



# ABSOLUTE SCOOP

## DID YOU KNOW?

Medications can interfere with wound healing by affecting one or more phases of the healing process.

Medication adjustments may be possible to help improve outcomes.

## PRESSURE ULCERS AND THE IMPACT OF MEDICATIONS ON HEALING

Written by Kate Marcum, Consultant Pharmacist, PharmD, BCGP, BCMTMS

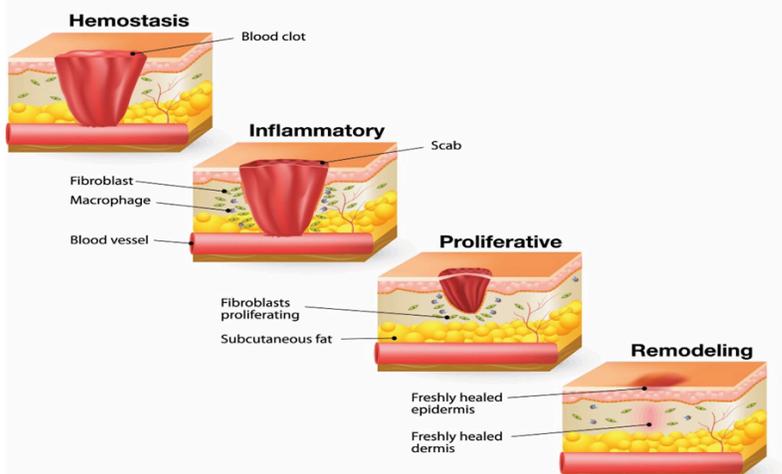
Pressure ulcers are a major indicator of patient outcomes in skilled nursing facilities and are strongly associated with increased hospitalization rates and mortality. Their presence increases complexity of care and staff workload. Furthermore, pressure ulcers remain a significant Quality Measure (QM) and therefore can directly impact a facility's Five-Star Quality Rating. Poor performance may lead to financial penalties and reduced Medicare reimbursement. CMS tracks both new pressure ulcers and worsening of existing ulcers.

Risk factors for developing pressure ulcers include immobility, frailty, poor nutrition, and dehydration. While mechanical and nutritional factors are well known, medications can also interfere with healing by affecting one or more phases of the healing process. Recognizing and minimizing the effects of medications on wound healing is essential for optimizing care and improving outcomes.

### Prevention and Best Practices

- Perform regular skin assessments
- Reposition residents frequently to relieve pressure
- Maintain clean, dry skin and proper nutrition/hydration
- Use pressure-relieving surfaces
- Document accurately and comprehensively on the MDS

## WOUND HEALING



### Phase 1: Hemostasis/Coagulation (1-2 days):

*Vasoconstriction, platelet aggregation, clot formation*

#### Medications/Supplements that may inhibit this phase:

- Vasodilators: Nitroglycerin, Hydralazine, Saw Palmetto, Flaxseed
- Platelet inhibitors: NSAIDs, Clopidogrel, Aspirin
- Anticoagulants: Warfarin, Apixaban, Rivaroxaban

### Phase 2: Inflammatory (up to 1 week): *Inflammatory cells remove damaged tissue; painful*

#### Medications that may inhibit this phase:

- NSAIDs: Ibuprofen, Meloxicam (higher risk with long-term use)  
*Tip: Consider acetaminophen as an alternative*
- Aspirin
- Nicotine
- Colchicine
- Corticosteroids
- Androgens
- Retinoids

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## Phase 3: Proliferative (day 7-30): Epithelialization and collagen synthesis

### Medications that may inhibit this phase:

- Calcium Channel Blockers: Nifedipine, Verapamil, Diltiazem  
*Tip: Vitamin C supplements may help offset the effects of Calcium Channel Blockers*
- Chemotherapy/Antineoplastic agents: Hydroxyurea, Capecitabine
- Immunosuppressants: Methotrexate, Hydroxychloroquine, Sulfasalazine, Adalimumab
- Anti-rejection drugs: Azathioprine, Mycophenolate, Cyclosporine
- Retinoids
- Corticosteroids

## Phase 4: Remodeling (day 21-1 year): Collagen turnover, scar tissue formation

### Medications that may inhibit this phase:

- ACE Inhibitors: Lisinopril, Enalapril  
*Tip: Consider topical collagen dressings*

### Clinical Considerations:

- 1. Medication Review:** Review prescription and nonprescription medications that may impact healing.
- 2. Collaborative Planning:** For necessary medications (e.g., chemotherapy or immunosuppressants), coordinate timing around wound healing phases if possible.
- 3. Consider Alternatives:** Replace with medications that don't impair healing, if appropriate.
- 4. Deprescribing:** Reduce or temporarily discontinue medications known to impair healing.

Pressure ulcer prevention and management goes far beyond surface-level care. Understanding how medications impact wound healing allows clinicians to make proactive adjustments that improve resident outcomes, enhance quality scores, and reduce the burden of preventable complications.

#### References:

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## About the Author



*Outside of work, Kate is a wife, and a mom to two very busy boys. She loves running in the Cleveland Metroparks, attending spin class, and volunteering at her boys' schools.*

Kate joined Absolute in 2023 and quickly added expertise and depth to Absolute's consulting team! She has over 15 years of experience as a consultant pharmacist and discovered her passion for geriatric pharmacy during her clinical year in pharmacy school. Her dedication to serving the older population and their caregivers is truly inspiring. As an outstanding clinical consultant, Kate consistently receives glowing feedback from customers for her exceptional clinical skills. She makes a significant impact, and we are incredibly fortunate to have her on our team!

What did the stamp say to the envelope on Valentine's Day?

I'm stuck on you!



What do you call a very small Valentine?

A Valen-tiny.