

U.S. Department of Health & Human Services

May 7, 2014

New HHS Data Shows Major Strides Made in Patient Safety, Leading to Improved Care and Savings

The data in this report shows a substantial nine percent decrease in harms experienced by patients in hospitals in 2012 compared to the 2010 baseline, and an eight percent decrease in Medicare Fee-for-Service (FFS) 30-day readmissions. National reductions in adverse drug events, falls, infections and other forms of harm are estimated to have prevented nearly 15,000 deaths in hospitals, and saved \$4.1 billion in costs, and prevented 560,000 patient harms in 2011 and 2012. These historic improvements are a result of strong, diverse public-private partnerships, active engagement by patients and families, and a wide range of aligned federal programs and initiatives – including new tools provided by the Affordable Care Act – working in concert towards shared aims.

Hospital-Acquired Conditions (HAC) and Readmission Rates Show Improvement

Preliminary data compiled by the Agency for Healthcare Research and Quality (AHRQ) indicate substantial improvement on a range of measures for hospital-acquired conditions (HACs). CMS data is also showing large reductions in 30-day readmissions rates for Medicare patients.

Table 1: Improvement in Hospital-Acquired Conditions, 2010-2012

| Measure Focus | Baseline Rate | Most Recent Rate |
|-------------------|----------------------|----------------------|
| Incidence of | 145 HACs per | 132 HACs per |
| Hospital-Acquired | 1,000 discharges | 1,000 discharges |
| Conditions | in 2010 ¹ | in 2012 ² |

Preliminary nationwide data from 2012 indicates that the HAC rate declined by nine percent from the 2010 level. This corresponds to a reduction in the measured harm rate from 145 harms per 1000 discharges in 2010 to 132 harms per 1000 discharges in 2012. This has resulted in a cumulative total of 560,000 fewer HACs in two years.³ The reductions in adverse drug events, falls, infections and other forms of harm are estimated to have prevented 15,000 deaths in hospitals, and saved \$3.2 billion in 2012 alone. This represents \$4.1 billion in cumulative savings from the start of the Partnership for Patients.

The efforts underway are leading to concrete differences in terms of dollars saved for our health care system, and even more importantly, saved lives. National leading indicators datasets from the Centers for Disease Control and Prevention's (CDC) National Healthcare Safety Network (NHSN), the Centers for Medicare & Medicaid Services (CMS), the American Nurses Association's (ANA) National Database of Nursing Quality

¹ Agency for Healthcare Research and Quality (AHRQ), Centers for Disease Control and Prevention (CDC), and Centers for Medicare & Medicaid Services (CMS), 2010.

² Preliminary data from AHRQ, CDC, and CMS, 2012. See Eldridge, 'Methods Used to Estimate the Annual Partnership for Patients National Hospital-acquired Condition (HAC) Rate', AHRQ, May, 2014, available at: http://www.ahrq.gov/professionals/quality-patient-safety/index.html.

 $^{^3}$ The total 2010 baseline number of HACs is 4,745,000. The 2012 preliminary estimate is 4,316,000 HACs.

Indicators, and the Hospital Engagement Networks (HENs) are also showing dramatic improvements, as indicated in the below table.

Table 2: Improvement in Select Hospital-Acquired Conditions from 2010 baseline through 4th Quarter 2013

| | Ventilator- Associated Pneumonia (VAP) | Early Elective Delivery (EED) | Obstetric Trauma Rate (OB) ⁴ | Venous thromboembolic complications (VTE) | Falls and Trauma | Pressure Ulcers |
|---------------------|---|--|--|--|---------------------|--------------------|
| Results to Date | 53.2% ↓ | 64.5% ↓ | 15.8% ↓ | 12.9% ↓ | 14.7% ↓ | 25.2% ↓ |
| Source ⁵ | NDNQI | HENs | HENs | CMS | NDNQI | NDNQI |

The Affordable Care Act is also helping to lead the way in delivery system reform in other large health programs. For instance, the all-cause 30-day hospital readmission rate among Medicare fee-for-service beneficiaries held constant from 2007 to 2011, generally between 19-19.5 percent of beneficiaries readmitted to the hospital within 30 days. This rate fell to 18.5 percent in 2012, thanks in part to provisions of the Affordable Care Act. The Affordable Care Act includes tools – such as tying Medicare reimbursement for hospitals to their readmission rates and the Hospital Value-Based Purchasing Program – to improve the quality of health care that can also lower costs for taxpayers and patients. This means avoiding costly mistakes and readmissions, keeping patients healthy, and rewarding quality instead of quantity.

The all-cause 30-day hospital readmission rate among Medicare fee-for-service beneficiaries plummeted further to approximately 17.5 percent in 2013, translating into an estimated 150,000 fewer hospital readmissions between January 2012 and December 2013. This represents an 8 percent reduction in the Medicare fee-for-service all-cause 30-day readmissions rate.

Figure 1: Medicare FFS All-Cause, 30-day Readmission Rate⁷

20.0%

19.5%

19.5%

18.5%

17.5%

17.0%

16.5%

16.5%

17.0%

⁴ Obstetric Trauma Rate – Vaginal Delivery Without Instrument (PSI-19).

⁵ National Database of Nursing Quality Indicators (NDNQI), Centers for Medicare & Medicaid Services (CMS), and Hospital Engagement Network (HEN) submitted April 2014 data. In HEN-reported data, baseline and current periods vary across HENs.

⁶ CMS Office of Information Products and Data Analytics.

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Partnership for Patients

In April 2011, the Department of Health and Human Services (HHS) joined leaders representing hospitals, employers, health plans, physicians, nurses, and other health professionals, patient advocates, and State and Federal governments to launch the Partnership for Patients, a nationwide public-private initiative to keep patients from being harmed in hospitals and heal without complication. The Partnership for Patients, created by the CMS Innovation Center through authority in the Affordable Care Act, is sharing best practices with over 3,700 hospitals enrolled in the initiative. The primary goals of the Partnership for Patients are to reduce preventable hospital-acquired conditions by 40 percent and 30-day readmissions by 20 percent between 2010 and 2014. The Partnership for Patients is one part of a larger effort within HHS to reduce hospital acquired conditions and readmissions. HHS is working together with public and private partners to move the national needle on patient safety issues.

A core element of the Partnership for Patients is the 27 Hospital Engagement Networks (HENs). The HENs work at the regional, state, national, or hospital system level to help identify solutions already working and disseminate them to other hospitals and providers. The 27 HENs are:

- America's Essential Hospitals Institute (formerly National Public Health and Hospital Institute)
- American Hospital Association
- Ascension Health
- Carolinas HealthCare System
- Dallas-Fort Worth Hospital Council Foundation
- Dignity Health (formerly Catholic Healthcare West)
- Georgia Hospital Association Research and Education Foundation
- Healthcare Association of New York State
- Hospital & Healthsystem Association of Pennsylvania
- Indian Health Service
- Intermountain Healthcare
- Iowa Healthcare Collaborative
- Joint Commission Resources, Inc.
- Lifepoint Hospitals, Inc.
- Michigan Health & Hospital Association
- Minnesota Hospital Association
- New Jersey Hospital Association
- Nevada Hospital Association
- North Carolina Hospital Association
- Ohio Children's Hospital Solutions for Patient Safety
- Ohio Hospital Association
- Premier
- Tennessee Hospital Association
- Texas Center for Quality & Patient Safety
- UHC (formerly University Health System Consortium)
- VHA
- Washington State Hospital Association

Better patient safety also reduces healthcare costs by decreasing the amount of unnecessary medical care that patients and Medicare beneficiaries need. Ten years after publication of the Institute of Medicine's report To Err Is Human, researchers identified rates of medical harm —that is, injuries to patients associated with their

care—in excess of 25 events per 100 admissions. A <u>November 2010 study by the Office of the Inspector General (OIG)</u> found that 13 percent of hospitalized Medicare beneficiaries experience adverse events resulting in prolonged hospital stay, permanent harm, life-sustaining intervention, or death. Almost half of those events are considered preventable.

The Partnership for Patients has identified ten core patient safety areas of focus that include nine hospital-acquired conditions. The work is not limited to these areas, but the following areas of focus are important causes of harm representing the initial focus:

- Adverse Drug Events (ADE)
- Catheter-Associated Urinary Tract Infections (CAUTI)
- Central Line Associated Blood Stream Infections (CLABSI)
- Injuries from Falls and Immobility
- Obstetrical Adverse Events, including Early Elective Deliveries (EED)
- Pressure Ulcers (PrU)
- Surgical Site Infections (SSI)
- Venous Thromboembolism (VTE)
- Ventilator-Associated Pneumonia (VAP)
- Readmissions

As Table 2 illustrates, the Partnership for Patients has found that rapid progress on these patient safety risks can be achieved through implementation of best practices and care improvement collaboration between HHS and the nation's hospitals and health care providers.

Partners in Action to Improve Patient Safety

The success in reducing readmissions and harm was made possible through the teaming and cooperation of many partners. These partners include the Quality Improvement Organization (QIO) Program, the Medicare Readmissions Reduction Program, the Hospital Value Based Purchasing Program, the Community Based Care Transitions Program, the Agency for Healthcare and Research Quality (AHRQ), the Health Resources and Services Administration (HRSA), the Centers for Disease Control and Prevention (CDC), Hospital Engagement Networks (HENs) listed above, the Administration on Community Living (ACL) aging services networks, the Indian Health Service (IHS), Hospital Engagement Networks, private partners, and many others.

These preliminary successes occur across entire systems of hospitals and across entire States. For instance, through the collaboration with the Healthcare Association of New York State HEN and other patient safety programs and partners, hospitals have achieved significant state-wide results in safety across the board. The results in the 152 hospitals assisted by the Healthcare Association of New York State are shown in the following table:

Table 3: Healthcare Association of New York State HEN Achievements from 2010 to 2013

| Healthcare Association of New York State HEN 152 Hospitals | ADE: 6.5 % decrease in Rate of Adverse Drug Events (ADEs) for High Alert Drugs Per 1,000 Patient Days [Anti- Coagulants, Insulin, and Opiates] | CAUTI: 36.1% decrease in CAUTI Population Rate Per 10,000 Patient Days | CLABSI: 48.0% decrease in CLABSI Standardized Infection Ratio (SIR) for ICUs Only |
|---|--|--|---|
| Falls: 16.6% decrease in Falls with injury per 1,000 patient days (NDNQI) | EED: 78.2% decrease in Rate of Scheduled Deliveries <39 Weeks | OB-Other: 4.4% decrease in PSI-19: Obstetric Trauma Rate - Vaginal Delivery Without Instrument | PrU: 45.5% decrease in PSI-03 (Medicare) |
| SSI: 27.0% decrease in Hip Prosthesis (HPRO) Surgical Site Infection Standardized Infection Ratio (SIR) | VAP: 30.4% decrease in Possible Ventilator- Associated Pneumonia (POVAP) Rate Per 1,000 Ventilator Days | VTE: 20.1% decrease in PSI-12 (Medicare) | Readm: 10.2% decrease in 30-Day All Cause Readmission Rate |

Similarly, the hospitals assisted by the Dignity Health HEN have also significantly reduced harm on a system-wide basis across its 35 hospitals.

Table 4: Dignity Health HEN Achievements from 2010 to 2013

| Dignity Health HEN 35 Hospitals | | ADE: 70.6% decrease in hypoglycemic rate (POC results<40 mg/dl) | CAUTI: 52.7% decrease in CAUTI per 1,000 catheter days (house-wide) |
|--|--|---|---|
| CLABSI: 31.4% decrease in CLABSI per 1,000 central line days | Falls: 25.5% decrease in falls with injury (NDNQI definition) | EED: 97.6% decrease in EED rate (PC-01); sustaining rate <1% | PrU: 55.3% decrease in rate of HAPU (all stages) |
| SSI: 36.3% decrease in SSI/100 targeted procedures | VAP: 52.1% decrease in VAP per 1,000 vent days | VTE: Sustaining low (benchmark) VTE rate (PSI-12) for the Medicare population | Readm: 14.3% reduction in Medicare FFS readmissions |

Conclusion

These improvements are a result of strong, diverse public-private partnerships, active engagement by patients and families, and a wide range of aligned federal programs and initiatives. In 2014, HHS will continue to accelerate delivery system reform efforts by working with its nationwide partners to capitalize on these recent successes to achieve its patient safety goals. We will continue the close teamwork with hospital systems, governmental organizations, patients, providers, and private partners that are the foundation for success.

The efforts by HHS and its partners to improve care while achieving savings, including the Partnership for Patients and in conjunction with new tools provided by the Affordable Care Act, show that we are well on the way towards increasing patient safety, reducing healthcare costs, providing a more sustainable healthcare system for providers, all while bringing the best, safest possible care to patients. There is more to do to improve patient safety, including further reducing readmissions, and we intend to leverage the work that has been accomplished already to make more improvements in patient safety. Groups that want to join us in our efforts to improve patient safety should visit: http://partnershipforpatients.cms.gov/.