INTRODUCTION
Pressure ulcers have been in existence for centuries and remain a major health care problem today. Approximately 2 million Americans suffer from pressure ulcers (Brody, 1986; Staas & Gioschi, 1991). It is estimated that persons over the age of 65 have a 60-90% chance of pressure ulcer development (Cooper, 1991). Home care nurses spend 50-75% of their time on wound care (Harding, 1995). It is estimated that the total national cost of pressure ulcer treatments exceeds 1.335 billion dollars. (AHCPR, 1995). The cost of wound care is alarming considering that most pressure ulcers can be prevented (Kresevic & Naylor, 1995). Prevention is the treatment of choice (Gosnell, 1987). A standardized comprehensive pressure ulcer prevention program is essential to effectively prevent the occurrence of pressure ulcers (Bryant, et al., 1992). The development of protocols for prevention, based on risk assessment, offers health care providers the ability to effectively decrease the incidence and prevalence of pressure ulcers.

Studies suggest that prevalence of pressure ulcer development in the home care setting ranges from 8.7-20%, while incidence is estimated to be between 17% and 29% (AHCPR, 1992 & Ramundo, 1995). The importance of prevention should not be underestimated.

PROBLEM

• Pressure ulcers need to be prevented.

• Risk factors for development of pressure ulcers need to be identified by all health care professionals.

• Standardized protocols based on the risk assessment score need to be initiated.

SOLUTION

• Standardized approach to identify risk factors
  – Use of Braden Scale

• Standardized protocols based on:
  – WOCN Patient Care Standards (1992)

• Development of algorithms

• Combining risk assessment score with interventions
**SOLUTION: THE CARE CYCLE**

Initiate care cycle:
1. Admission to home health care agency
2. At recertification
3. If patient undergoes a change in health status

Complete the Braden Risk Assessment Tool

Are there existing pressure ulcers?

**Nurse evaluates risk factors**

**Wound Team Referral and initiate Level I, II and III Interventions (see below)**

**EDUCATE**

Education of patient and caregiver on AHCPR guidelines and prevention of pressure ulcers

1. Minimize pressure on heels
2. Implement turn schedule
3. Evaluate support surface

1. Evaluate seating
2. Position change schedule

Monitor risk factors for change

1. Age 65 or older

**INITIATE PROTOCOL**

**Bed-bound**

- Braden score of 12 or less
- High Risk

- Reassess
  - a) weekly
  - b) PRN

Implement Level I, II & III Interventions (see below)

**Chair-bound**

- Braden score of 13-14
- Moderate Risk

- Reassess
  - a) monthly
  - b) PRN

Implement Level I & II Interventions (see below)

**Age 65 or older**

- Braden score of 15-16
- Low Risk

- Reassess
  - a) Medicare recertification
  - b) PRN

Implement Level I Interventions (see below)

**LEVEL I INTERVENTIONS**

1. Educate the patient and caregiver on the AHCPR Guidelines
2. Evaluate support surface
3. Eliminate extrinsic risk factors

**LEVEL II INTERVENTIONS**

Develop a plan to address:
1. Poor nutrition
2. Poor mobility and activity level
3. Moisture control and incontinence
4. Friction and shear

**LEVEL III INTERVENTIONS**

1. Assess need for Physical Therapist, Occupational Therapist, Speech Therapist, Social Worker, Dietician, and Home Health Aid referral
2. Involve the Wound Team in the plan of care
3. Initiate an ET Nurse referral
SOLUTION: SUPPORT SURFACE SELECTION PROTOCOL

ASSESSMENT

Is ulcer at least 8 sq cm, located on trunk or pelvis? Tried comprehensive treatment plan without success for at least 30 days?

Has physician documented other medical conditions requiring treatment with CLINITRON® Air Fluidized Therapy?

Group 1, 2, or 3 support surface used for the past 30 days with no improvements?

CLINITRON® AT-HOME® Air Fluidized Therapy

Reevaluate plan of care including support surface

Is the ulcer healing?

Retain Current Surface

Braden score is 17 or above

No special surface is needed

Bedridden or chairbound?

Stage III and IV pressure ulcer?

Stage III and IV pressure ulcer?

Has physician documented other medical conditions requiring treatment with CLINITRON® Air Fluidized Therapy?

Group 1, 2, or 3 support surface used for the past 30 days with no improvements?

Group 2 or 3 surface used prior to discharge?

Bedridden or chairbound?

Stage III and IV pressure ulcer?

Stage III and IV pressure ulcer?

Has physician documented other medical conditions requiring treatment with CLINITRON® Air Fluidized Therapy?

Group 1, 2, or 3 support surface used for the past 30 days with no improvements?

Group 2 or 3 surface used prior to discharge?

Bedridden or chairbound?

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Group 2 or 3 surface used prior to discharge?

Bedridden or chairbound?

Stage III and IV pressure ulcer?
OUTCOME

• Decreased incidence and prevalence of pressure ulcers
• Implemented appropriate preventative interventions
• Appropriate utilization of specialty beds
• Increased compliance of nursing staff
• Increased autonomy and accountability of health care professionals

SUMMARY

Pressure ulcers can be prevented by using standardized protocols that guide nursing practice. Through early detection, appropriate support surface selection and a deliberate strategy of prevention based on risk potential, patient outcomes can be improved while costs are reduced.

Education is the essential element of an effective pressure ulcer prevention and treatment program. Today, more than ever, the nurse is in an excellent position to educate other health care providers, allied health care workers, patients and their families about the risks associated with pressure ulcers.

Treatment options need to be based on scientific research, regular risk assessment, and sound clinical judgment. Years of clinical experience and evaluations have revealed the following three items as essential in providing a cost-effective solution to the reduction of pressure ulcers: applying the Braden risk assessment tool; teaching the AHCPR Guidelines to the patient and caregiver; and utilizing the right mix of support surfaces as illustrated in the Support Surface Selection Protocol.

REFERENCES


