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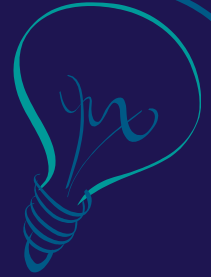
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#1 - CLBSI's



- First initiative
- Baseline data (2006) = 4.28/1000 line days
- Council reviewed the literature
- Practices
 - Insertion bundle
 - Central line care
 - Assessment of central line necessity



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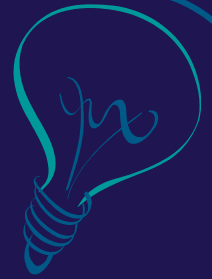
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- Inservicing to all Critical Care Units
- Sharing evidence, demonstrating dressing change
- Inservicing done 1:1 or in very small groups
- Peer to peer



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The Central Line Bundle

A group of 5 best practices* that, when performed together as a group, *significantly* lowers the rate of central line blood stream infections more than any one of the practices alone would have predicted.

*Institute for Healthcare Improvement; www.ihl.org



The Bundle Elements (components 1-4 focus on prevention of infection during insertion; 5 occurs daily)

1) Hand hygiene – anyone participating in the procedure must thoroughly wash their hands with soap and water or alcohol gel prior to starting.

2) Maximum barrier precautions – operator wears cap, mask, sterile gown and sterile gloves; patient is covered from head to toe with a sterile drape, with a small opening at the site for insertion; all others in the room must wear a cap and mask

3) Chlorhexidine skin antiseptics – the site is prepped in a back and forth motion for 30 seconds with chlorhexidine; the site is allowed to air dry.



4) Optimal site selection -subclavian site preferred unless contraindicated



5) Daily review of line necessity – unnecessary lines must be removed, as the infection rate increases the longer the line is in

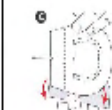
Adult Central Venous Catheter Dressing Change

- Wash hands for 15 seconds
- Apply non-sterile gloves and open kit
- Place mask on face
- Carefully remove old dressing
- Clean with Normal Saline and sterile gauze. If soiled
- Remove non-sterile gloves and wash hands for 15 seconds
- Apply sterile gloves from kit
- Hand Hygiene, Mask, Gloves and Sterile Drape are optional
- The kit contains 3 chlorhexidine gluconate (CHG) swabsticks. Use back-and-forth strokes to clean site for a total of 30 seconds. Allow antiseptic to dry completely. DO NOT BLOT OR WIPE AWAY ANTISEPTIC.
- Apply BIOPATCH® over insertion site: BLUE SIDE UP. Line up the BIOPATCH® slit with the catheter. Assure the entire patch has contact with patient's skin.
- Secure suture hub with Hubguard®. Optional.
- Center SorbaView® Ultimate dressing over catheter entry site. Align slit over tubing.
- Slip universal tape strip under tubing and over edge of dressing.
- The Tubing Anchor is designed to stabilize the lumens of catheters. Bend or pinch the foam to gain better access to the channels. Place tubing in the channels.
- Then, remove the backing from the foam base and secure the Anchor to skin.
- To secure the tubing, stretch the silicone band across all the tubing and fit it into the notch.
- Write date, time and nurse initials on dressing
- Document on dressing change on Flow Sheet



Secure suture hub

Biopatch: BLUE side to the sky



Slit alignment



Universal tape strip



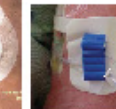
Tubing Anchor



Silicone Band



Tubing Anchor



Piso Anchor



The Pace Council 2009



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#2 - Aspiration Pneumonia



- Chosen to substitute for Failure to Rescue
- #2 Cause of mortality in 2006 - 2007
- Highly Nursing sensitive
- 22%* mortality rate at baseline
- Review of literature



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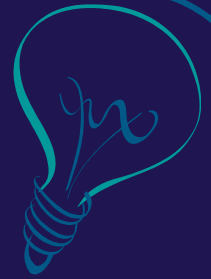
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- Key evidence-based practices
 - Oral care
 - Swallow screen
 - Supervised oral intake
- Peer to peer inservicing and posters for each unit
- Inclusion of CNA's in inservicing



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Patient Safety: Aspiration Pneumonia Prevention

1 RN identifies patients at risk



2 No food, liquid, or medications until RN does Swallow Screening or Dysphagia Evaluation done by Speech



3 Suction is set up at bedside & ready



4 HOB is elevated at 30° at all times . . .



. . . and at 60°–90° for meals

5 Frequent mouth care



6 Assist or supervise 1:1 precaution patients at meal time



CPHC-Que by BS_2008



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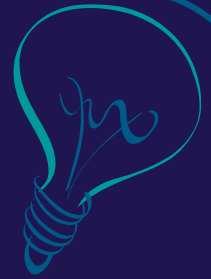
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#3 - Pressure Ulcer Prevention



- Negotiated as 3rd initiative
- Prevalence static
- CMS Never Event
- Highly Nursing sensitive
- Again began with review of literature



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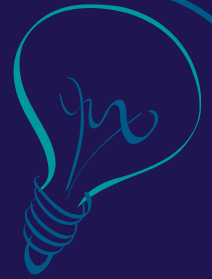
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- Pilot done in high acuity MSICU
- Trialed positioning and pressure relief products
- Recommendation for purchase approved by Nursing Leadership
- Following roll out, no discernable changes in prevalence



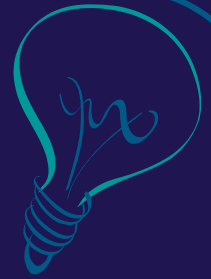
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- 4 all-day Skin Care Fairs
- Focused on product usage, wound care consultations, and documentation
- Council worked with Materials Management to get products available on Nursing Units



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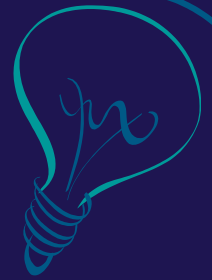
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#4 Severe Sepsis Mortality



- Added initiative by Moore Foundation
- Nursing sensitive strategies of the Surviving Sepsis Campaign
- Early identification of sepsis, completion of sepsis screen, SBAR for communicating with physicians



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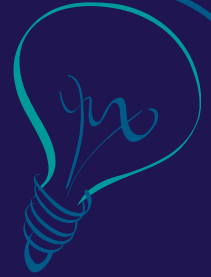
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- Launched sepsis boxes on Med/Surg units
- Removed after 3 months due to regulatory issues
- Learning opportunity for Council



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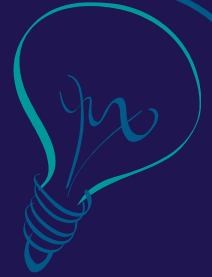
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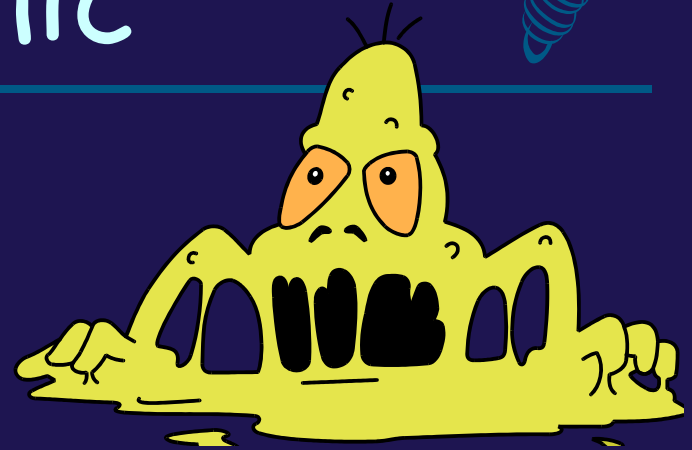
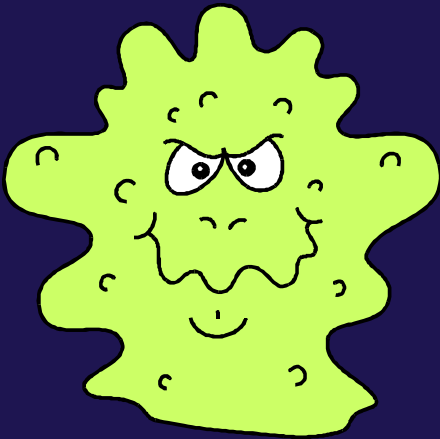
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Mnemonic



- Screen
- Every
- Patient
- Sepsis
- Is
- Sneaky



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Early Recognition of Severe Sepsis

Notify Charge Nurse, MD, and RRT if your patient fits the criteria for either A or B below:

A. SEPSIS

Documented infection, e.g. UTI, pneumonia, cellulitis, endocarditis, surgical site, invasive/implanted devices *and*

2 or more new signs of SIRS:

- Temp < 36 or > 38
- Pulse > 90
- Resp > 20 (28 is too late!)
- WBC < 4 or >12 K
- Bands > 10%

B. SEVERE SEPSIS

1 or more signs of organ dysfunction;

- Unexplained acute Δ in mental status and/or \downarrow LOC
- \uparrow oxygen requirements
- SBP <90 or >40 mmHg below baseline
- Mottled skin/capillary refill \geq 3 sec
- Urine output <0.5 mg/kg/hr or \leq 240 ml/8 hrs
- Creatinine \uparrow >0.5 from baseline
- Blood glucose > 120 in non-diabetic
- Lactate \geq 3
- Platelet count <100 K or a 50% decrease

Initial RN Actions for Sepsis

1. Notify charge nurse/MD/RRT
2. Continuously monitor V/S and O₂ Sat
3. Apply O₂
4. Ensure patent IV access
5. Fingerstick for glucose
6. Have supplies ready
 - IV tubing & 1 L NS
 - 2 sets blood culture bottles
 - Lactate tube on ice
 - CBC/Chem Panel/Crossmatch
 - Care summary/chart
7. Stay with patient
8. Anticipate within 1 hr
 - Fluid bolus
 - Antibiotic
 - Transfer



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A. SEPSIS

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Physician Guide to Care

	If possible infection:	Recommended action:
Most Severe \uparrow	Hypotension—MAP <65, SBP <90, >40 mmHg below baseline? Or Pressors needed?	Septic Shock EGDT order set, ICU Transfer
	Lactate \geq 3?	Severe Sepsis EGDT order set, ICU Transfer
Least Severe \downarrow	Acute Organ Failure? Δ MS \uparrow FiO ₂ Cr. >0.5 over baseline or oliguria Mottled skin	Crystalloid 20-50 ml/kg over 6 hours. Reassess for end organ failure or EGDT order set, ICU transfer
	Other acute organ failures? Bilirubin >2 Plts <100 K INR >1.5 Glucose or insulin dose Lactate 2-2.9	Severe Sepsis Crystalloid 20-50 ml/kg over 6 hours. Repeat Lactate, reassess for end organ failure



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You Can Prevent Aspiration

Do not give food or liquids.

- ❑ Unless RN has said patient can eat
- ❑ If sleepy or drowsy
- ❑ Unless HOB is 60 - 90 degrees
- ❑ Unless suction set up at bedside



If patient must be supervised or fed:

- ❑ Do not leave food or liquids in room unsupervised
- ❑ Give very good oral care:



- ❑ AM + PM brush teeth for 1 minute with brush and paste
- ❑ Every four hours swab with antiseptic, rinse, then apply moisturizer
- ❑ Keep HOB at 30°



STOP

STOP EVERYTHING!

The criteria below are reasons to immediately notify the RN of your patient's condition:

- ❑ Systolic BP >150 or <90
- ❑ Temp <36 or >38
- ❑ Heart Rate >90 or <50
- ❑ Resp Rate >20 or <8
- ❑ Urine output <240 ml for the last 8 hours
- ❑ O₂ sat <90
- ❑ Increasingly drowsy, increasingly agitated
- ❑ Patient complaint of pain



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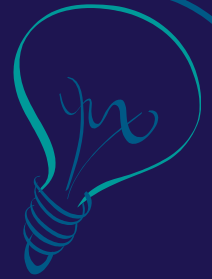
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Dealing with Slippage



- **Monitor data regularly**
 - All data shared with Council monthly
 - Council educated on data reporting
- Refresher education
- Council members use every opportunity to share evidence-based practices with colleagues



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Next Steps



- 5th Initiative just launched
- Supplemental grant to extend for 6th initiative
- Supplemental grant also supporting additional work with sepsis



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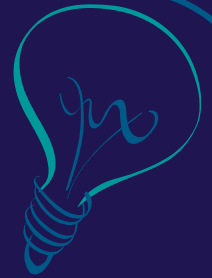
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Challenges



- Resource intensive
- Balancing time for education
- Different levels of participation



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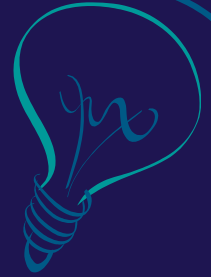
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Lessons Learned



- Peer to peer planning takes longer, but implementation goes quicker
- Bedside RN's prefer to learn about practice changes from their peers
- Staff involved in directing their own practice are more willing to hold each other accountable



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Questions?

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