 **CHRISTIANA CARE
HEALTH SYSTEM**

**Skin Integrity PI for
Cardiovascular/Critical Care**

**Christiana Care Health System
NDNQI 2010 Conference
Rhythms in Quality
January, 2010**

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Christiana Care Health System



 **CHRISTIANA CARE
HEALTH SYSTEM**

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Plan

Opportunity for Improvement

- To reduce Hospital Acquired Pressure Ulcers for Cardiovascular/Critical Care Patient Care Services

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Plan

Team Members


- **Joanne Bramble, RN - Administrative Associate, Nursing PI, Team Facilitator**
- **Beth Donovan, RN - Wound Ostomy Nurse**
- **Thea Eckman, RN - Staff Development Specialist/CVICU/2E Stepdown**
- **Emily Irish, RN - Staff Nurse, MICU**
- **Kathy Johnson, RN - Nurse Manager, MICU**
- **Sara Laws, RN - Staff Nurse, CVICU**
- **Jacki Lowe, RN - Staff Nurse, CICU**
- **Joanne Matukaitis, RN - Director, Patient Care Services, Team Leader**
- **Mitch Saltzberg, MD - Medical Director, Heart Failure Program**
- **Maureen Seckel, APN - Pulmonary Critical Care**
- **Donna Shanosk, RN - Nurse Manager, 3D**
- **Mary Shapero, RD - Food and Nutrition Services**
- **Rachel Zahn, RN - Staff Nurse, CICU**
- **Marc Zubrow, MD - Director of Critical Care Medicine**

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Plan

Background/Current Knowledge


- **Hospital acquired pressure ulcers**
 - Leads to 60,000 deaths annually
 - Are responsible for up to \$11 billion in added treatment costs
 - Can add between \$400,000-\$700,000 to the average hospital's cost
 - Range from stage 1 ulcers, which can appear reddened, like a bruise, and cost \$2,000 or more to treat, to stage 4 ulcers, which are the most severe, can cause extensive deep tissue damage, and may cost up to \$70,000 to treat.
 - Will result in denial of payment by Medicare starting October 2008
 - The Institute for Healthcare Improvement (IHI) has set a goal of zero tolerance for Hospital Acquired Pressure Ulcers as part of the 5 Million Lives Campaign


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Plan

Background/Current Knowledge

- **What do we know?**
 - Risk is predictable – age, immobility, incontinence, poor nutrition, sensory issues, dehydration
 - Skin integrity can change within hours
 - Wet skin is more vulnerable
 - Continual pressure, especially over bony prominences, increases risk
 - Pressure-relieving surfaces and repositioning do make a difference.

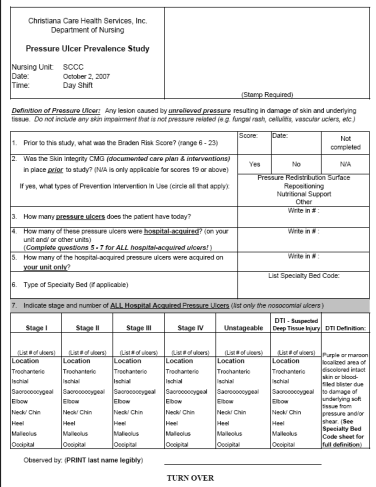


Full Thickness Wound


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Plan

Current Practice



Pressure Ulcer Prevalence Study

Christiana Care Health Services, Inc.
Department of Nursing

Nursing Unit: SCCC
Date: October 2, 2007
Time: Day Shift

(Stamp Required)

Definition of Pressure Ulcer: Any lesion caused by prolonged pressure resulting in damage of skin and underlying tissue. (Do not include any skin impairment that is not pressure related (e.g. surgical marks, cellulitis, vascular ulcers, etc.)

1. Prior to this study, what was the Braden Risk Score? (range 6 - 23)

2. Was the Skin Integrity CMG (documented care plan & interventions) in place prior to study? (tick in only applicable for scores 19 or above)

3. How many pressure ulcers does the patient have today?

4. How many of these pressure ulcers were hospital-acquired? (on your unit and/or other units) (Complete questions 5-7 for ALL hospital-acquired ulcers!)

5. How many of the hospital-acquired pressure ulcers were acquired on your unit only?

6. Type of Specialty Bed (if applicable)

7. Indicate stage and number of ALL Hospital Acquired Pressure Ulcers (not only the nosocomial ulcers)


Stage I	Stage II	Stage III	Stage IV	Unstageable	DTI - Suspected	DTI - Documented
Location	Location	Location	Location	Location	Location	Location
Trochanteric	Trochanteric	Trochanteric	Trochanteric	Trochanteric	Trochanteric	Trochanteric
Ischial	Ischial	Ischial	Ischial	Ischial	Ischial	Ischial
Sacrococcygeal	Sacrococcygeal	Sacrococcygeal	Sacrococcygeal	Sacrococcygeal	Sacrococcygeal	Sacrococcygeal
Elbow	Elbow	Elbow	Elbow	Elbow	Elbow	Elbow
Heel/ Chin	Heel/ Chin	Heel/ Chin	Heel/ Chin	Heel/ Chin	Heel/ Chin	Heel/ Chin
Heel	Heel	Heel	Heel	Heel	Heel	Heel
Malleolus	Malleolus	Malleolus	Malleolus	Malleolus	Malleolus	Malleolus
Occipital	Occipital	Occipital	Occipital	Occipital	Occipital	Occipital

Observed by: (PRINT last name legibly)

TURN OVER

■ Sample Pressure Ulcer Data Collection Tool

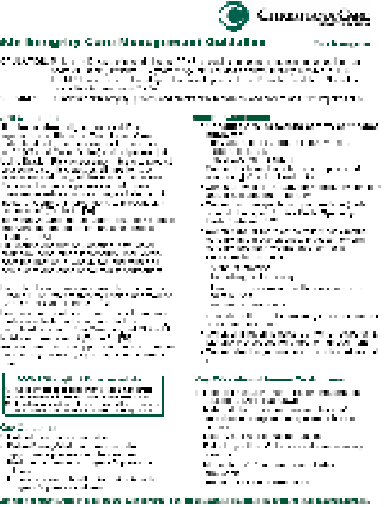
- Collected monthly



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Plan

Current Practice



SKIN INTEGRITY CARE MANAGEMENT GUIDELINE

1.0 PURPOSE AND SCOPE

1.1 PURPOSE

1.2 SCOPE

2.0 DEFINITIONS

2.1 SKIN INTEGRITY

2.2 SKIN INTEGRITY CARE MANAGEMENT

3.0 ASSESSMENT

3.1 INITIAL ASSESSMENT

3.2 ONGOING ASSESSMENT

4.0 INTERVENTIONS

4.1 GENERAL INTERVENTIONS

4.2 SPECIFIC INTERVENTIONS

5.0 EVALUATION

5.1 EVALUATION OF SKIN INTEGRITY

5.2 EVALUATION OF SKIN INTEGRITY CARE MANAGEMENT

6.0 REFERENCES

6.1 REFERENCES

7.0 APPENDICES

7.1 APPENDIX A: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.2 APPENDIX B: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.3 APPENDIX C: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.4 APPENDIX D: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.5 APPENDIX E: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.6 APPENDIX F: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.7 APPENDIX G: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.8 APPENDIX H: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.9 APPENDIX I: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.10 APPENDIX J: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.11 APPENDIX K: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.12 APPENDIX L: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.13 APPENDIX M: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.14 APPENDIX N: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.15 APPENDIX O: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.16 APPENDIX P: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.17 APPENDIX Q: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.18 APPENDIX R: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.19 APPENDIX S: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.20 APPENDIX T: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.21 APPENDIX U: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.22 APPENDIX V: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.23 APPENDIX W: SKIN INTEGRITY CARE MANAGEMENT TOOL


7.24 APPENDIX X: SKIN INTEGRITY CARE MANAGEMENT TOOL

7.25 APPENDIX Y: SKIN INTEGRITY CARE MANAGEMENT TOOL


7.26 APPENDIX Z: SKIN INTEGRITY CARE MANAGEMENT TOOL


■ Skin Integrity Care Management Guideline (CMG)

- Available on CCHS portals




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Plan	Measurable Goal/ Key Outcomes
<ul style="list-style-type: none">■ Unit Acquired Pressure Ulcers will be reduced by a minimum of 50% with ultimate goal of "Zero" Tolerance■ Adopt IHI goal of "Never Event" for Unit Acquired Pressure Ulcers■ Improve assessment skills and pressure ulcer identification■ Improve compliance with appropriate interventions	
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	Units
<ul style="list-style-type: none">■ Cardiovascular Intensive Care Unit (CVICU)■ Coronary Intensive Care Unit (CICU)■ Medical Intensive Care Unit (MICU)■ Pulmonary Stepdown/Vent Weaning Unit (3DSD)	
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Barriers – Fear of Change!




- **“We have always done it this way”**
- **“There is nothing wrong with the way we are doing it”**
- **“If the system is not broken don’t fix it”**

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Barriers

- **Lack of Support**
 - Leadership involvement
 - “It is not my problem”
- **Knowledge**
 - Nurses on the floor are aware of their patient population
 - Nurses on the floor know what has worked in the past

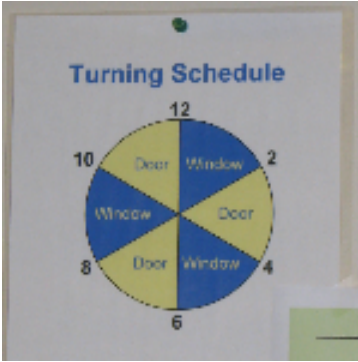
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Do **Action Plan: Solutions Implemented**


- **Team formed 9/07 and implemented the following interventions over several months:**
 1. Turning Schedule Clock
 2. Staff education using online modules, lectures, and one on one mentoring focusing on "Zero" tolerance
 3. Piloted Bowel Management System
 4. Updated For Your Information (FYI) Sheets
 5. Identified Unit based skin champions
 6. Routine WOC rounding on units and with skin champions
 7. Assessment strategies for wedge positioning devices, along with increased availability on each unit
 8. Reformatted Skin Integrity CMG by risk category (in process)
 9. E-mail from Team leader to all staff with goals

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Do **Action Plan/Solutions Implemented**



Sample Turning Schedule Clock posted in patient room



Sample Wedge Positioning Device



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Do

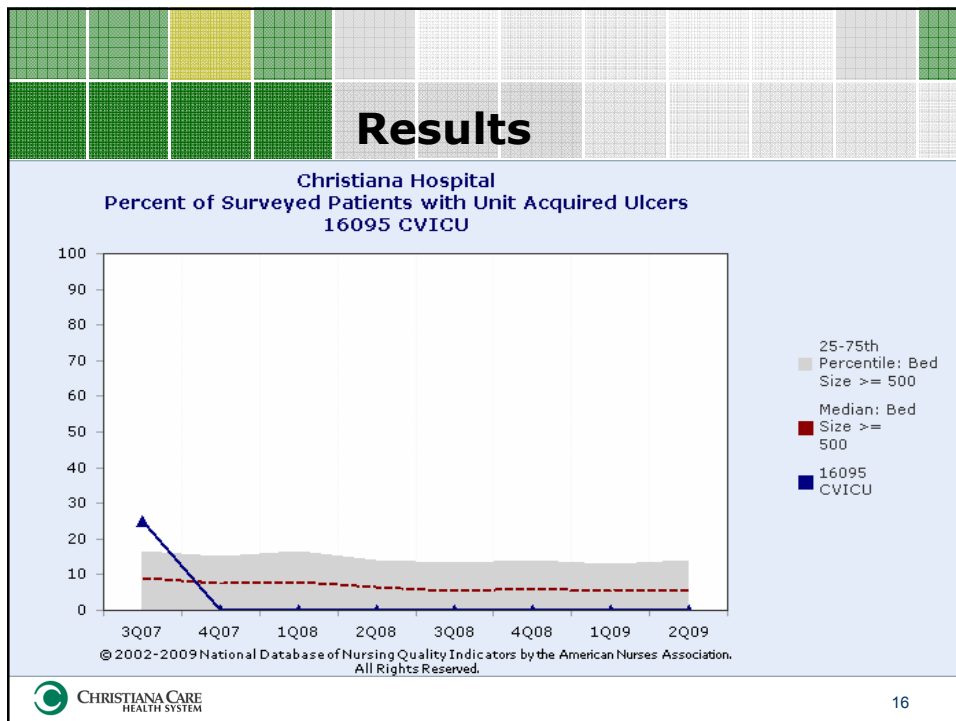
NO "Butts" About It!

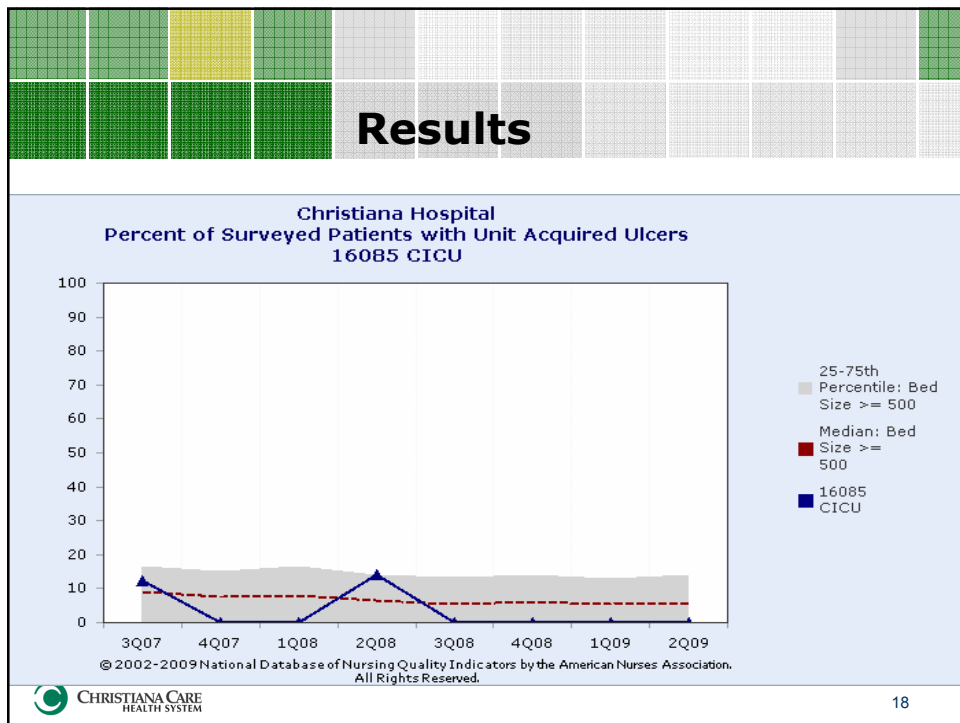
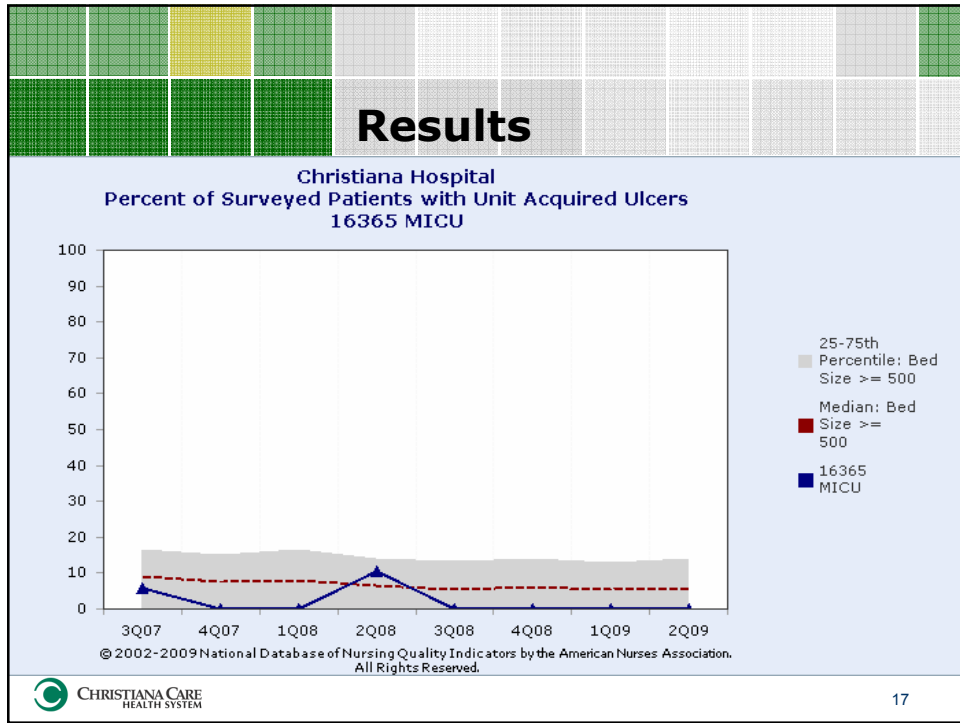
We are on a mission to eliminate HAPU in Critical Care Services

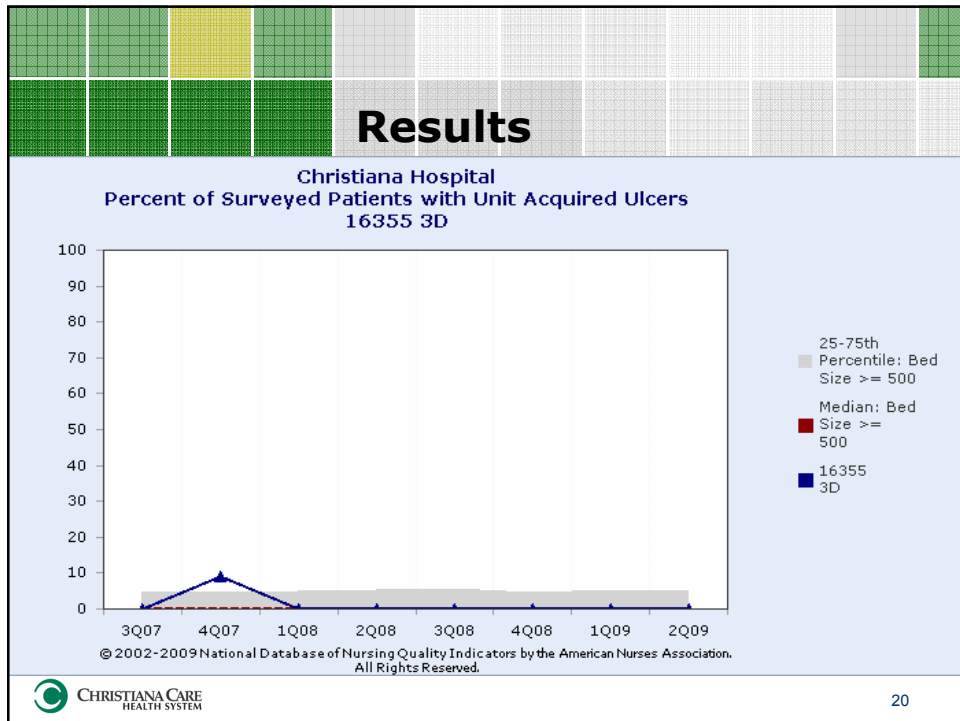
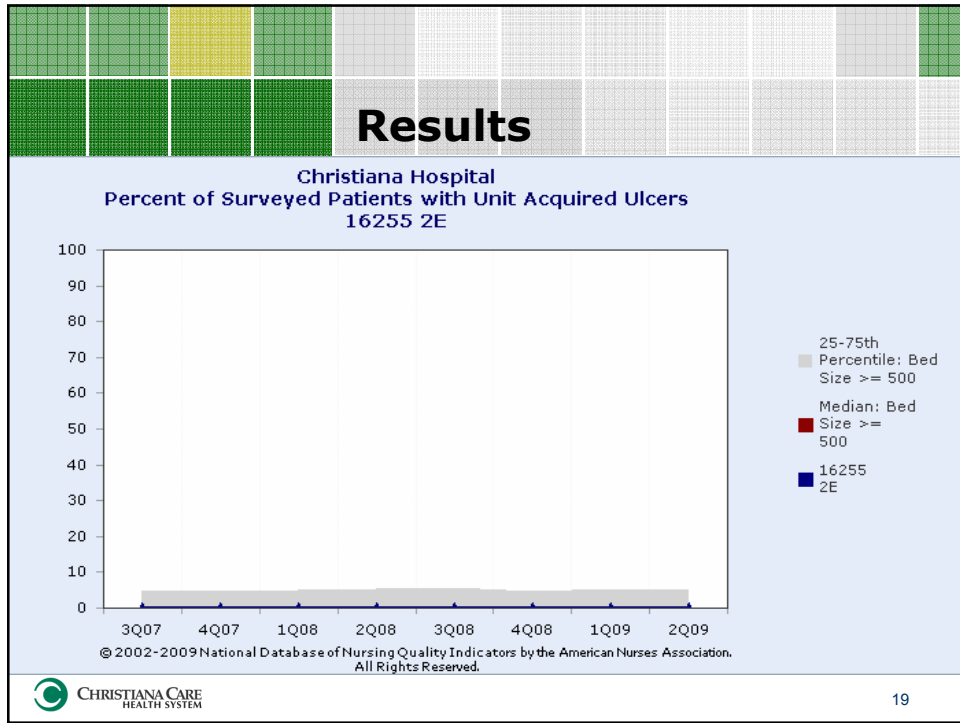
- **May 1, 2008** we will start a concentrated effort to eliminate HAPU at CCHS.
- Each unit will **post a daily total** of HUPA that have been identified on their unit.
- Each month that there are ZERO "unit identified HAPUs" - **pizza parties** will be provided for each shift.
- For 100 consecutive days a **trophy** will be awarded to that unit.

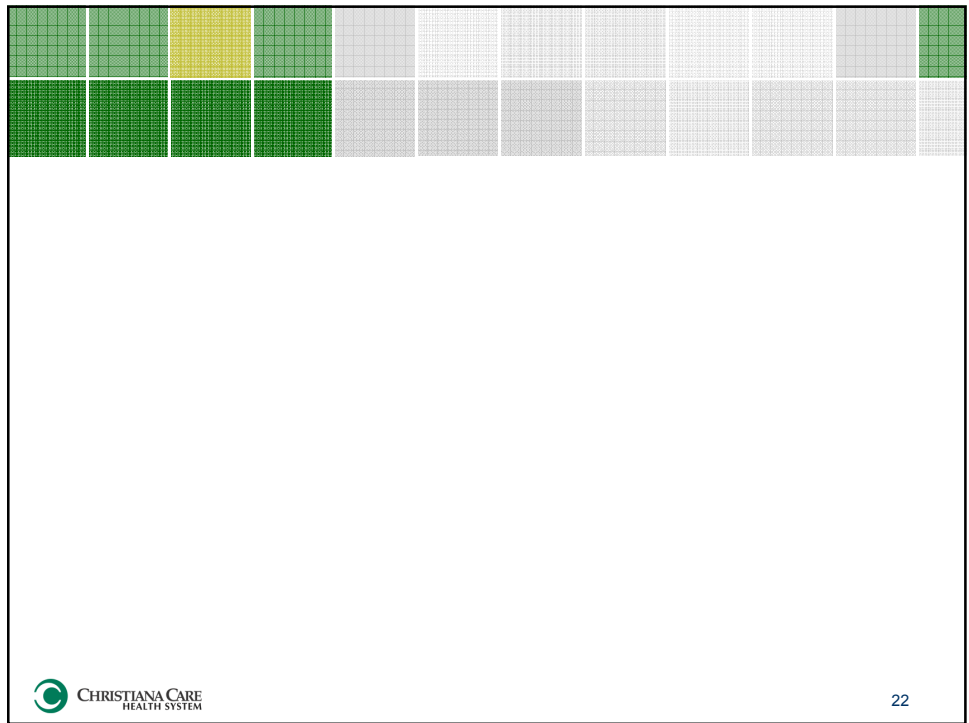
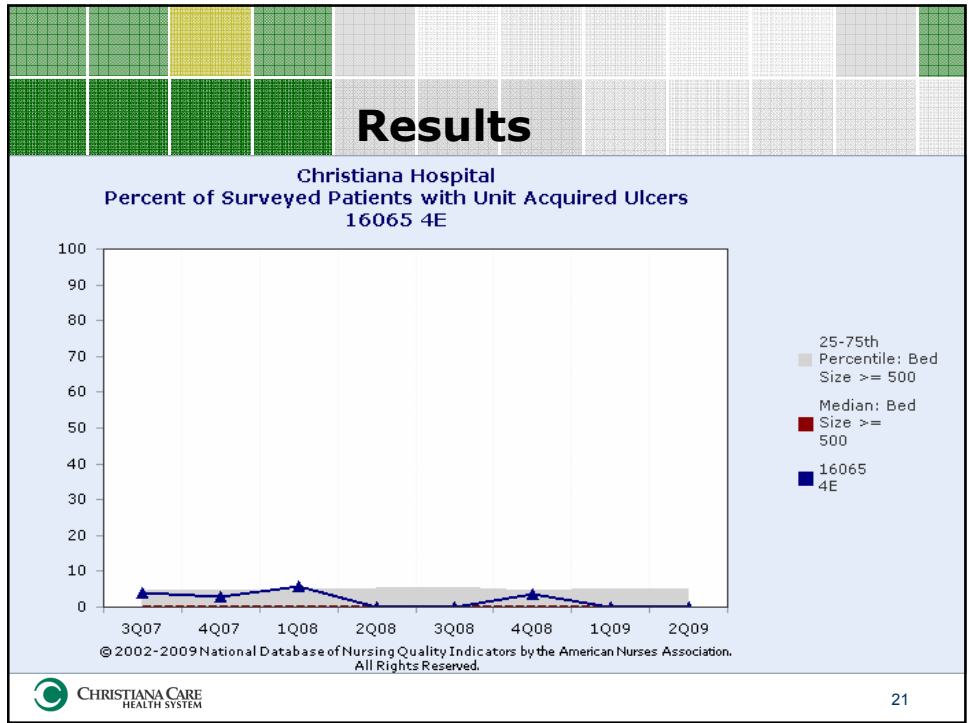



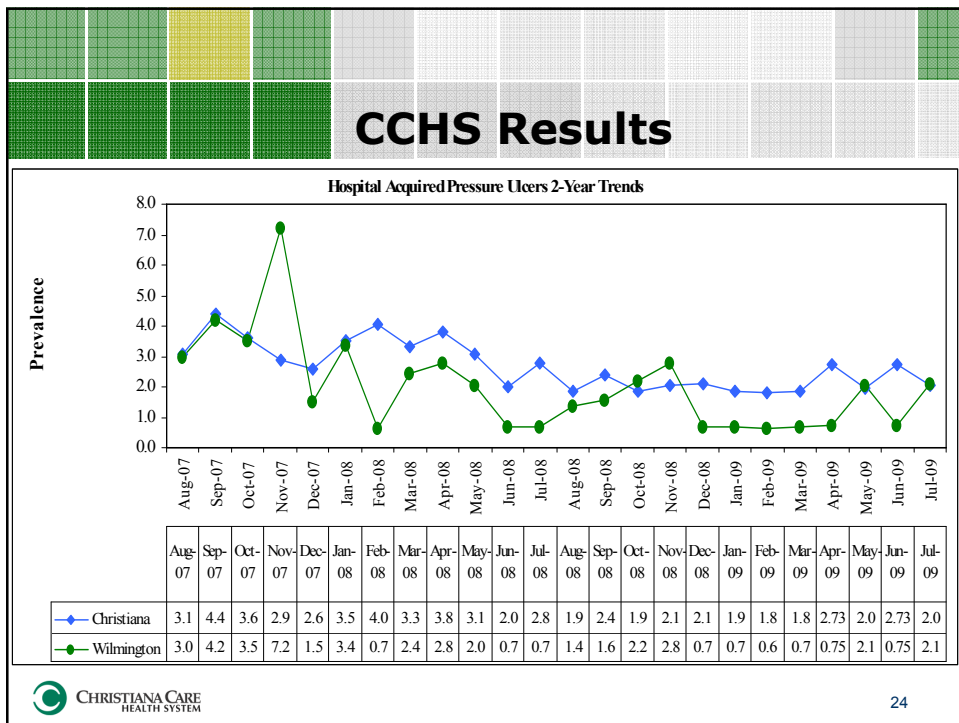
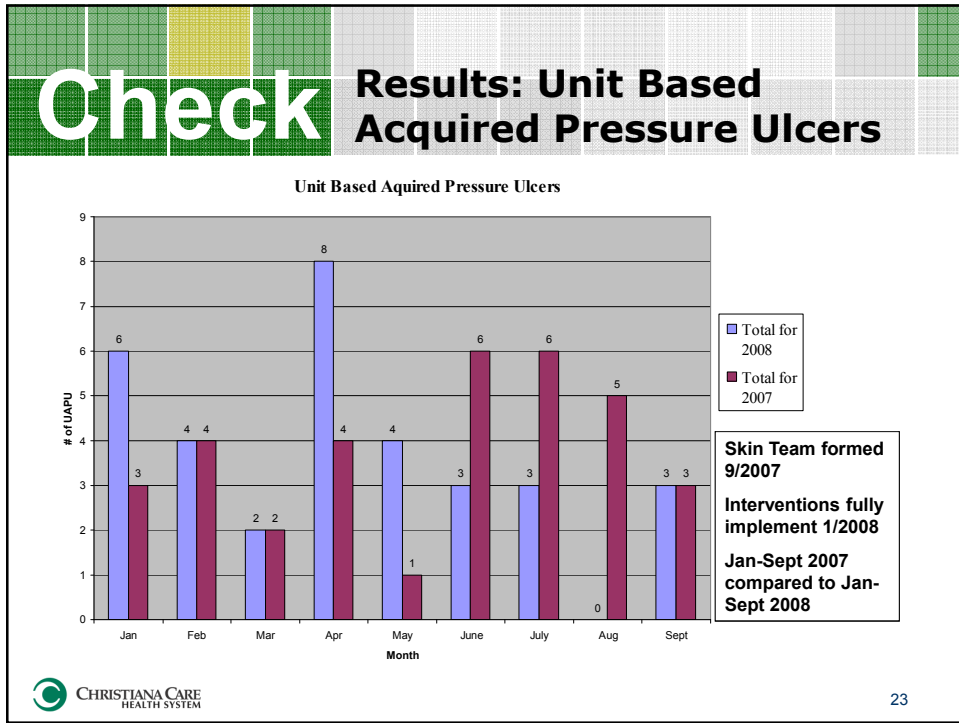
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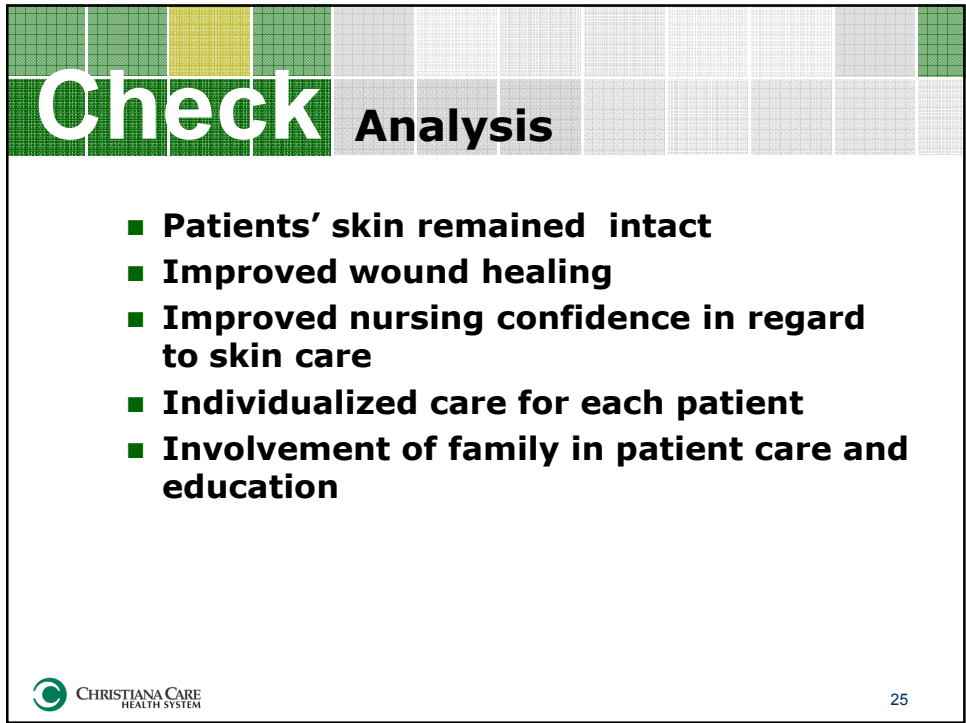









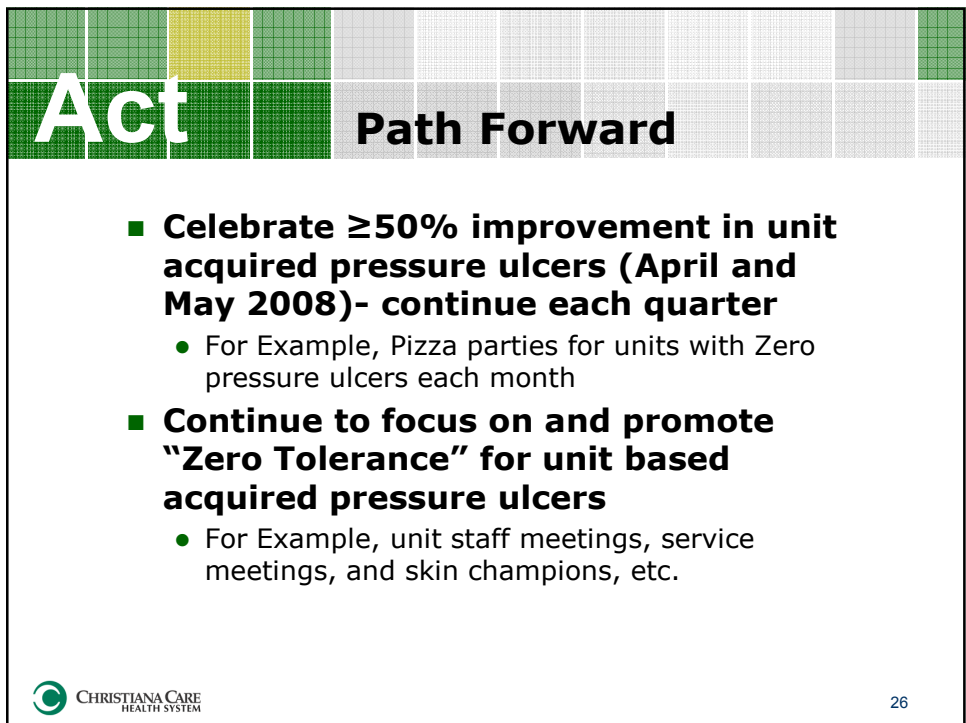




Check Analysis


- **Patients' skin remained intact**
- **Improved wound healing**
- **Improved nursing confidence in regard to skin care**
- **Individualized care for each patient**
- **Involvement of family in patient care and education**

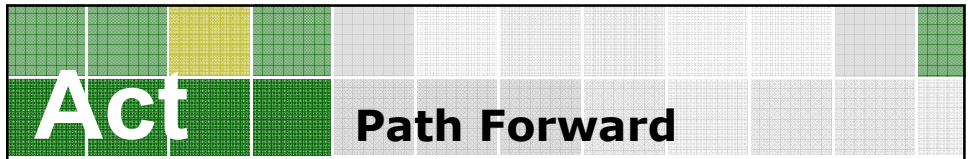
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Act Path Forward

- **Celebrate $\geq 50\%$ improvement in unit acquired pressure ulcers (April and May 2008)- continue each quarter**
 - For Example, Pizza parties for units with Zero pressure ulcers each month
- **Continue to focus on and promote "Zero Tolerance" for unit based acquired pressure ulcers**
 - For Example, unit staff meetings, service meetings, and skin champions, etc.


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Act

Path Forward

- **Review patient charts for opportunities in units with <50% improvement monthly**
- **Continue with identified interventions and skin monitoring in each unit**
- **Continue to meet monthly to review data and opportunities including path forward**



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Act

Lessons Learned

- There is great variation:
 - **Identification of skin impairment**
 - **Documentation**
 - **Prevention**
 - **Treatment**
- Care plans need to be individualized for each patient
- Skin prevention is an ongoing team effort with multiple challenges



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Act	Goal
<ul style="list-style-type: none">■ We believe that all patients deserve best practice.■ Best practice is Zero Hospital/Unit Acquired Pressure Ulcers <p><i>Think of Yourself as a Patient</i></p> 	

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<p>QUESTIONS?</p> <p>Contact Information:</p> <p>jmatukaitis@christianacare.org</p>	

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