Partnership for Patients is a nationwide effort by U.S. hospitals to improve the quality and safety of the care they deliver. The Health Research and Educational Trust of New Jersey, part of the New Jersey Hospital Association, is among the select organizations chosen by the federal government to lead hospitals in this quality improvement journey.

First created under the Affordable Care Act to improve the value of U.S. healthcare, the initiative designated NJHA as a “hospital engagement network” in 2011, charged with working with N.J. healthcare providers to implement improvement strategies. In 2017, that work continues with NJHA once again chosen to lead the Garden State in a new designation – hospital improvement innovation network, or HIIN – to improve the quality of care delivered in the Medicare program. NJHA is one of just 16 organizations nationwide to earn the HIIN designation.

This progress report reflects five years of data documenting the improvements in care and the resulting healthcare cost savings that New Jersey hospitals have achieved under the Partnership for Patients. Improved outcomes for patients are the ultimate goal of this work. But better care also yields savings which are essential in this era of rising healthcare costs; New Jersey hospitals have achieved both under the Partnership for Patients. Hospitals’ care improvements have averted 77,342 cases of patient harm and have reduced healthcare costs in New Jersey by $641 million between 2012 and 2016.

Working Together to Make Healthcare Better
Partnership for Patients-NJ
2012-2016 Progress Report

Hospitals’ care improvements have averted 77,342 cases of patient harm and have reduced healthcare costs in New Jersey by $641 million between 2012 and 2016.

Luciana Mendes-McGuire of Bridgewater is part of the “family faculty” at Children’s Specialized Hospital in New Brunswick, part of RWJBarnabas Health. It wasn’t a role she envisioned for herself — until her daughter Ariana suffered a serious brain injury in an accident. Ariana, then age 7, was in the main acute care hospital for six weeks – half of them in an induced coma — and then additional months rehabilitating at Children’s Specialized. She initially couldn’t walk, talk or feed herself. Today, Ariana’s an active teen-ager, navigating her first year of high school and planning to get her driver’s license. And Luciana today epitomizes the Partnership for Patients’ commitment to family engagement by joining the hospital staff to help other families become an active part of their children’s care.

“It’s important to have a relationship with the doctors and the therapists. They collaborated so well with us and had us very involved in the team. When something like this happens to your child, you feel like you have lost control. Having a team like this including you in everything they’re doing, it just gives you a feeling that you haven’t totally lost control.

“I feel like you become part of this family, and I always have someone to help me. We’re still all very invested in her getting better.”
<table>
<thead>
<tr>
<th>Condition</th>
<th>Baseline Rate</th>
<th>2016 Rate</th>
<th>Rate of Change</th>
<th>Cases of Harm Avoided</th>
<th>Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse Drug Events (Warfarin Events - per 100 patients on Warfarin)</td>
<td>9.9%</td>
<td>6.43</td>
<td>-55%</td>
<td>3,122</td>
<td>$9,367,446</td>
</tr>
<tr>
<td>C. Difficile (C. Diff Rate) - per 10,000 patient days</td>
<td>7.81</td>
<td>6.43</td>
<td>-18%</td>
<td>1,007</td>
<td>**</td>
</tr>
<tr>
<td>Catheter-Associated Urinary Tract Infections (CAUTI Rate) - per 1,000 catheter days</td>
<td>1.91</td>
<td>1.05</td>
<td>-45%</td>
<td>94</td>
<td>$94,413</td>
</tr>
<tr>
<td>Central Line-Associated Bloodstream Infections (CLABSI Rate) - per 1,000 central line days</td>
<td>1.42</td>
<td>0.77</td>
<td>-46%</td>
<td>346</td>
<td>$5,882,013</td>
</tr>
<tr>
<td>Injury from Falls and Immobility (NQF0202) - per 1,000 med/surg patient days</td>
<td>0.82</td>
<td>0.46</td>
<td>-43%</td>
<td>833</td>
<td>$552,236</td>
</tr>
<tr>
<td>OB Early Elective Deliveries (EED Rate) - per 100 deliveries at 37-39 weeks gestation</td>
<td>2.2%</td>
<td>1.1%</td>
<td>-49%</td>
<td>47</td>
<td>$36,844</td>
</tr>
<tr>
<td>Obstetric Adverse Events (PSI-19) - per 1,000 vaginal deliveries</td>
<td>24.16</td>
<td>15.93</td>
<td>-34%</td>
<td>1,269</td>
<td>$3,807,166</td>
</tr>
<tr>
<td>Pressure Ulcers (NQF0201) - per 100 patients surveyed</td>
<td>3.28</td>
<td>2.02</td>
<td>-38%</td>
<td>851</td>
<td>$34,482,049</td>
</tr>
<tr>
<td>Readmissions (All-Cause 30-Day Readmission Rate) - per 100 live discharges</td>
<td>10.6%</td>
<td>7.4%</td>
<td>-30%</td>
<td>66,032</td>
<td>$581,608,171</td>
</tr>
<tr>
<td>Sepsis (Sepsis Mortality Rate) - per 100 sepsis cases</td>
<td>32.2%</td>
<td>26.9%</td>
<td>-16%</td>
<td>3,330</td>
<td>**</td>
</tr>
<tr>
<td>Surgical Site Infections (SSI-KPRO Rate) - per 100 total knee replacement surgeries</td>
<td>0.62</td>
<td>0.53</td>
<td>-15%</td>
<td>91</td>
<td>$1,916,529</td>
</tr>
<tr>
<td>Venous Thromboembolism (PSI-12) - per 1,000 surgical discharges</td>
<td>7.32</td>
<td>3.66</td>
<td>-50%</td>
<td>247</td>
<td>$1,973,789</td>
</tr>
<tr>
<td>Ventilator-Associated Events (IVAC Rate) - per 1,000 ventilator days</td>
<td>1.35</td>
<td>1.18</td>
<td>-12%</td>
<td>73</td>
<td>$1,530,708</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>77,342</td>
<td>$641,251,364</td>
</tr>
</tbody>
</table>

** Cost savings factor not available.

This table shows the results of data collected from participating hospitals on hospital-acquired conditions, 30-day readmission rates, total cases of harm averted and total healthcare costs avoided. Sources of data and per-patient costs include the National Healthcare Safety Network, the National Database on Nursing Quality Indicators, hospital-reported data extrapolated from chart reviews, U.S. Agency for Healthcare Research and Quality, the American Hospital Association’s Health Research and Educational Trust and RTI International. Percent change rates represent pre- (baseline) and post- (current) data, as described. Cases of harm avoided and estimated costs savings represent data from 2012-2016.
Partnership for Patients is focused on the following key patient safety areas. The rate of improvement is based on year-end 2016 performance compared with baseline performance. The baseline data is from 2010 or 2011, except in the case of ventilator-associated events and *C. difficile*, both of which were added in 2013.

What do the numbers mean? In each area, the rate of change shows a reduced likelihood of a patient experiencing that specific complication while hospitalized. The ultimate goal is to prevent all cases of patient harm. As our healthcare teams work toward that goal, we continually assess the progress to date.

**ADVERSE DRUG EVENTS** – Any incident in which the use of a medication may have resulted in death, a birth defect, disability, hospitalization or was life threatening or required intervention to prevent harm.

**C. DIFFICILE** – An infection caused by bacteria that results in inflammation of the colon, known as colitis. Its official name is Clostridium difficile. People who have other illnesses or conditions requiring prolonged use of antibiotics, and the elderly, are at greater risk of acquiring a *C. difficile* infection.

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS** – One of the most common type of healthcare-associated infection. Virtually all healthcare-associated urinary tract infections are caused by instrumentation such as a catheter inserted into the urinary tract.

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS** – An infection that occurs when germs enter the body through thin plastic tubes that are placed in a large vein near the patient’s neck, chest, arm or groin (a central line).

**FALLS** – A fall within a healthcare site that results in harm for the patient.

**EARLY ELECTIVE DELIVERIES** – A birth scheduled by choice before the 39th week of pregnancy without a medical reason or need. Studies show EEDs are associated with increased complications for both mothers and newborns, compared to deliveries occurring beyond 39 weeks and women who go into labor on their own.

**OBSTETRIC ADVERSE EVENTS** – A pregnancy-related complication that results in harm to the mother or baby, including injuries or trauma that may occur during delivery.

**PRESSURE ULCERS** – Injuries to skin and underlying tissue resulting from prolonged pressure on the skin. Pressure ulcers most often develop on skin that covers bony areas of the body, such as the heels, ankles, hips and tailbone.

**READMISSIONS** – A patient admission to a hospital within 30 days after being discharged from an earlier hospital stay.

**SEPSIS** – A potentially life-threatening complication of an infection. Sepsis occurs when chemicals released into the bloodstream to fight the infection trigger inflammatory responses throughout the body.

**SURGICAL SITE INFECTIONS** – An infection that occurs after surgery in the part of the body where the surgery took place.

**VENOUS THROMBOEMBOLISM** – A blood clot that develops in a vein due to immobilization.

**VENTILATOR-ASSOCIATED EVENTS** – Lung infections that can occur in people who are on breathing machines in hospitals. Ventilator-associated pneumonia typically affects critically ill persons that are in an intensive care unit.
Tasha Dunn, RN; and Allison Paul, RN, are colleagues in the critical care unit at St. Peter’s University Hospital, where they have championed the Partnership for Patients’ goal of creating a culture of safety that carries through to all employees, in all parts of the hospital. They credit an education program at the New Jersey Hospital Association with energizing them and helping them apply education and best practices that empower nurses to play a central role in preventing catheter-associated urinary tract infections. And the measure of their success? Last year just three catheter patients in their unit acquired an infection – and now they’re aiming for zero.

Tasha Dunn, RN: “We were so inspired. We fell in love with this whole culture of safety idea. We engaged the management, we got everyone onboard and we got our team together. At that point everyone was really just so enthused about it, and it stuck. We really changed the culture of the entire unit.

Allison Paul: “A culture of safety is to bring awareness that as nurses, our priority is patient safety. If one patient is harmed by something that we could have prevented, that is one patient too many.”

Each year of New Jersey’s Partnership for Patients includes “learning action networks” and collaboratives to focus on specific areas for improvement, with models like “all teach/all learn” and the Comprehensive Unit-based Safety Program (CUSP). These specialty areas complement the overall work on reducing hospital-acquired conditions.

### TIMELINE

**2012**
- Improving Patient Flow for Better Efficiency
- Early elective deliveries

**2013**
- CUSP programs to reduce bloodstream & urinary tract infections
- Adverse Drug Event Collaborative

**2014**
- CUSP programs to prevent ventilator-associated events & surgical infections

**2015**
- Sepsis Learning Action Collaborative
- Preventing catheter-related infections in the ED

**2016**
- Antimicrobial Stewardship
- C. difficile reduction
- Fall prevention

**HIGHLIGHTS**

- **2012**
  - Hospitals decrease ER wait times up to 85%
  - Early elective deliveries decline by 48%

- **2013**
  - Bloodstream & urinary tract infections decline 24%
  - The combined cost savings is nearly $3 million.

- **2014**
  - 27.1% decline among all hospital-acquired conditions
  - NJHA selected among 17 nationwide to continue as HEN

- **2015**
  - Sepsis mortality declines 11%, 400 lives saved
  - NJ posts nation’s 2nd best rate of readmissions reduction
NJHA and its members use several proven strategies to achieve results. Specific models over the Partnership for Patients’ first five years have included Plan-Do-Study-Act (PDSA) cycles to test and guide change and TeamSTEPPS methods to drive an overall culture of quality and safety. But in the simplest of terms, NJHA’s efforts embrace three key tactics:

- **TRAINING** – Healthcare providers join with NJHA in regular education sessions, both in person and by webinar. NJHA recruits industry experts from across the nation to present evidence-based best practices that provide proven, consistent approaches to avoiding adverse events. These approaches are incorporated into the hospitals’ practices and culture to improve care.

- **TOOLS** – Partnership for Patients participants receive an arsenal of tools from NJHA and the Centers for Medicare and Medicaid Services to apply in their organizations. This toolbox includes guidelines, checklists, training manuals, how-to guides, instructional videos, algorithms, brochures and more.

- **DATA** – Collecting and sharing data is an essential component of this quality improvement initiative. Participants report data to NJHA monthly, and NJHA uses it to provide dashboards and benchmarking for analysis. Data allows healthcare providers to understand their current situation, identify areas that need improvement and measure the impact of any strategies they implement. In short, good data reviewed regularly helps healthcare providers know where they stand – and drives them to where they want to go.

Dr. Marty Scott has spent the last 15 years of his professional career focused on patient safety – first at the Wake Forest Medical Center in North Carolina and now as chief transformation officer at Hackensack Meridian Health. As a physician, he leads the clinical team in providing quality care, but he will be the first to say that taking good care of patients is a team sport – as emphasized in the Partnership for Patients. And winning is measured not in points scored, but in lives’ saved.

“What we know is that medicine is too complex to think that any one person could have every piece of information. It really does require a team. The physician is in the quarterback position, but that physician is not at the bedside 24 hours a day. You have to have that nurse and that nursing team, and the technicians, pharmacy, therapists, pastoral care, social workers…. You have to talk about having all that expertise coalesce around the needs of that patient.

“The big thing that you deliver is changing a patient’s life…. If you think about all the people that you protected from a hospital-acquired condition, those are people who got to have another birthday, another anniversary. Or they got to walk their daughter down the aisle or have a catch with their grandson. That’s pretty cool.”

“What we know is that medicine is too complex to think that any one person could have every piece of information. It really does require a team. The physician is in the quarterback position, but that physician is not at the bedside 24 hours a day. You have to have that nurse and that nursing team, and the technicians, pharmacy, therapists, pastoral care, social workers…. You have to talk about having all that expertise coalesce around the needs of that patient.

“The big thing that you deliver is changing a patient’s life…. If you think about all the people that you protected from a hospital-acquired condition, those are people who got to have another birthday, another anniversary. Or they got to walk their daughter down the aisle or have a catch with their grandson. That’s pretty cool.”
In 2017, the healthcare partners participating under the new Hospital Improvement Innovation Network continue to focus their efforts on the national program’s goals: 20 percent further reduction in overall patient harm and a 12 percent reduction in 30-day hospital readmissions. Within that framework, NJHA is zeroing in on some specific priorities:

**ANTIMICROBIAL STEWARDSHIP:** Each year in the United States, at least 2 million people become infected with bacteria that are resistant to antibiotics, and about 23,000 people die as a direct result of those infections, according to the Centers for Disease Control and Prevention. The use of antibiotics is the single most important factor leading to antibiotic resistance. NJHA’s collaborative promotes and measures use of the appropriate agent, dose, duration and route of administration of antimicrobial agents both in the hospital and in post-acute care settings. Special attention is being paid to combatting Clostridium difficile (C. diff.), a bacteria that causes infection that disrupts and inflames the colon.

**HIGH RELIABILITY ORGANIZATIONS:** NJHA is embarking on a new collaborative to bring resources and support to hospitals as they begin a journey to become “high reliability organizations.” High reliability organizations are defined as complex, high-risk organizations that deliver the right outcome each and every time, despite human error and potentially unsafe systems and processes. The science, strategies and tools of high reliability have been used by numerous organizations that need to manage high levels of risk, including those in the aviation and nuclear power industries. NJHA’s collaborative applies those same tools and strategies to the healthcare environment.

**PATIENT AND FAMILY ENGAGEMENT:** Improving patient safety and quality of care requires a redesign of relationships. Patients and family members should feel empowered to ask questions, state their opinion, have access to patient records and be active and engaged alongside clinicians in any care decisions. NJHA is collaborating with experts in patient and family engagement to help implement patient and family advisory councils in all New Jersey hospitals. NJHA will also provide tools to help hospitals implement strategies for improved communications between clinicians and patients, interactive learning sessions at the bedside and “safety rounds” within the hospital that include patients and family members.

**SAFE IMAGING:** The Safe Imaging Collaborative is a new effort to reassess how hospitals treat minor head trauma in children. The goal is to prevent kids from having unnecessary CT scans, which exposes them to potentially harmful radiation. Healthcare professionals are being trained with new assessment protocols to help determine when a scan is needed — and when it’s not. Additional tools will help educate parents, athletic trainers and others about the different types of head injuries, when a scan is appropriate and the dangers of exposing children to radiation if a CT scan isn’t necessary.
Working Together to Make Healthcare BETTER

Partnership for Patients-NJ
2012-2016 Progress Report