ACNL Webinar

Early Mobility: Improving Clinical Outcomes

December 9, 2014 - 12:00 – 1:00 p.m.

Call-In: 1-888-858-6021
Conference ID: 6869845975#

Welcome and Introductions

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Early Mobility in Acute Care

Improving Patient Outcomes

Raymond Phillips, PhD, RN
Chief Nurse, Acute Care/Nursing Research
VA Northern California Health Care System
Objectives

➢ Define Early Mobility.
➢ Discuss the benefits of early mobilization.
➢ Discuss barriers to early mobilization.
➢ Discuss further considerations with early mobilization.

Mobility is Life

➢ Early mobility is profoundly beneficial to your patients.
➢ Don’t be afraid, they do better than you expect.
➢ It is an inter-professional task.

Early Mobility Defined

Early mobility (also called progressive mobility) is a term best used to describe mobilization activities that begin immediately upon stabilization of hemodynamic and respiratory physiology, generally within 24-48 hours after ICU admission.

Benefits of Early Mobilization

- Improved respiratory function.
- Maintains strength and joint range of motion.
- Fewer physiologic impairments.
- Repositioning allows for other interventions.
- Improved quality of life.


Barriers to Early Mobilization

- Psychosocial barriers (e.g., agitation, confusion, impaired or no response to simple commands).
- Complex comorbidities.
- Advanced age.
- Physiologic instability.


Impairments seen with prolonged bedrest

- Increased respiratory dysfunction.
- Impaired strength.
- Physiologic impairments.
- Increased risk for skin breakdown.
- Decreased quality of life.

Prolonged hospital stays with mechanical ventilation =

**DECREASED FUNCTION**

- Increased morbidity/mortality.
- Increased cost of care.
- Increased length of stay.
- Respiratory weakness and increased duration of ventilation.
- Sleep deprivation.
- Lack of social interaction.
- Prolonged sedation.
- Delirium.


**Where do we go from here?**

We need to use evidence-based practice to change the status quo of immobility. Culture change requires a collaborative effort.
Kaiser Permanente San Leandro Medical Center

- Opened June 3, 2014 (Northern California)
- 264-bed medical center includes all private rooms, 10 operating rooms, 24-hour emergency services with 40 treatment rooms and a newborn intensive care nursery
- The 63-acre site also is home to a 275,000 square foot medical support building that opened on April 7, 2014

OBJECTIVES

To describe the strategies for ambulation of ICU patients at Kaiser Permanente San Leandro Medical Center
To describe the process for engaging staff to improve Mobilization of Med/Surg Patients at Kaiser Permanente San Leandro Medical Center
RETHINKING CRITICAL CARE BUNDLE

• CAM ICU Assessment
• Delirium Detection
• Vacation Sedation (SAT & SBT)
• Mobility Bundle
• ICU Length of Stay

THE EVIDENCE

• Culture of early mobility in mechanically ventilated patients. CCM 2009
• Early activity is feasible and safe in respiratory failure patients. CCM 2007
• Early exercise in critically ill patients enhances short-term functional recovery. CCM 2009
• Early intensive care unit mobility in the treatment of acute respiratory failure. CCM 2008
• Early physical and occupational therapy in mechanically ventilated, critically ill patients: a randomized controlled trial. Lancet 2009
• Effects of exercise programs to prevent decline in Health-related quality of life in highly deconditioned institutionalized elderly persons. Arch Intern Med 2010
• Impact of whole-body rehabilitation in patients receiving chronic mechanical ventilation. CCM 2005
LEARNING FROM EXPERTS

- ICU Culture change is essential and takes time
- Champions necessary to drive and maintain change
- Walking ventilated patients is possible
- Patients understand and expect to be walked
- Expected benefits
  - Reduced Hospital LOS
  - Decreased ventilator days
  - Less delirium higher level of functionality on discharge

ICU MOBILITY METRICS

Kaiser Permanente has internal process measures expected of all 21 NCAL facilities:

- 40% of all ICU patient days where at least one of the following documented in Distance Walked flow sheet row:
  - At least two documentations of ’1-20 feet’ ambulation greater than four hours apart

Exclusions:
- ICU days where less than 12 hours was spent in the ICU (i.e. admitted after/discharged before noon)
- Patient has a Pre-Admission Level of Function of Level I (bedbound) or Level II (can sit in chair only) two weeks prior to admission

REQUIRED START-UP RESOURCES

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REQUIRED START-UP RESOURCES

- Nurse champions need time out of the count to
  - Provide education prior to implementation
  - Attend Implementation Workgroup meeting

- MD Champion
  - Scheduled and given time to attend Implementation Workgroup meeting

- All Implementation Workgroup members (Nurses, MD, PT, PCT, RT) need to be given paid time to attend bi-weekly meetings

- Implementation Workgroup facilitator

- Regional Support

- PCTs assigned 12 hours per day to ICU (2 x 3 hours days & pms)

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ROLE OF NURSE CHAMPION

- Prior to implementation
  - Attend bi-weekly Implementation Team Meeting
  - Educate staff on mobility protocol, ROM, functional assessment, and required documentation

- During implementation
  - Reinforce nursing education at the bedside
  - Assist with real-time data collection on shift

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IMPLEMENTATION TEAM

- Need to identify team that would plan and execute implementation

- MD Champion (Intensivist)

- ICU Staff Nurse Champion (one each from FRE and HAY)

- Nurse Leader (Assistant Manager, CNS/Educator, or Manager)

- Physical Therapy Manager or lead

- PCT Manager and a PCT

- Respiratory Therapist

- Other

- Team would meet every 1-2 weeks between initiation and implementation

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NEEDED RESOURCES: TIME

- Implementation Team Members – time to attend meetings and do follow-up work
- RN Champions – time to do PDSAs, time to educate staff
- MD Champions – time to educate other MDs on protocol
- PT – time to assist with nursing education
- Training time to learn about protocol
  - ICU RNs
  - Respiratory Therapists: must be present during mobilization of vented patients
  - Physical Therapists: may be needed to assist
  - PCTs: mobilization times need coordination

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NEEDED RESOURCES: EQUIPMENT

- All new workplace safety equipment in San Leandro
  - All ICU beds have new overbed lifts
  - Identify any additional equipment needed, e.g., Liko Lift slings and reposition sheets
  - Staff needed to be educated on new equipment
  - Contracted with outside vendor to launder slings

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MOBILITY PROCESS

Nurse Knowledge: Handoff (Mobility)
Multidisciplinary Rounds
Coordination with PT and Lift Team
Mobility re-evaluation on the next shift

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ICU INTEGRATED QUALITY MEASURES
AUDIT TOOL

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NEW “LAWRENCE REPORT”
SENT DAILY – THE VALIDATION PROCESS

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MOBILITY STARTS IN THE ICU
ALL KAISER CENTERS WORKING ON MOBILITY BUNDLE:
SAN LEANDRO ON TRACK TO ACHIEVE 40% TARGET

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ICU METRICS — DOES MOBILITY IMPACT DELIRIUM?

CAM-ICU Outcome and Process Measures: Percent of ICU intervals (7am-2:59pm and 3pm-11pm) during which a CAM-ICU assessment was completed.

CAM-ICU Delirium Detection Rate: Frequency distribution of CAM-ICU results, counting one result for each opportunity interval (7am-2:59pm and 3pm-11pm).

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ICU ADC VS ALOS — NO REAL CHANGE

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MOVING TO THE MED/SURG FLOORS — MULTIPLE ELEMENTS

Patient Care Technicians (PCTs): Education, Empowerment, use of “My List” in Health Connect, Hand off Process

Audits / Technology: ANM created “HAP (Hospital Acquired Pneumonia) Shared List” in electronic documentation & performs Mobility Audits on shared drive

Team Communication: Lightening Rounds: Nursing, Patient Care Coordinators, Physical Therapy, MSW, MD

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SAN LEANDRO MED SURG

- Two Units:
  - 4th floor Med/Surg: 48 bed unit—focus of presentation
  - 5th floor Med/Surg/Tele/Oncology: 48 beds

MED/SURG MOBILITY METRICS

Definitions: 60% of non-ICU patient days where the following is documented in the Distance Walked flow sheet row:

Two or more walks of more than 21 feet if >16 hours on the unit

Exclusions: Patient is discharged before noon, has a pre-admission level of I or II

CHALLENGES TO AMBULATING
OUR JOURNEY

• Initial Mobility scores very low
• Drilled down to identify opportunities
• Needed to understand the purpose and how data was collected
• Nurses needed to understand how mobility related to HAP (Hospital Acquired Pneumonia) and delirium prevention
• Documentation was a key element to reflect the work we were doing
• Patient Care Technicians (PCTs) initially had little understanding of their role and how technology could help them streamline their workflow
• ANMs/ NMs took an active role in education and oversight to identify eligible patients and ensure compliance with ambulation goals and documentation
• Ambulation metrics and progress were shared with staff and successes were celebrated

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UBT/MOBILITY FOCUS

For every patient

Mobility

Patient Care Technician

Educated PCTs how to utilize “Level of Function” to prioritize mobility

ANMs/NMs screened for eligible patients

Validation through audits and daily Lawrence Report

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PCT HANDOFF TOOL: UBT PROJECT #1

STARTED 10/15/2013

How we did it?

• Test of change = PCT Hand off tool (PCT Worksheet)

The tool helps the PCTs to identify their patient’s safety by getting the hand off report from the primary RN. PCTs utilize the mobility tool (PCT Worksheet) to identify patient’s eligible to ambulate and be able to completely document the information in the HCC without passing or leaving the flow sheet block. Also, the hand off tool consist of other initiatives (infection control, diet) for the PCTs to function effectively as a care giver in the prevention of complications.

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Challenges to Ambulation:
- PCT’s did not consistently document in electronic medical record (KPHC) the distance walked by their patients.
- PCTs and Nurses had to guess how far their patients walked (San Leandro).
- Med Surg unit does not have mobility markers to accurately measure distance walked.

What we Did:
- The team initiated another project to define the correct distance markers around the Med Surg unit.
- The team utilized the distance wheel marker and posted the 30 feet decals in each 30 feet location.
- Education and follow up to all the PCT’s were provided with the emphasis of MOBILITY using the distance markers.
NM/ANM SHARED LIST: IDENTIFIES LEVEL OF FUNCTION

PCT DOCUMENTATION – UBT PROJECT #3

Challenges to Ambulation:
- PCT’s did not consistently document in electronic medical record (KPHC) the distance walked by their patients
- All PCT’s were given HC access and HAP patients were “wrenched into” their patient lists
- Using the PCT worksheet and “My Patient List”, PCT received report from bedside RN regarding patients who needed ambulation
- PCT’s were taught to document distance walked in the Mobility Flow sheet

What We Did:
- All PCTs were given HC access and HAP patients were “wrenched into” their patient lists
- Using the PCT worksheet and “My Patient List”, PCT received report from bedside RN regarding patients who needed ambulation
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PCT “MY LIST” IN KPHC

PCTs use this list to identify patients who are eligible to ambulate, based on criteria of Level III, IV and V

Assistance is prioritized to those less independent

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PCT ACTIVITY/MOBILITY FLOWSHEET:
PCTS DOCUMENT DISTANCE WALKED

INITIAL MOBILITY AUDIT ON SHARED DRIVE REPLACED BY “LAWRENCE REPORT”

ANMs complete mobility audit twice a day
- Night shift populates the patient name and MRN
- Day shift audits for compliance
- PM shift audits for second ambulation

LAWRENCE REPORT 4TH FLOOR
(PHI REMOVED)
LEARNINGS AND SUCCESSES

Challenges to Mobility:
* PCT’s need an effective and clear hand off from the RN in order to successfully mobilize their patients due to the appropriate contraindications (MD order, Hemodynamic instability and others).
* PCT’s need to collaborate with RNs to document the mobility
* PCT’s need education in how to in explain the purpose and benefits of mobility

Successful Outcomes:
* PCT’s are knowledgeable with their professional contributions in the prevention of infection
* PCT’s and RN’s relationship have been improved
* PCT’s contributions in care experience have been noticeable
* The current HAP mobility score card is moving up to surpass the regional target

LIGHTENING ROUNDS

• During lightening rounds, the Nurse Leader speaks to the nursing staff regarding patients who should be ambulated each shift, based on the level of functioning

• Created a Lightening Rounds smart phrase and Handoff Tool

LIGHTENING ROUNDS HANDOFF TOOL
PT/PCC: IT TAKES A VILLAGE

Physical Therapist
- Actively participates
- Communication with Nurses
- Before and after every PT session
- Documentation of recommendations for Nursing follow-up
- Opportunity:
  - PT to document mobility on the HAP flow sheet

Patient Care Coordinator
- Initial assessment helps to determine patient’s baseline and prior level of functioning
- During Multidisciplinary Rounds, PCC focuses on mobility as one aspect of a safe discharge plan
- PCC involvement helps to preplan for DME upon discharge

MD Involvement
- To prevent complications, Surgeons are now ordering mobility > 4 x day!
- Mobility component is an important aspect of non-pharmacological intervention

SAN LEANDRO MOBILITY
OCTOBER 2012 - OCT 2014

Almost to the target of 60% for all of Med/Surg to ambulate twice daily > 20 feet (unless bed bound or chair bound two weeks prior to admission)

Fully at target for the 4th floor Med/Surg Unit: 68.5% for November 2014

DAILY MOBILITY AUDIT FROM LAWRENCE REPORT

4th Floor MS Mobility Data from November 2014
Lawrence report

<table>
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<th>Pre-Admission Level</th>
<th>Pre Adm Mobility (level III, IV, V)</th>
<th>Pre Adm Level Percentage (III, IV, V)</th>
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We were excited to see the data reflecting the changes in our mobility efforts, and we began to realize the impact of our patient mobility program, when we started hearing feedback during our leader rounding. We were changing lives; one particular story resonated with our ANM, Rosalie.

There was a patient on our unit who had several complicated readmissions, the family was scared and frustrated as their mother/wife had been intubated for the 3rd time. Due to all the circumstances around the re-admissions and the seriousness of the patients health condition, they were a little intimidating to round on due to their lack of trust and dissatisfaction.

Rosalie recalls that this day was different because patient’s husband was smiling. When she asked how things were going he said “Great”, as he looked at his wife sitting up in the chair. Rosalie asked, “What made it Great?”

He went on to say “Because it’s been years since I saw my wife without oxygen and only 3 days from her admission she would be going home” (patient was intubated in CCU upon admission).

Patients husband shared that despite his wife being intubated in CCU that the mobility program was getting her up into the chair every day. He said that this is what was making the difference, and appreciated the consistency on the floor - even moving past getting into the chair to walking short distances...WITHOUT OXYGEN! At this point there were tears in his eyes...this story connected purpose to practice, our mobility program was working!!

Get Up And Go
Early Mobility for Respiratory and Ventilator Patients

Vickie B. Ancheta RN BSN HACP
Nurse Manager DOU2 PVHMC
Peggy Cusack RN BSN HACP
Director Critical Care Services
Nora Catipon RN NP
Diego Gavela PT

“When God created Angels they came to earth and became Nurses”
Quote from patient husband.
WHO WE ARE

Location: Pomona, California
456 Bed Community Not For Profit Hospital

“GET UP AND GO” MOBILITY
BACKGROUND

• Majority of DOU2 patients are from ICU.
• Neuromuscular weakness, due to prolonged bed rest in the ICU’s is common problem

Baby steps” One Patient at A Time” became our Motto

• Studies have demonstrated that early mobility even in Critical Care settings is safe, feasible, best practice and help reduced hospital acquired conditions

Methods

- Collaborative meetings with Respiratory, PT and DOU2
  - Nurse Practitioner became our champion.
- Evidenced Based Best practices were researched and presented to our team.
- Night shift gave 50% of the baths on their shift.
- Developed our Weaning Protocol and Mobility Assessment Tool. Mobility tools were laminated and posted on each patient’s bedside and provided education to the clinicians.
- Communication and transparency

Work with what we have
PATH TO RECOVERY

- **Clinical Activities**
  - **Day 1**
    - Initial Assessments
      - Team Huddle to improve nutrition, mobility, strength, identify current needs, and prevent complications.
      - Discharge planning
  - **Day 2**
    - Assess weaning progress and developed specific respiratory plan of care. P.T. partnering with nursing regarding mobility

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**DOU2 AVERAGE VENT DAYS**

17% improved VENT LOS

- CMI:
  - 2011: 4.2
  - 2012: 4.5
  - 2013: 4.4
  - 2014: 4.3

- VENT DAYS:
  - 2011: 945
  - 2012: 1032
  - 2013: 1077
  - 2014: 1077

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**DOU2 PATIENT**

- **FALLS**
  - Zero for 1 year 2011 - 2012
  - 1.2 Rate Per 1000 Patient days 2013 - 2014
- **HAPU’s**
  - Zero for 12 quarters (3 Years CALNOC)
- **VAP RATES**
  - 2013: <0.08 RATE / 1000 VENT DAYS
  - 2014: 0.00 RATE / 1000 VENT DAYS
- **WEANING OFF VENTILATOR**
  - 2013: *13.5% OFF VENT.
    - Weaned 18 patients off Vent.
    - Decannulated 4 Patients
  - 2014: *12% YTD OFF VENT.
    - Weaned 14 patients off Vent.
    - Decannulated 3 Patients
- **HCAPS SCORE**
  - Meeting the Goal
    - > 3.75%

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**Extended the Mobility Program in the ICU**

<table>
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<th>Year</th>
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<td>164</td>
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<tr>
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Mortality Rate for Ventilator Patients

- Predicted Mortality Rate
- Actual Mortality Rate

Weaned off the vent. Ambulating with PT.

PHYSICAL ACTIVITY FOR DOU2 PATIENTS RESPIRATORY VENTILATOR/TRACH PATIENTS

**Check with nursing for parameters.
**Requires initial Physical Therapy assessment.

PHYSICAL ACTIVITY FOR DOU2 PATIENTS RESPIRATORY VENTILATOR/TRACH PATIENTS

- Bed Rest
- Trigger PT
- Dangling at edge of bed
- Standing
- Ambulation with assistive device

**Begin standing at edge of bed**
**Begin standing**
**Begin ambulation with assistive device**

If *vitals are stable

- Place bed in "chair" position
- Begin PROM
- May be performed by Nursing
- Ambulate with appropriate respiratory support

Performed by Nursing or PT or RAP

Room/Bed________________________
SUMMARY

- VENTILATOR PATIENTS
  - Continue to high volume of ventilator
    - Patients 161 – 2014
  - CMI 4.4
- WEANED OFF VENTILATOR
  - 2013-2014
    - 12% - 13% WEANED
- AVE. VENTILATOR DAYS
  - 6.26

- TEAM BUILDING
  - Respiratory
  - Physical Therapy
  - Nursing
  - Physician
- CALNOC STUDIES
  - 2012-2014 YTD
  - ZERO HAPU’S
- HACPS
  - > 3.75 2014 😊

Wrap Up of Today’s Webinar

- Final Questions
- Evaluation
- Access to webinar recording

Thank You for Participating!