Strategy	Key Change Concepts	Action Items
1. Organizational Vision and Commitment: Hospital leadership demonstrates a commitment to skin integrity	1.1 Establish pressure ulcer reduction as a strategic priority	 1a Establish pressure ulcer reduction as a priority and set organization—level aims for reducing pressure. An Aim should be clearly stated, be measureable, achievable, and identify a timeframe. Example of an aim statement(s): Reduce pressure ulcers in our hospital by xx % within the next six months. Maintain rate of facility acquired pressure ulcers at less than xx%
		 1.1b Incorporate performance of ongoing review and trending of pressure ulcer data including pressure ulcer prevalence and incidence rates into ongoing monitoring of organizational performance. Examples include: Leadership to regularly receive and review data Aim statement (1.1a) incorporated into organizational performance measures that are reported to the Board of Directors or other appropriate governing body.
	1.2 Actively educate internally and externally about goals, expected outcomes and accountabilities	 1.2 Communicate the pressure ulcer reduction priority to board members and administration, medical directors, physicians/providers, families and staff. Examples of communication strategies include but are not limited to: Reports to governing board Reports to Patient Safety Council Posting of organizational performance measures
	1.3 Establish support for a skin integrity program	1.3 Charter a multi-disciplinary team to lead skin integrity program:
		Possible team members: One member with a background in wound care Nutritionist Therapist staff nurse nursing assistant Physician(s): surgical or non-surgical or hospitalist QI staff Others as appropriate 1.3b Establish skin integrity program priorities:

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		 Ensure all staff realize pressure ulcer prevention is their responsibility Ensure that all staff understands pressure ulcer reduction requires a combination of (1) assessing risk (looking at each Braden scale subcategory separately), (2) inspecting the skin, and then (3) implementing appropriate interventions. Ensure both new and existing staff regularly has educational review pressure ulcer prevention policies and processes.
2. Assess organization's current practices: Interdisciplinary team analyzes current practice and identifies opportunities for improvement	2.1 Identify areas for improvement in pressure ulcer reduction	 2.1a Analyze data to identify opportunities for improvement for improvement in pressure ulcer prevention. Data sources include but are not limited to: Quality Measures/Indicators Internal performance improvement data Prevalence and incidence data Benchmark data Ancillary Services – e.g. Radiology, transport. Unit specific input – e.g. Emergency Department, Intensive Care, or Surgery. Patient Satisfaction Survey 2.1 b Develop a system to track and report all stages of nosocomial pressure ulcers
	2.2 Identify authoritative information currently available	 2.2a Review the commonly referenced pressure ulcer prevention research, including: Bergstrom N. Strategies for Preventing Pressure Ulcers; In Thomas D, Allman R. Clinicians in Geriatric Medicine. Philadelphia, PA: W.B. Saunders Co., 1997: 437-454. Bergstrom N, Bennett MA, Carlson CE, et. al. Treatment of pressure ulcers. Clinical Practice Guideline, No. 15. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research. Dec 1994: AHCPR Publication No. 95-0652. Bergstrom N, Braden B, Kemp M, Champagne M, Ruby E. Predicting Pressure Ulcer Risk: A Multisite Study of the Predictive Validity of the Braden Scale. Nurs Res 1998; 47: 261-9. Bergstrom N, Braden, BJ, Laguzza A, Homan V. The Braden Scale for Predicting Pressure Sore Risk. Nurs Res 1987; 36: 205-10. Braden BJ, Bryant R. Innovations to Prevent and Treat Pressure Ulcers.

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Strategy		Geriatric NursingJul/Aug 1990; 11(4): 182-6. Allman RM, Goode PS, Patrick MM, Burst N, Bartolucci AA. Pressure ulcer risk factors among hospitalized patients with activity limitation. JAMA. 1995; 273:865-870. 2.2b Review evidence based-guidelines from expert professional associations and organizations AHRQ clinical guidelines NPUAP guidelines 2.2c Perform literature review on selected topics that would pertain to any specialty population in your facility. 2.3a Review the organizations current approach. The following processes are supported by evidence-based research and found in the above referenced guidelines. These processes represent the foundation of a successful pressure ulcer prevention program. 1. Frequency of pressure ulcer risk assessments using a tested tool: Braden Scale Norton Scale 2. Frequency of skin inspections based on individual risk. Ideally linked to times such as: Daily cares Change in condition 3. Individualized preventive strategies based on risk assessment results. This should include but is not limited to: customized turning and re-positioning schedules use of pressure re-distribution devices (mattresses, cushions etc.) establishment of hydration and nutrition plans use of moisture barriers 2.3b Additional information that is key to pressure ulcer prevention and should be assessed includes: How skin care information is communicated from staff to staff and between
		disciplinesPreventative measures required when patient is transferred between care

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	2.4 Identify areas for improvement in processes and practices.	settings and departments – e.g. Radiology, Surgical Department. • Consistent and reliable documentation of skin integrity and wound characteristics. • Situation Awareness that a patient is at risk for skin breakdown due factors such as, prolonged surgery, critical illness and extended times on transfer carts. 2.4 Utilize analysis of available data to (2.1a) as well as understanding of current approach to pressure ulcer prevention (2.3) to identify opportunities for improvement such as: • Variation between current practice and desired practice – performance gaps. • Lack of skill and knowledge • Lack of clear expectations • Policy/procedure violations • Workarounds caused by inefficient processes and workflow • Breakdown in communication
3. Identify Causes: Interdisciplinary team conducts analysis to identify system causes	3.1 Identify the system-based causes related to the opportunities for improvement identified through the above assessment of the organizations current practices.	3.1 Perform a root cause analysis for each opportunity for improvement to identify the underlying causes and factors. It may be helpful to classify the identified root cause(s) into the following categories: • equipment/environment • staff training, • fatigue/scheduling, • communication, • rules/policies/procedures For more information and assistance on performing and formatting a RCA: http://www.patientsafety.gov/rca.html Other tools that can be helpful in performing a root cause analysis include flowcharting to map current care processes and using a fault tree analysis tool. They enable the team to focus on gaps between current and expected practice. QIOs are able to provide assistance with these tools.

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4. Plan and implement the process change: Optimize performance through the use of evidence-based research, quality improvement techniques and measurement.	4.1 Identify performance goal(s) 4.2 Identify measurement strategy to determine if performance goal(s) are met.	 4.1 Based on identified causes, develop goals that clarify what is to be accomplished - goal(s) should be measurable and achievable and incorporate best practices into expected care practices. Examples: Cause: skin inspections not being performed on admission as expected due to lack of a clear admission process. Goal: A skin inspection will be performed on admission for 95% of newly admitted patients. Cause: insufficient documentation of implemented pressure ulcer prevention measures due to multiple areas to document the information. Goal: Implemented prevention interventions will be documented in 95% of records Cause: Incomplete skin assessments due to lack of head to toe pressure point skin assessment education and competency of early recognition of wound development: Goal: Skin assessments are 90% accurate 4.2 Determine what data source(s) such as medical record/EHR or observation of specific practices will be used to assess if the performance goal has been met. Examples: Medical record/EHR can be used to collect data on the timing and documentation of skin inspections, and initiation of preventative measures. Direct observations can be used to collect data on accuracy and completeness of skin inspections
	4.3 Formulate process changes	 4.3 For each identified cause, determine what change(s) in current processes can be made that will achieve the performance goal. It may be helpful to learn what has worked at other facilities. It is important to clearly communicate the new process change as well as the staff roles and responsibilities associated with implementation. Examples of causes with associated goal, process changes, measurement and staff responsibilities include: Cause: skin inspections not being performed on admission as expected due to lack of a clear admission process. Staff is not clear on who is to perform the assessment or what form(s) to utilize. Goal: A skin inspection will be performed on admission for 95% of

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Strategy	Key Change Concepts	newly admitted patients. Process change: Based on flow charting of current process and the identified opportunities for improvement, modify admission process to build skin inspections into admission process and work flow. The new process will clearly identify responsible staff, documentation tools to be utilized and timing of the inspection. Measurement: 30 records from new admissions will be randomly
		selected each month to assess timing of the assessment and completeness of documentation. Audits will continue until goal of 95% is achieved for two consecutive months. Staff roles and responsibilities: Wound care specialist will work with QI team to modify current admission process, identify documentation tools, and expected timing of inspection based on patient risk.
		 Cause: insufficient documentation of implemented pressure ulcer prevention measures due to required documentation in multiple areas of the medical record.
		 Goal: Implemented prevention interventions will be documented in 95% of records Process change: Based on review of all currently available medical record forms/screens and flow charting of current process create a single format for documenting assessment of skin integrity, preventative strategies to be utilized based on resident risk assessment and charting of wound development/progression/healing.
		 Measurement: 30 records will be randomly selected each month to assess if correct form is used and preventative strategies link to the resident's risk assessment results. Audits will continue until goal of 95% is achieved for two consecutive months. Staff roles and responsibilities: Wound care specialist will work with QI team to modify current forms/screens.
		 Cause: Incomplete skin assessments due to lack of head to toe pressure point skin assessment education and competency of early recognition of wound development: Goal: Skin assessments are 95% accurate Process change: Based on review of current staff education program a curriculum will be developed, offered and updated annually that

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		 includes training related to risk assessment, skin inspection, implementation of preventative measures, and recognition of alterations in skin integrity. This education program will address current as well as any future staff. Measurement: 95% of staff will pass post-test evaluation demonstrating competency in skin assessment and wound recognition. Staff roles and responsibilities: Staff development coordinator will develop program curriculum.
	4.4 Communicate to all involved staff the pending process change and implementation date(s)	 4.4 Develop an internal education or communication strategy within and across departments. Communication strategy should Clearly state staff expectations and accountabilities Utilize multiple modes of communications, such as, posters, newsletters, staff meetings, paycheck stuffers Include a training plan for new staff
	4.5 Implement process change	4.5 Implement process change - refer to QIO for resources and tools to assist with successful implementation strategies.
5. Monitoring	5.1 Determine if process changes put in place resulted in intended improvements.	 5.1a Collect and analyze data (4.2) to measure progress Evaluate whether changes in process and practice have helped attain desired results If goal has not been attained, perform root cause analysis. Based on this analysis refer back to 3.1a to guide additional process changes. If goal has been met, evaluate if there is a need for ongoing monitoring in order to assess whether improvement is sustained over time 5.1b Establish a process for ongoing review of evidence-based practices and other relevant literature to assure care practices are continuing to meet current guidelines and standards of care.

Additional resources:

Minnesota Hospital Association, SAFE SKIN Call to Action: http://www.mnhospitals.org/index/tools-app/tool.353?view=detail

Strategies for Pressure Ulcer Prevention, Kathleen M. Borchert, MS, et al., recorded 12/17/08 https://www.qualitynet.org/dcs/ContentServer?cid=1228147980086&pagename=Medgic%2FMQPresentations%2FPresentationTemplate&c=MQPresentations

National Center for Patient Safety (NCPS), root cause analysis http://www.patientsafety.gov/rca.html

Institute for Healthcare Improvement (IHI), Improvement models and papers http://www.ihi.org/IHI/Topics/Improvement

National Pressure Ulcer Advisory Panel www.npuap.org

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