

Pressure Ulcer Prevention: The Goal is Zero

Building Reliability in Pressure
Ulcer Prevention

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Prevention Pressure Ulcers

The Goal:

Reduce the incidence of hospital-acquired pressure ulcers

Focus on “getting to zero.”

Reducing Pressure Ulcers

For All Patients:

1. Conduct a skin and risk admission assessment for all patients
2. Reassess skin and risk for all patients daily

For High Risk Patients:

3. Inspect skin daily
4. Manage moisture
5. Optimize nutrition and hydration
6. Minimize pressure

Daily Skin and Risk Assessment

- Skin integrity can deteriorate in hours.
 - Frequent assessment prevents minor problems from becoming major ulcers.
- Risk is predictable
 - Key factors contributing to the development of pressure ulcer include age, immobility, incontinence, poor nutrition, sensory problems, circulation problems, device related pressure, dehydration, and multiple co-morbidities
- Identification of at-risk patients help focus on implementation of prevention strategies
- Complexity and acuity of hospitalized patients require daily reassessment of risk and skin assessment

Manage Moisture

- Wet skin is more vulnerable to skin disruption and ulceration.
 - Dry skin is a risk factor as well.
- Care should be taken to minimize exposure of the skin to moisture due to incontinence, perspiration, or wound drainage.
- It may be necessary to use underpads made of materials that absorb moisture and present a quick-drying surface to the skin or use topical agents that act as moisture barriers and moisturize the skin.

Optimize Nutrition and Hydration

- Patients with deficits may have muscle mass loss and weight loss making the bones more prominent and making it hard for patients to be mobile.
- There may be edema and reduced blood flow to the skin, causing ischemic damage , which contributes to skin breakdown.
- High protein diets may improve the healing of pressure ulcers in malnourished nursing home patients

Minimize Pressure

- Redistribution of pressure, especially over bony prominences, is of primary concern.
- Turn/redistribute pressure every 2 hours
- Patients with limited mobility are especially at risk for the development of pressure ulcers.
- Continual pressure, especially over bony prominences, increases risk.
- Pressure-relieving surfaces may help.

Reliability – Is it Possible?

And just what is it?

What is Reliability to You?

- Think of a process that you consider to be reliable
- What makes it reliable?
- How do you know it is reliable?

What is Reliability?

- The measurable capability of an object to perform its intended function in the required time under specified conditions. (Handbook of Reliability Engineering, Igor Ushakov, editor)
- The probability of a product's performing without failure a specified function under given conditions for a specified period of time. (Quality Control Handbook, Joseph Juran, editor)
- The extent of failure-free operation over time. (David Garvin)

What Makes This So Hard?

- Improvement methods are highly dependent on vigilance and hard work
- The focus on outcomes (end product) tends to exaggerate the reliability of the steps along the way giving a false sense of security
- Lack of standardization creates variation in practice and results
- Design rarely accounts for human factors

Intent, Vigilance and Hard Work

- Designing basic failure prevention
- Common equipment, standard orders sheets
- Personal check lists
- Working harder next time
- Feedback of information on compliance
- Awareness and training

Design of Safe & Reliable Systems of Care:

Prevent-Identify-Mitigate*

- **Prevent** Design the system to prevent failure
- **Identify** Design procedures and relationships to make failures visible when they do occur so that they may be intercepted before causing harm
- **Mitigate** Design procedures and build capabilities for mitigating the harm caused by failures when they are not detected and intercepted

Reliable Design Based on Human Factors

- Decision aids and reminders built into the system
- Desired action the default (based on evidence)
- Redundancy
- Scheduling
- Taking advantage of habits and patterns
- Standardization of process

Examples of Strategies

Building Reliable Processes

Conduct a Pressure Ulcer Admission Risk Assessment; Reassess Daily

Standardization, decreasing reliance on memory, forcing function

- Use visual cues in admission documentation for completion of skin and risk assessment.
- Standardize risk assessment tool/checklist across the institution.
 - Incorporate action steps linked to risk.
- Use multiple methods to visually identify patients at risk.
 - Place stickers on chart, use visual cues on door and bed.
- Improve processes to ensure risk assessment is conducted within four hours of admission and reassess daily. (redundancy)

Manage Moisture

Standardization, decreased reliance on memory, forcing function, less steps, visual reminder, taking advantage of habits and patterns (human factors)

- Allow staff to pilot potential supplies (underpads, cloths, barrier products)
- Keep kit of needed supplies at bedside for at-risk incontinent patients.
 - Brightly colored tub
 - Skin care products
 - Pads
 - Washcloths

Optimize Nutrition/Hydration

Forcing Function, standardization, opt out rather than opt in

- Design process for automatic consult to dietician for at risk patients
- Wise use of supplements
- Mug at bedside
- Talk to the patient!

Minimize Pressure

Forcing function, standardization, taking advantage of habits and patterns (human factors), reminders

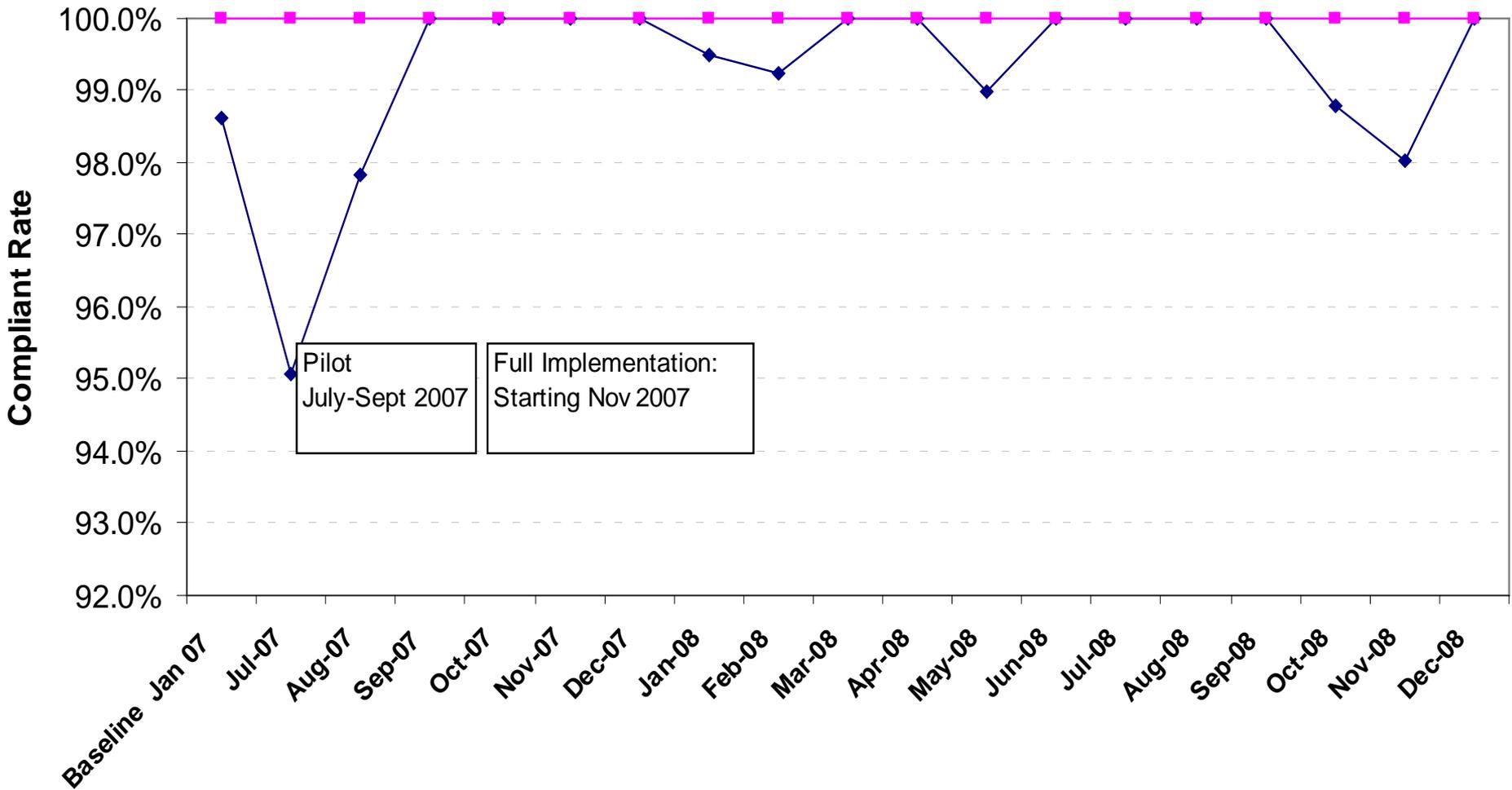
- Use alerts and cues to remind staff to turn patient.
 - Turn clock (Window, clock, door)
 - Audio cues
- Turn Team
- Strategize high level bed assignments
- Seek Comfortable tools

Here's an idea.....

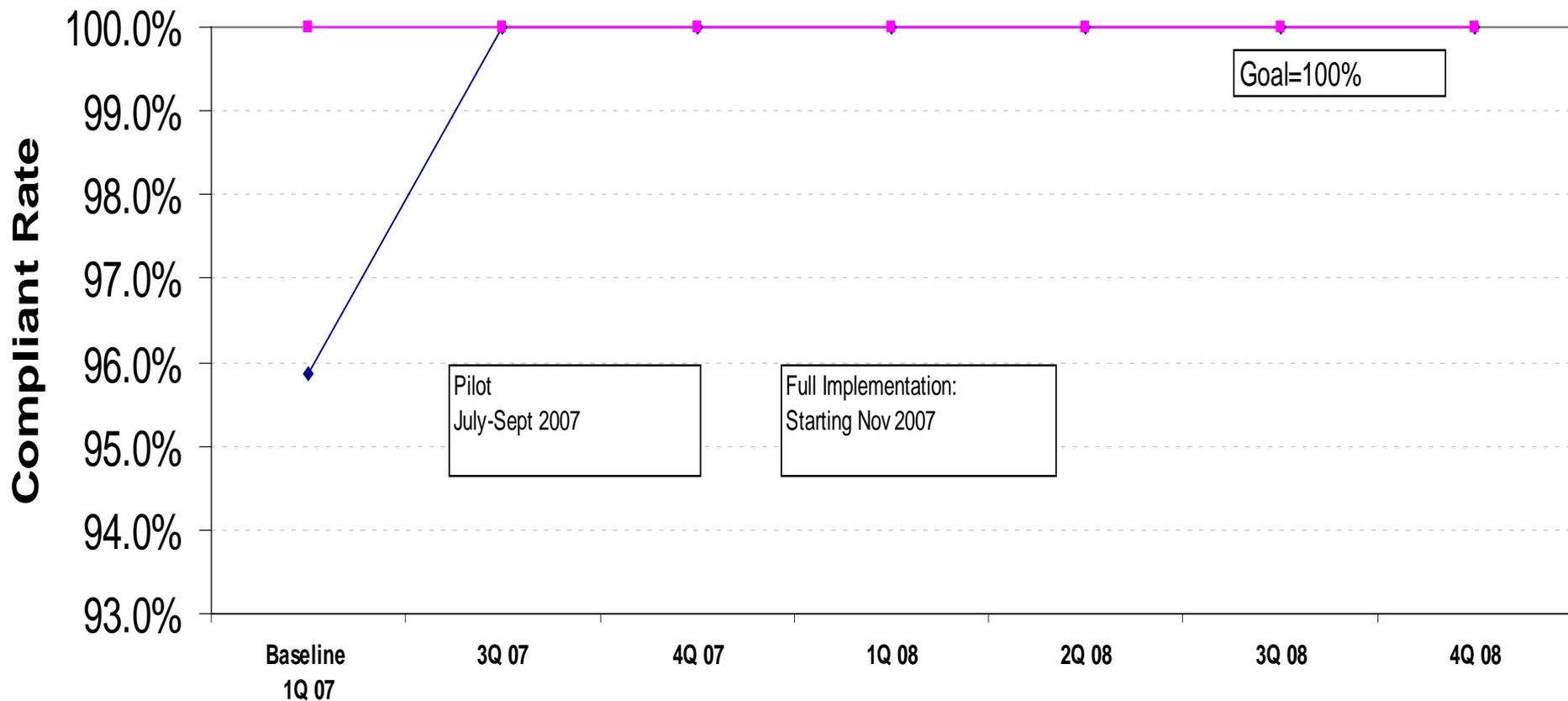
Reliability Concepts; standardization, decreased reliance on memory, forcing function, less steps/complexity

- Share resources with community facilities-
- Skin Care Champions
- Rounds: Hourly or every 2 hours
 - Make sure patient is clean and dry
 - Offer water
 - Turn/reposition patient

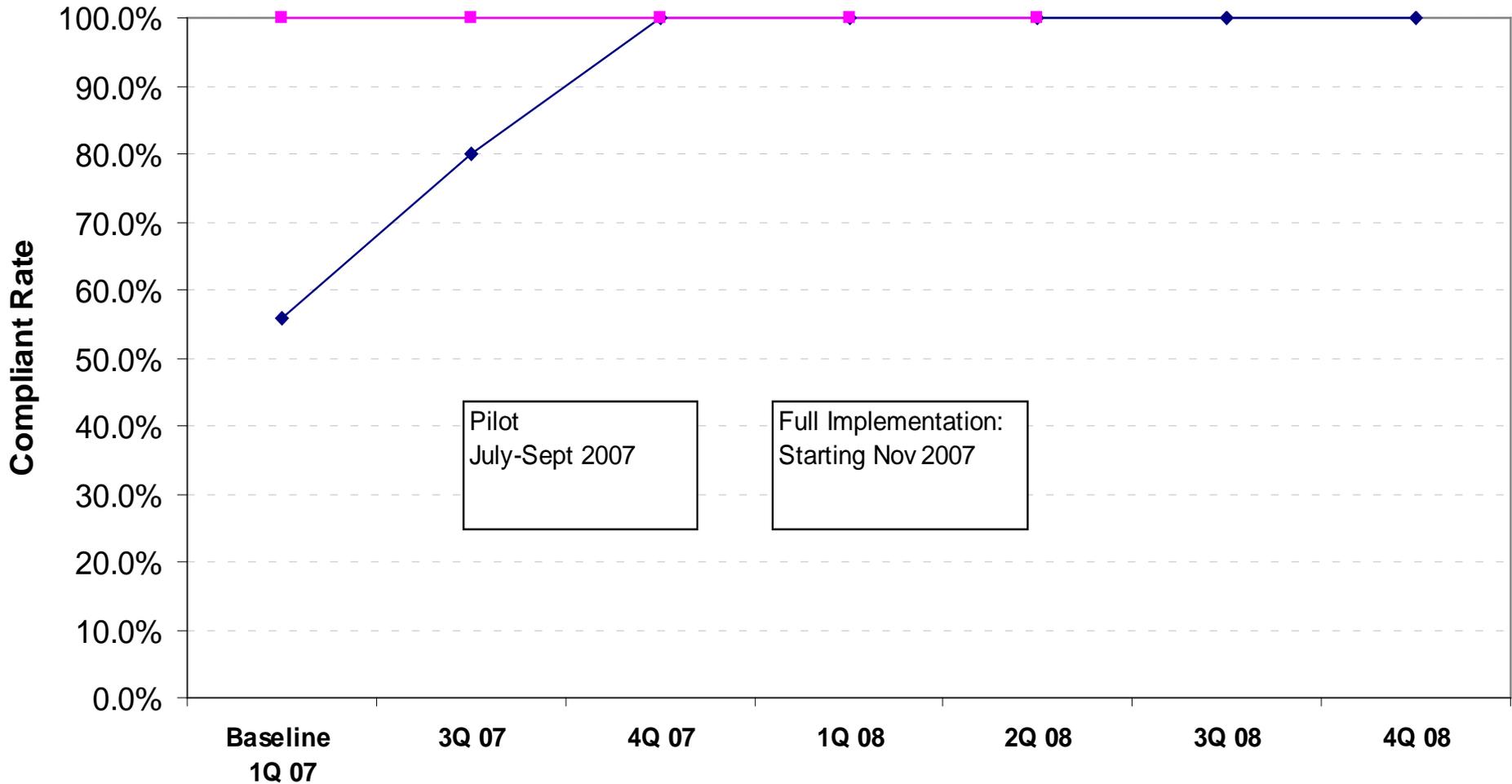
Holy Spirit Hospital
Camp Hill, Pennsylvania, United States of America
Reducing Hospital Acquired Pressure Ulcers
Percent of Patients Receiving Pressure Ulcer Risk Admission
Assessment



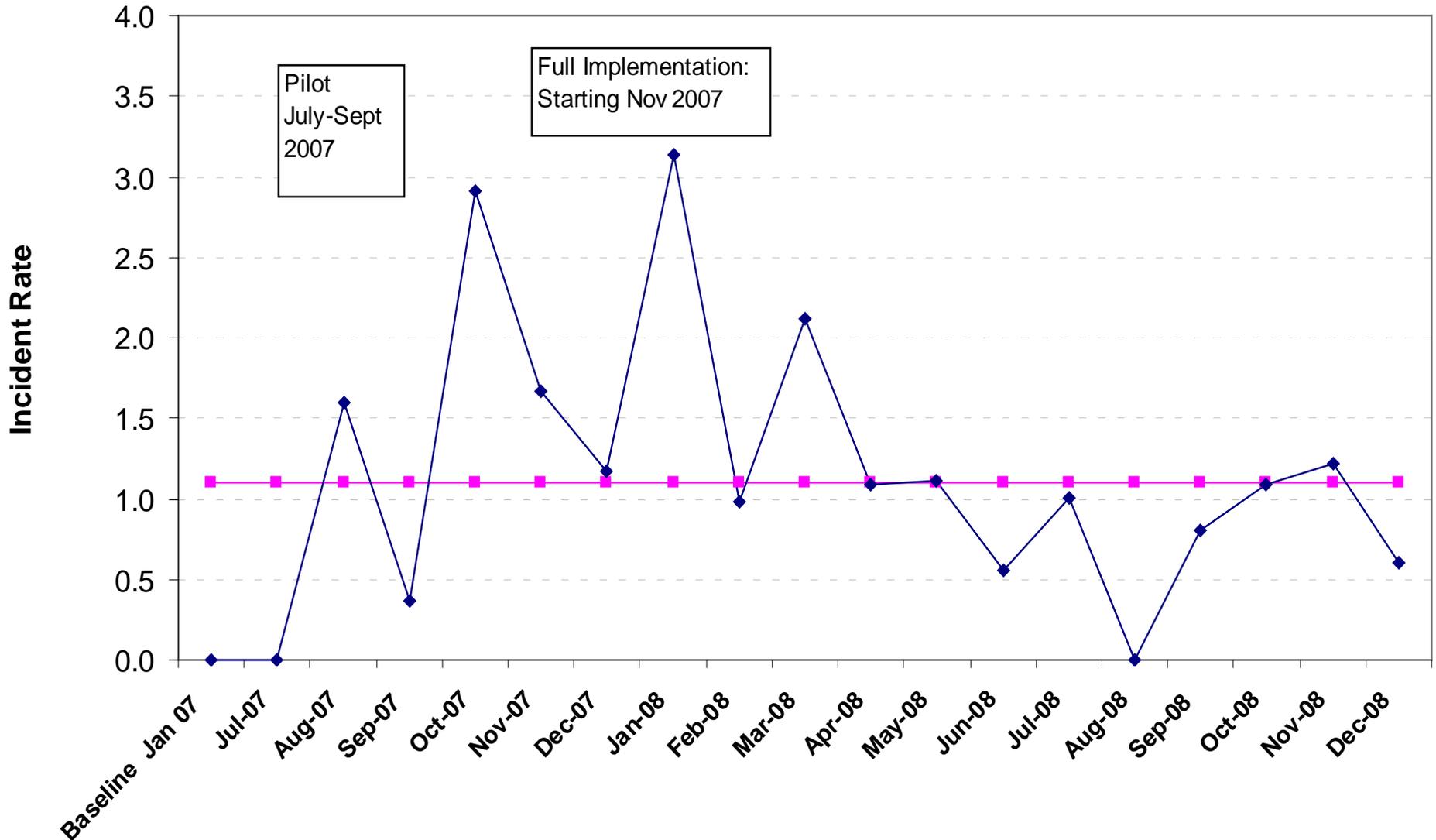
Holy Spirit Hospital
Camp Hill, Pennsylvania, United States of America
Reducing Hospital Acquired Pressure Ulcers
Percent of Patients Receiving Daily Pressure Ulcer Risk Reassessment
(NDNQI); Quarterly Measure



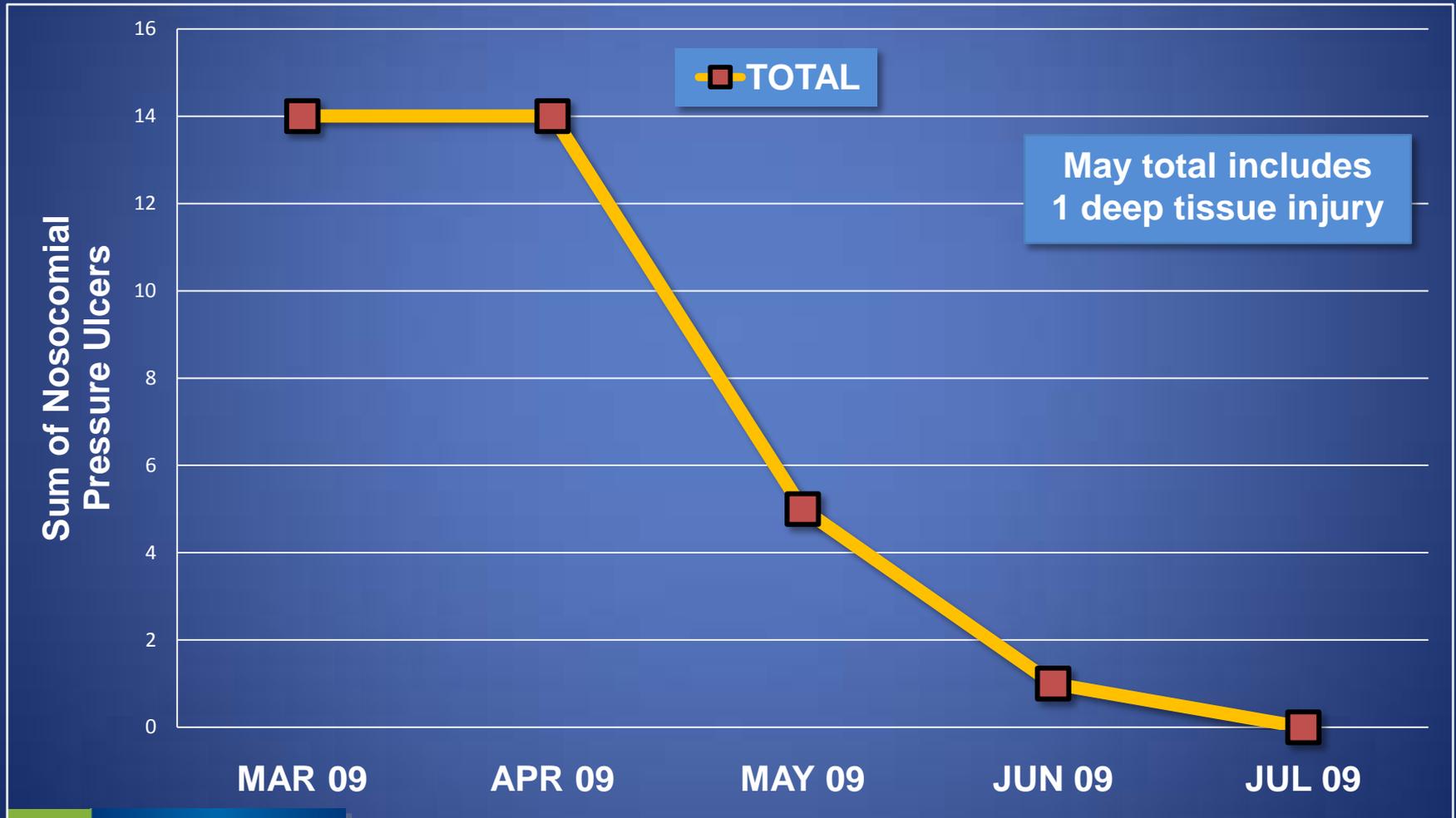
Holy Spirit Hospital
Camp Hill, Pennsylvania, United States of America
Reducing Hospital Acquired Pressure Ulcers
Percent of At-Risk Patients Receiving Full Pressure Ulcer Preventative
Care (NDNQI); Quarterly Measure



Holy Spirit Hospital
Camp Hill, Pennsylvania, United States of America
Reducing Hospital Acquired Pressure Ulcers
PPressure Ulcer Incidence per 1000 Patient Days



Hendricks Regional Health





**WE
WILL**

PREVENT PRESSURE ULCERS.
KNOW THE FACTS. TAKE ACTION.