Why are hospitals so interested in Prevention Pressure Injuries?

As of 2016, it was estimated that 2.5million people contract a pressure injury. Over 60,000 Die from pressure injury related complications

From 2016 to present, the rate of pressure injury development in US healthcare facilities (hospitals and long-term care), is going up every year. Current rates of pressure injury development vary from as little as 2% of total patients to as high as 45% **depending on the facility.**

Due to reporting inconsistencies, the true number of people who suffer pressure injuries each year is difficult to know for sure but is far more than 2.5million

Pressure injuries **are considered avoidable with appropriate care.** Pressure injury occurrence in healthcare facilities is indicator of the quality of caregiving provided by facility bedside caregiver staff.

High PI rates are considered a **sign of neglect.** Facilities with high rates are subject to reduced reimbursements, penalties and lawsuits. In extreme cases they can be shut down

Why Do Pressure Injuries Happen?

There are many risk factors associated with PI development. In most cases, a person gets a pressure injury due to a **combination** of health factors and environmental factors.

1. Intrinsic (Health) Factors

Intrinsic, or internal health factors, are disease or injury states that can make a person at risk for pressure injury. These are conditions that lead to one or more of the following:

Immobility: Extended and severe disability due to injury, neurological ds/injury, advanced age, patient behavior, etc.

Poor skin integrity: due to advanced age, poor nutrition/hydration, certain medications, trauma, disease, etc.

Constant exposure to moisture: especially incontinence

Reduced or restricted tissue perfusion related to **cardiovascular,** diabetes, **hypotension,** trauma, etc.

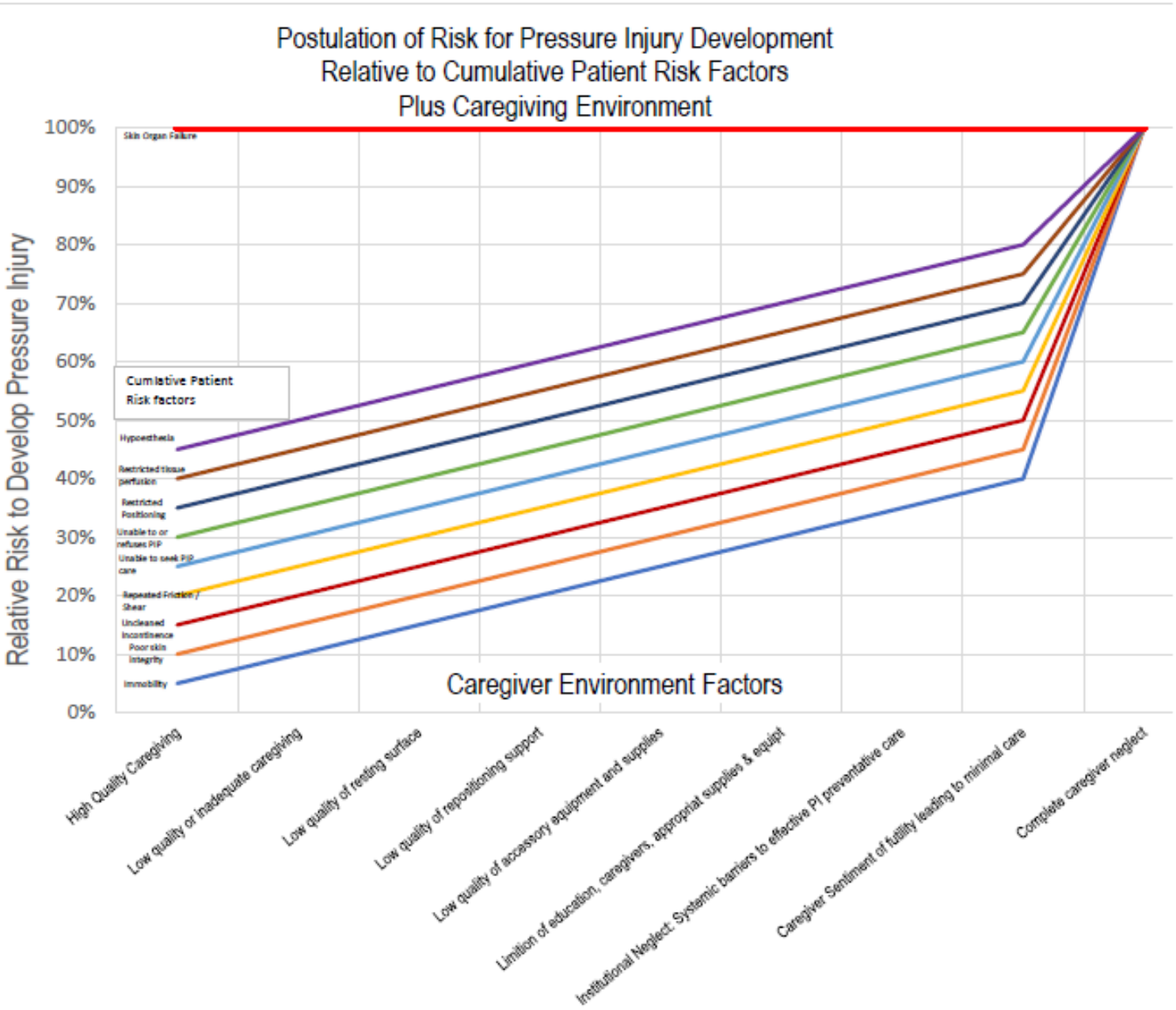
2. Extrinsic Factors

Extrinsic, or environmental, factors are circumstances exposure to pressure and tissue perfusion, moisture that affect the persons, friction & shear and the persons state of nutrition & hydration

Environmental: Quality of resting surface(s), quality of accessory equipment and supplies, access to assistance, nutrition & hydration, education, training.

Caregiver: Quality and consistency of care: knowledge, training, skill level, competency, attentiveness.

Institutional: Quality of administrative organization, investment and support of PIP related care, especially adequate caregiver staffing.



Cumulative Patient Risk Factors

- Immobility: Unable to or does not self adjust off pressure points PRN
- Poor skin integrity related to malnutrition,dehydration, meds, damaged skin or underlying tissues
- Uncleaned incontinence / moisture
- Frequent episodes of low friction and shear or incident of high friction and shear
- Pt unable to or does not self advocate for basic care needs especially nutrition and pericare
- Patient does not stay in or refuses position of reduced pressure
- Restricted body position / Unable to sustain pressure relieved position
- Vascular disease/injury states that reduce or restrict perfusion of blood/oxygen to skin and underlying tissues
- Neurological disease/disease states that lead to hypoesthesia
- Skin organ failure

Although a linear association between cumulative risk factors,
A patient's risk of developing a pressure injury is relative to the patient conditions and caregiver environment conditions

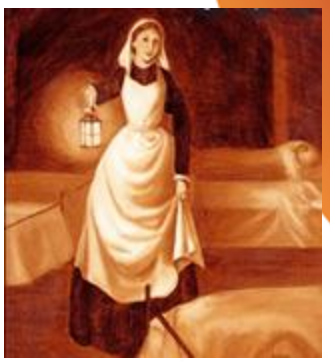
Root Cause of Most Hospital Acquired Pressure Injuries (HAPI)

The rate of Facility Acquired Pressure Injuries (hospitals and skilled/subacute/rehabilitation facilities) has been steadily rising for at least the past 5 years. The COVID pandemic has exacerbated the problem.

There are several reasons why our rates went up. First and foremost was we decided to track all HAPI's regardless of stage, rather than only the greater than stage 3 HAPI's required by CMS.

1. **No risk assessment after 1st day of admission.** Missed that patient was at significant risk or do not recognize the patient *became* more at risk, so PIP interventions not done.
2. **Skin check by chart** instead of actually looking at the patents skin Q shift. Signs of looming pressure injury not recognized for several shifts/days, so PIP not done.
3. **Core PIP interventions done but were not effective.** Usually related to difficulty achieving PIP intervention goals of care, especially good pressure relief (turning and repositioning), difficulty keeping the skin clean and dry, difficulty preventing friction and shear, and/or difficulty supporting adequate nutrition and hydration.

History of Caregiving, Skin Care and Pressure Injury Prevention



"If he has a bedsore, it's generally not the fault of the disease, but of the nursing"

Florence Nightingale, 1859

Although pressure injuries have been happening to people since the beginning of people, blame it on Florence Nightingale that nurse/caregivers became 'responsible" for pressure injuries.

Ever since then, the organ of skin (the largest organ of the human body) has become the only organ whose decisions regarding care and protection are left to the bedside caregiver, usually nurses, but rarely the doctor. The definition of the term "bedside caregiver" became synonymous with **any person** that provided care for a person's basic physical needs: Mobility, nutrition & hydration, hygiene, and of course skin care and pressure injury care. In this way, "Nursing" and "Bedside caregiving" mean the same thing.

Medical care has evolved *a lot* since Florence's day. We have gotten much better at caring for people. Very sick people stay alive longer. But the trade off is healthcare has become much more complicated and fractionated.

Where it used to be that the same doctor took care of everything from broken limbs to cancer, now virtually all fields of medicine require MD specialization. The practice of basic bedside care and patient handling, especially skin and pressure injury prevention care, is completely disconnected from the MD's scope of practice.

The scope of practice for nursing has expanded and partitioned into specialties too. Before 1950, nurses were not even "qualified" to use a stethoscope. (True!), Now bedside caregivers; (nurses, aids, PT/OT, RT, technicians etc.) are the primary custodians for a myriad of high-tech advances in medical practice.

But the truth is, to date not much has changed about pressure injury prevention. There is no medication or technology that can stop bedsores. The bedside caregiver is still very much in charge of skin care and pressure injury prevention.

Bedside caregivers are still the guardians of skin care and the soldiers against pressure injury prevention.

Only caregivers can stop bedsores.

Why are pressure injuries more difficult than other Hospital Acquired Conditions (HAC's)?

There is nothing new about pressure injuries. People have gotten pressure injuries since the beginning of people. They are common most everywhere. In every country, across all cultures.

There is nothing new about caregivers trying to prevent them either. With all the advancements in science and medicine we have made, you'd think by now we'd have this problem well under control.

But no. Quite the opposite. As hard as everyone tries (…) Pressure injuries have become the most prevalent HAC in this country, and the second most expensive. [1]

Why, in this day and age, are we still struggling with what at first glance seems like such a basic health problem?

Take a closer look and you will see. Pressure injuries are a far more difficult problem than first meets the eye.

Just about everything about pressure injuries is tricky. From why they occur, to how they develop and evolve, to how to prevent them, to how to treat them. They are hard to predict. They can stay for years. And they can turn deadly in a day.

And of course they are particularly difficult to stop. There is long laundry list of interventions a caregiver must do, and a wide variety of supplies and equipment needed to keep PIs at bay. Virtually all the interventions involve frequent, time consuming, highly laborious and exhausting patient handling. Interventions must be implemented correctly, or they might as well not be done at all. Often the work leads to caregiver lift injuries and sometimes patient injury. The best evidence for what really works to prevent them is precarious and highly contingent on litany of "Ifs, Ands, Buts and Maybe's" What works in one case may or may not work in the next

PI's affect a high percentage of our patient population

Every day the percentage of patients entering the acute and long-term healthcare system who are at risk for developing or already have pressure injury is higher. It could be an otherwise healthy patient who is suddenly rendered immobile for a long stretch of time. But more likely it can occur as a comorbidity/complication of almost all debilitating diseases, illnesses, injuries, pathologies, and age-related problems that are commonly land a person in the healthcare system.

More than just a comorbidity

The root cause of most pressure injuries involves a complex mix of variables across the entire spectrum of health: patient condition, medical treatments, industry practice, physical environment, socioeconomics, patient perceptions, beliefs and behaviors, and caregiver perception, beliefs, behaviors, availability and skill level.

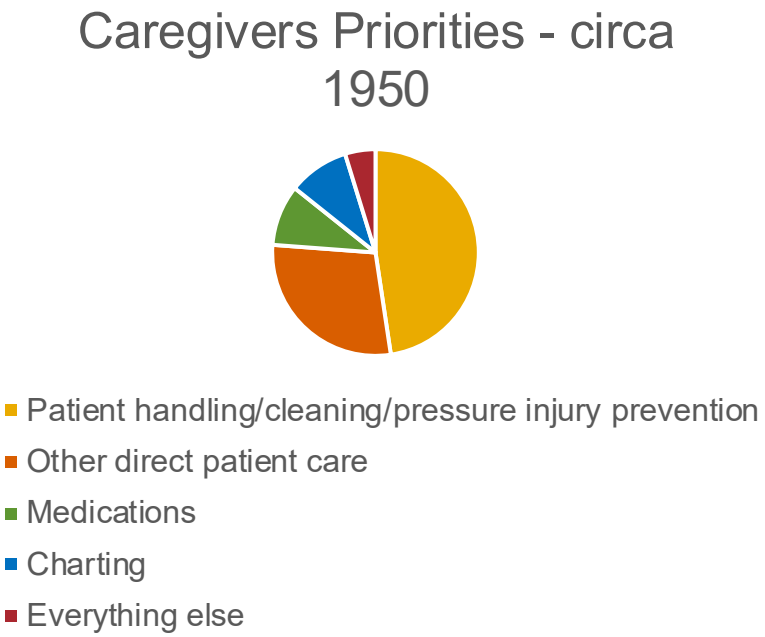
High variability and low consensus of treatment

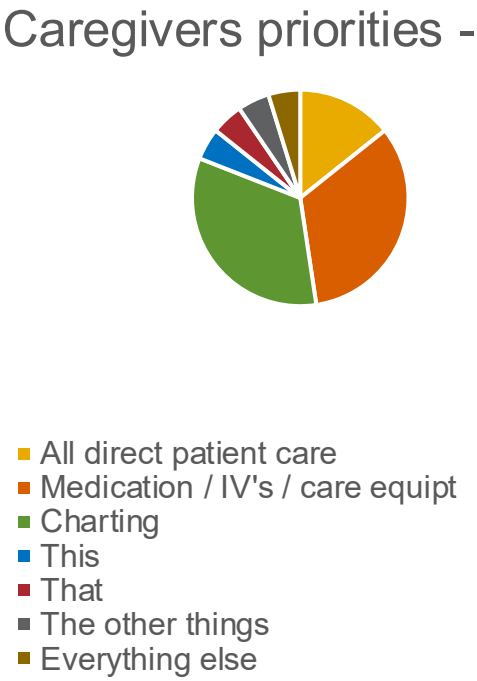
Industry paradigms for effective prevention and treatment methods are inconsistent and filled with misconceptions, myths, misunderstandings, unknowns, politics and bureaucracy. Standardization of effective prevention and treatment modalities is elusive due the complex nature and multiple variables that are difficult & sometimes impossible to measure and/or control in actual practice.

Despite exhaustive research and billions of dollars invested in technology and equipment, there is still no definitive single medical treatment or technology that is in itself effective to prevent pressure injury. It is one of the few health comorbidities left that can only be prevented or managed by hands-on bedside caregiving. And that is why it is so expensive.

1. Page, L. 5 Most Common Hospital Acquired Conditions Based on Total Costs
Beckers Hospital Review September 16th, 2010

Time Available
For Pressure Injury Prevention Care
Then and Now





This is empirical data. But you get the idea.
Prioritizing care is key.
PIP care is a higher priority than data entry.
Turn before you type.

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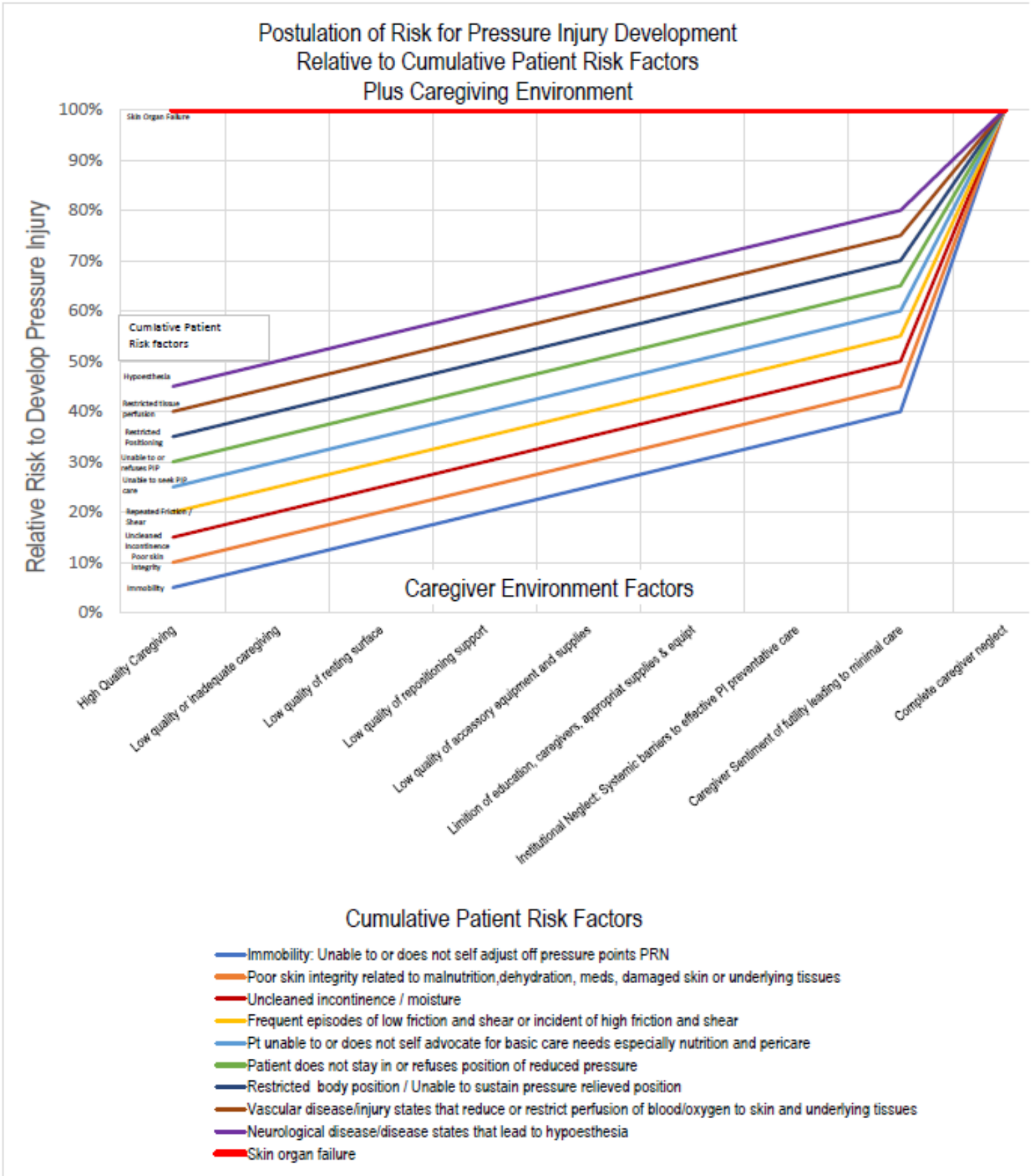

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A patient's risk of developing a pressure injury is relative to the patient conditions and caregiver environment conditions

PIP Intervention Standards of Care
The 10 Second Bedside Risk Assessment Tool

Each inpatient should be assessed for risk for pressure injury
upon admission
and every shift

I'm tired of watching nurses go to the computer to figure out who is at risk for pressure injury prevention. You may not know what your Braden Score is (probably don't) but you do know what your patient score is.

I devised **10 second bedside risk assessment tool. To** quickly assess a patient's risk for PI when you are already at the bedside, looking and working with your patient.

If one or more of the below conditions is "Yes", the patient can be considered to be at risk for pressure injury development.

1. **Existing pressure injury, history of pressure injury or signs skin damage over bony prominences** (redness, broken skin, rash, bruise like discoloration, wounds, or pain with palpation)

2. **Unable or *does not* reposition his/herself** As needed to relieve pressure to vulnerable pressure points. Cannot, does not or **is ineffective** to self reposition *frequently & spontaneously* enough to adequately relieve pressure from bony prominences, especially sacrum/coccyx and heels.

   Includes
   - Patients who refuse to move/be moved for whatever reason
   - Patients who are restrained
   - Able to stand/ambulate but does not self adjust/mobilize while in bed.

   Excludes: 6 hr supine bedrest orders, somnolent post op patients: (Re-assess Q 4 hrs.)

3. **Inhibited communication or behavior** such that the patient does not ask for, is unable to articulate or refuses assistance with care associated with skin safety

   - Cannot or does not notify staff when needs assistance with toileting or is soiled
   - Cannot of does not notify staff when needs help to reposition
   - Not able to take in appropriate nutrition and hydration? (feeder? Refuses to eat/drink
   - Repeatedly positions self or moves self in a way that may lead to skin harm
     (includes refusing to turn, refusing skin or wound care, restlessness, combative)

Pressure Injury Prevention Standards
PIP Bundle and Goals of Care

Standard Pressure Injury Prevention	Goals of Care
1. Initial AND DAILY RISK assessment Assess each inpatient for risk of PIP using Braden scale and/or Bedside risk assessment	Early identification of Pressure injury risk and implementation of prevention measures greatly reduce risk of developing pressure injury
2. Notify wound care and apply Green PIP wristband to all patients deemed at risk for PI development	Improves recognition by all staff of risk. Recognition and awareness improves the continuity of care across all disciplines.
3. Q SHIFT skin checks – to monitor for changes in skin condition relevant to PIP interventions provided.	To evaluate the effectiveness of current PIP interventions and plan/modify as need to improve
***4. Q4 Scheduled routine* turning & repositioning (T&P).** Regular and consistent turning and reposition scheduled within daily routines. Most PIP bundle core interventions can be done during turning & repositioning interventions.	To relieve pressure to bony prominences and provide mobility. Establishing a scheduled routine T&P about every 4 hours makes planning and coordinating staff easier and more efficient, improves care and saves time.
5. Avoid Friction & Shear. Use appropriate techniques and equipment to protect from friction and shear.	See Standards of care for reducing friction and shear. Friction and shear is a cause of pressure injury
6. Moisture Control: Appropriate use peri-care to keep skin clean & dry. Avoid use of moisture trapping/moisture generating devices. (Diapers, sliders)	Protect skin against excoriation of skin from urine and stool.
Support Nutrition and Hydration Promote best possible Nutrition & Hydration. Plan time for feeding, patience	Patience to provide best possible nutrition and hydration is a core nursing function. Improves patients skin tissue tolerance.
Protect / alternate pressure from medical and equipment devices tubes bedrails, tapes, etc	To minimize risk of device related pressure injury

Barriers to doing Turning and Repositioning (T&P) and Suggestions To Overcome The Barriers

Turning and Repositioning **WORKS** to prevent pressure injuries

BECAUSE it is during Turning and Repositioning that you have an opportunity to do almost everything necessary to prevent PI's

But let's face it: Turning and Repositioning is not easy. It takes a lot of time, often more than one caregiver, and it often involves a lot of heavy lifting. Below are some common barriers to T&P and suggestions to overcome them.

Common Barrier	Suggestions to Overcome
Don't have time / Not enough help	**Don't let the T&P work schedule you.** You should schedule the T&P. T&P is one of those nursing functions that should be done as part of your daily routine. It can be delayed but not skipped. Patient care takes priority over data entry. We recommend doing it **about q4h** give or take an hour. We suggest **about** after mealtime, and **about** 4 hours after dinner and before breakfast. If T&P requires 2 or more people, those 2 people have to plan together about what time to do it, adjusting for circumstances.
It takes way too long to T&P my patient	The average T&P takes about 10 minutes to complete. If you have a patient that takes a lot longer, you have a "Difficult to Turn" patient. **It's the "Difficult to Turn" patients that get the pressure injuries.** 1st step is to identify why it is taking so long? 2nd step is to decide what, if anything can be done about it? **Do you need lift equipment?** Do you need to manage pain first? Do you need help to manage patient behaviors? Do you need to call for more people? PT? or Wound care? Or is there not much that can be done about it except to allow more time to get it done?
All T&P interventions we did get undone right after we walk out of the room.	This is another "Difficult Turn" situation. Sometimes the patient does not stay in the turned position, or the support devices (wedge or pillows) flatten out, bottom out or slide out. Urine and stool absorption/containment products might"fail" right away or are removed by the patient. The list of possibilities is almost endless. Obviously, the only thing you can do is try to resolve the problem by changing your approach. But since each problem has to be addressed separately, stay tuned for more suggestions on a separate document
My patient refuses to turn	Refusing to turn is very common. When the patient was admitted to the hospital, they signed an agreement to be treated. Turning & Repositioning is part of that agreement. Since pressure injury is considered a sign of neglect, we are liable for pressure injuries that develop or that get worse while under our care, even if they refused care. If your patient is truly at risk for developing a pressure injury and refuses to turn, the first thing you should do is try to talk them into it. If not successful now, request again every time you enter the room. If still no, the next step is to educate them about pressure injuries and why they need this care. Finally, if your patient refuses (including saying they will do it themselves, but they don't) please notify wound care for use to evaluate and determine next steps.
Comments/ suggestions welcome	

Standard of Care Best Practice
Boosting / Transfer / Slider Devices

Boosting / transfer / slider sheets are designed to reduce friction

The advantages to using booster / transfer / slider sheets are:

- Reduces friction against patients' skin - Lowers risk of friction/shear injury
- Reduces friction/weight resistance - Lowers risk of caregiver lift injury during boosts/transfers.

The disadvantages of boosting / transfer / slider sheets are:

- Can cause skin damage when left under patient – Low air and moisture permeability causes sweating, pools urine & stools. Wrinkle can cause pressure injury. Hover mats are abrasive
- Increases sliding – The time it takes for a patient with a slider under him/her is inversely proportional to how much they weigh and how immobile they are. The lighter and more immobile they are, the quicker they will slide down after boosting. Frequent sliding cause cumulative friction skin damage and increases the risk of caregiver lift injury due to repeated boosts.

Universal Standard Best Practice for boosting / transfer / sliders

- ✓ **Always make patient assist with boost and transfers to as much as he/she is able**
- ✓ **At least 2 caregivers are required for all boosts and bed-bed transfers when patient needs assistance**
- ✓ **Always place paper chux between patients' skin and boost / transfer / slider device**
- ✓ **Hovermats placed post op/post procedure must be removed within 2 hours unless patient meets criteria**
- ✓ **Leave in sliders are contraindicated for patients with posterior pressure injury. Use waffle overlay instead**
- ✓ **Waffles should be placed over mattress fitted sheet and covered with another fitted sheet or regular sheet**

Booster / Transfer / Slider Device Selection Guide

Weight / Needs assist	Paper chux	Sally Slide Always remove after use	Comfort Glide	Hovermat Remove after post op unless pt meets weight criteria	Waffle overlay Use instead when pt has PI on posterior
Under ~150lbs minimal assist	Yes	Ok if removed after use	Ok if removed after use	Not recommend	Not necessary but ok if pt has PI
Under ~150lbs	Yes	Ok if removed after use	Ok if removed after use	Not recommend	Use instead when patient has a pressure injury on posterior
Over ~150lbs to ~250lbs	Yes	Ok if removed after use	Ok to leave in	Better for patients closer to 250lbs. Assure paper chux protect back skin	Use instead when patient has a PI or if you are having problems with frequent sliding / slumping May place OVER slider
Over ~250lbs	Yes	Not recommended	Not recommended	Ok but consider using overhead lift equipt instead	Place over hover mat or lift sheet if patient has PI
Over 350lbs	Overhead lift equipment required				

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2. Notify wound care and apply Green PIP wristband to all patients deemed at risk for PI development	Improves recognition by all staff of risk. Recognition and awareness improves the continuity of care across all disciplines.
3. Daily skin checks – to monitor for changes in skin condition relevant to PIP interventions provided.	To evaluate the effectiveness of current PIP interventions and plan/modify as need to improve
***4. Q4 Scheduled* turning & repositioning (T&P).** Regular and consistent turning and reposition scheduled within daily routines. Most PIP bundle core interventions can be done during turning & repositioning interventions.	To relieve pressure to bony prominences and provide mobility. Establishing a scheduled routine T&P about every 4 hours makes planning and coordinating staff easier and more efficient, improves care and saves time.
5. Protect/prevent Use appropriate techniques and equipment to protect from friction and shear.	See Standards of care for reducing friction and shear. Friction and shear is a cause of pressure injury
6. Scheduled & PRN peri-care to keep skin clean & dry.	Protect skin against excoriation of skin from urine and stool.
Support Nutrition and Hydration Promote best possible Nutrition & Hydration	Patience to provide best possible nutrition and hydration is a core nursing function. Improves patients skin tissue tolerance.
Protect / alternate pressure from medical and equipment devices tubes bedrails, tapes, etc	To minimize risk of device related pressure injury

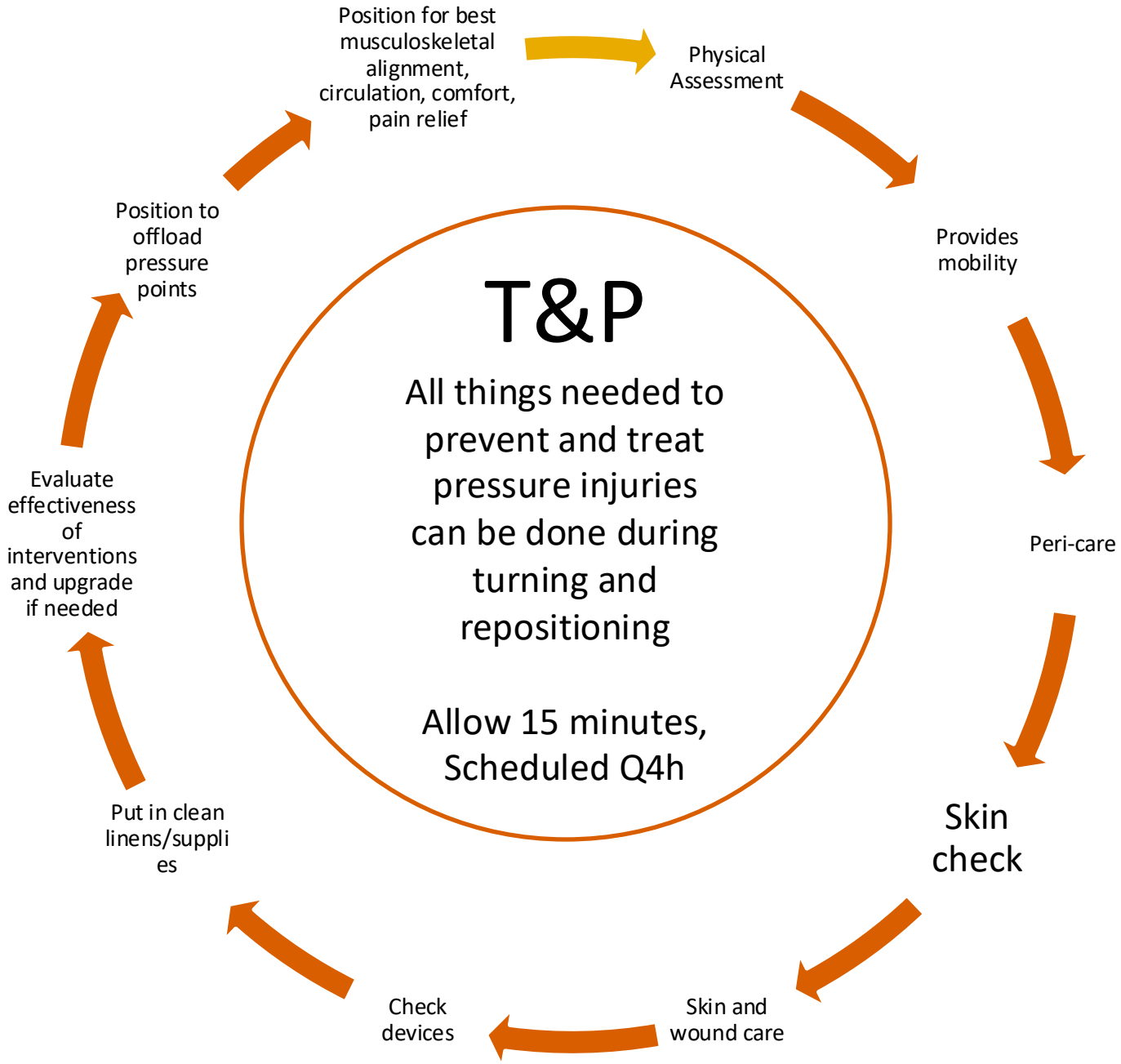
PIP Intervention Standards of Care
Sequence of Turning & Repositioning

By following a methodical sequence to turning and repositioning you will save you time and energy

Sequence of Steps	Details of Each Step
1. Get everything ready	Peri-care supplies Linens, gowns, sliders if needed Pause NG, feeding tubes, Put aside or remove blankets sheets,
2. Get bed ready	Lower HOB, Raise bed to hip height of TALLEST caregiver, Lower bedrail on side of caregiver doing peri-care
3. Peri-care front	Clean per protocol, clean foley, pat dry – apply creams or powders. Remove and replace gown if needed
4. Turn the patient	Turn using standards of safe patient handling and caregiver lift safety. See Standards of Patient Turning
5. Peri-care and wound care if needed on back	Clean per protocol, pat dry, apply creams per PIP Bundle protocol, skin or wound care order set pads/linens for replacement
6. Skin check	Check skin over all bony prominences, Resolve medical device pressure, look for and remove foreign objects. See standards for skin check
7. Turn the patient to the other side	See Standards to turning a patient
8. Replace pads, linens, install slider if needed	See Standards for Reducing Friction and Shear
9. Return patient to back	See Standards to turning a patient
10. Boost patient if necessary	Lower bed to trendelenburg if heavy. See Standards for Boosting a Patient
11. Remove slider if indicated	See Standards for Reducing Friction and Shear
12. Position and support patient to about 30 degree's lateral side turned position	See Standards of Patient Positioning for Pressure Injury Prevention
13. Return bed to flat.	Keep HOB flat or less than 10 degrees if possible. Or to greater than 30 degrees for feeding, comfort or for improved respiration
14. Reset patient comfort and devices	Reset medical care devices, Cover with sheets/blankets, put call light and table within reach

PIP Bundle Interventions

Its all about the Turning and Repositioning



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Professional Conduct Standards for Pressure Injury Prevention Care

1. It is the expectation that all bedside caregivers consider patent skin care and pressure injury prevention care a core job function.
2. It is the expectation that all bedside caregivers consider timely patient skin care and pressure injury care an important priority. Timely PIP interventions should take priority over less time sensitive and/ indirect patient care duties such as data entry.
3. It is the expectation that all bedside caregivers take responsibility to provide meaningful patient skin and pressure injury prevention care according to best practice standards and the best of his/her ability.
4. It is an expectation that all bedside caregivers make every effort possible to plane and provide skin and pressure injury prevention care within a routine schedule of about every 4 hours (or as recommended by wound care) whenever possible and reasonable.
5. It is an expectation that bedside caregivers work as a team to provide skin care and pressure injury prevention according to best practice standards. Including but not limited to when 2 caregivers are required for care.
6. It is the expectation that all bedside caregivers observe all caregiver lift safety principles, especially to implement use of lift devices (sliders, waffle air overlays, hoyer lift, ceiling lift, etc.) when it is recognized the lift, turning & repositioning and other patient handling weight exceeds the 30 lb. limit.
7. It is the expectation that when it is not possible for the assigned caregiver(s) to provide PIP interventions within one hour before or after the scheduled time , that efforts will be made to assign other, more available caregivers to provide the PIP care

PIP Bundle Interventions

Pt name_____ Rm ___

Core Standard	Exceptions / Add on's
✓**4 Eyes check** upon admission, unit/unit xfer, return from procedures > 2 hrs off floor ✓**Daily PI risk assessment on all patients** (10 second bedside risk test, Braden) ✓**Apply Green PIP wristband** on all patients found to be at high risk for pressure injury ✓**Skin check Daily** of bony prominences of all at risk patients . ✓**Ask for wound care consult** for signs of worsening skin condition	
Turn & Reposition Per unit schedule or as recommended by wound care	Turn every ___ Hrs ☐ Do not position on L R Back Favor turn on ____ side ☐ HOB < 10 degrees except during meals ☐ Request to turn each visit to room : Notify WC if refused ☐ Other: _____
Support Wedge cushion to support ~30 degrees Float heels at all times	Support w/regular pillows ok Requires LARGE wedge ☐ Foam boots on: L R Both feet ☐ Other instructions: _____
Friction / Shear Prevention Use paper chux to assist with turn / boost/ transfers	Use boost / transfer / Slider per protocol ☐ Use waffle air overlay INSTEAD of leave in slider ☐ Optifoam (aka Mepilex) on _____ USE NO OPTIFOAM ☐ Requires Hoyer lift Requires Ceiling Lift equipment
Moisture Management Paper chux under patient at all times. No diapers. Peri-care per unit schedule & PRN. Perisoap to clean	Check for soiling and clean if needed Q _____ ☐ Incontinence cream Calezyme Nystatin powder ☐ Other: _____ ☐ Purewick Poise pad Male wrap Condom cath ☐ Foley care per protocol Rectal Tube care per protocol ☐ Other _____
Support Surface Linet Turning bed	Add Linet Pump Add Waffle air overlay

☐ See "Wound Care" orders ☐ See "Skin Care" orders

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Pressure Injury Care & Prevention

Here are some links to some of our instructional videos:

QUICK & EASY BEDSIDE BRADEN ASSESSMENT DEMO

How to Turn and Set 30-Degree Lateral Wedge and Relieve Pressure

New Hire Orientation & Annual Refresher: Bedside Braden Risk Assessment and When it's Time to Turn.

To download The Ultimate Guide: How to Stop Bedsores, click the title or click here.

Jewell Nursing Solutions' mission is to empower all caregivers to prevent and heal pressure injury wounds.

For more information, contact us HERE.