

# The Hill-Rom® 900 Accella™ Bed

Improve safety. Enhance outcomes. Simplify tasks.



Enhancing outcomes for patients and their caregivers:

**Hill-Rom**

# Challenges in Healthcare

In a complex healthcare environment, hospitals are often presented with the following challenges:

## Patient Safety

**Approximately 1 in 5 acute care patients will develop a pressure ulcer.**<sup>1</sup>

Patients developing pressure injuries experience poorer outcomes and increased costs of treatment.

Acute hospitals have reported from **5 falls per 1,000 bed days in general wards, and up to 18 falls per 1,000 bed days** in specialist units with patients more vulnerable to falling.<sup>2</sup>

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## Improving outcomes through early mobilisation

Reducing length of stay (LOS) through early mobilisation has been associated with better outcomes for patients and reduced cost of care. From a financial perspective, the **mean LOS in the ICU is 5.7 days and each day in the ICU costs hospitals €1,596.**<sup>3</sup>

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## Staffing constraints

**29%-38% of nurses report a shortage of registered nurses.**<sup>4</sup>

Often the nurse to patient ratio is less than ideal for higher acuity settings, and clinicians spend more time than they would prefer on administrative tasks rather than caring for patients.



The Hill-Rom 900 Accella bed was designed specifically to solve these challenges within high acuity settings by focusing on:

- **Improving Safety**
- **Enhancing Outcomes**
- **Simplifying Tasks**

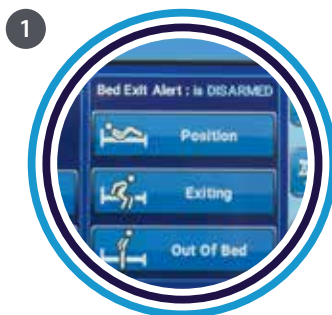


# Features that add up

Hill-Rom 900 Accella is designed specifically for the higher acuity setting by focusing on Improving Safety, Enhancing Outcomes through Early Mobilisation, and Simplifying Tasks.



- Improving Safety
- Enhancing Outcomes
- Simplifying Tasks



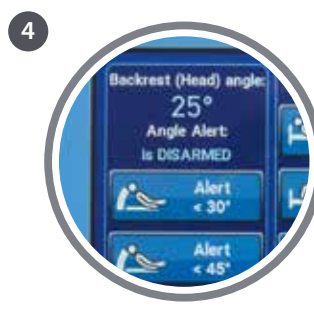
**3-Mode Bed Exit Alarm**  
(pg 6)



**Auto CPR**  
(pg 7)



**Steam Clean Validated**  
(pg 7)



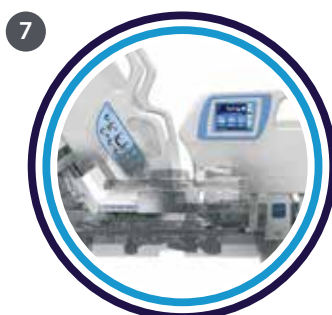
**Head-Of-Bed Angle Alarm**  
(pg 12)



**One-Touch Side Egress**  
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**Simple Weigh**  
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**SlideGuard™**  
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**Graphical Caregiver Interface**  
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# Improving Safety

## Reduce risk of patient falls

### 3-Mode Bed Exit Alarm

A **bed exit alarm**, alerts caregivers of potential **bed exit events**.

With **3 modes**, settings can be adjusted to the appropriate mode for your care setting and patient.

There is also an optional ability to alert the caregiver at the nurse station via a **nurse call system**.\*



### Intelligent Night Light

To maximise patient safety and minimise patient injury, the bed should be placed in its lowest position at night.

**With its ambient lighting, the intelligent nightlight:**

- Shines **green** when the bed is in its **lowest position**
- Shines **orange** alerting for **potential height adjustment**



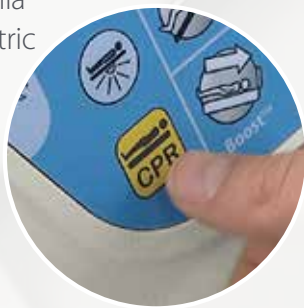
### Brake-Off Indicator

Alerts caregivers if the brakes are not engaged via an audible tone that continues until one of the brake pedals is depressed.

## Auto CPR

The **Auto CPR function** rapidly flattens the backrest of the bed, freeing the caregiver to commence CPR **within 5 seconds, while the bed continues to automatically move** into a horizontal position.<sup>5</sup>

The Hill-Rom 900 Accella bed also offers an electric CPR function.



## Simplified cleaning and disinfection

The prevalence of Hospital Acquired Infections (HAIs) pose an ongoing challenge in high acuity wards, with an estimated 4.1 million infections per year for patients in the EU, resulting in 16 million additional hospital days.<sup>6</sup>

In addition to traditional cleaning protocols, Hill-Rom 900 Accella is **validated for steam cleaning.**

# Improving Safety

## Pressure ulcer treatment and prevention

### Transform outcomes with Hill-Rom surfaces

Hill-Rom offers an extensive range of compatible foam, hybrid and powered surfaces for the prevention of pressure ulcers and the promotion of wound healing.





Therapeutic surfaces incorporate a variety of technical features including I-mmersion™ sensors and advanced Microclimate Management™, which together with frame articulation are designed to enhance patient rehabilitation and contribute to the prevention and treatment of pressure ulcers.

A selection of both surfaces and bed frames\* is available to rent via Hill-Rom OnDemand (<http://ondemand.hill-rom.com>), an online management tool for therapeutic surfaces and beds.

\* Dependent on both geographical market and product selection.



### Clinical Positioning Guide\*\* for Hill-Rom therapeutic surfaces collection

Foam surfaces			Hybrid surface
			
<b>NP50 Monodensity</b>	<b>NP100 Bidensity</b>	<b>NP150 Viscoelastic</b>	<b>AccuMax Quantum™ VPC</b>
<b>Comfort</b>	<b>Prevention</b>	<b>Prevention</b>	<b>Prevention &amp; Treatment</b>
Recommended for patient/resident support and comfort or for patients/residents at low risk.	Recommended for patients/residents up to moderate risk and/or having Stage I pressure ulcers.	Recommended for patients/residents up to moderate risk and/or having Stage I pressure ulcers requiring the highest level of pressure redistribution from a foam.	Recommended for patients/residents having up to Stage IV pressure ulcers.
<b>RISK LEVEL</b> Low	Low to Moderate	Low to Moderate	Moderate

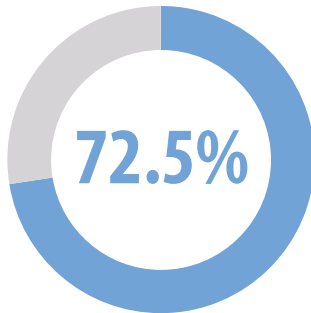
\*\* This guide is not intended as a replacement for validated risk assessment tools or clinical judgment. All contributing risk factors should be taken into account when making a choice of surface. In accordance with NPUAP/EPUAP guidelines, Hill-Rom recommends that the condition of each patient/resident be regularly checked. For patients/residents with special needs, Hill-Rom recommends the use of the most suitable I-mmersion Therapy system. Caregivers are responsible for making this decision, in accordance with modern care practices.



## Pressure ulcers occur in significant numbers each year:

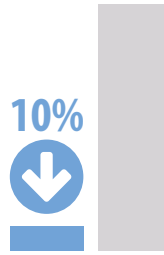


On average **1 in 5 patients** in acute care have a pressure ulcer<sup>1</sup>



Pressure ulcer prevalence in healthcare settings can be **as high as 72.5%**<sup>7</sup>

## Have serious outcomes for patients:



**Fewer than 10%** of patients receive adequate preventative care<sup>1</sup>



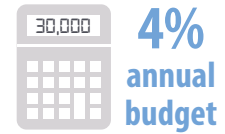
The development of a single pressure ulcer can **increase a patient's length of stay five-fold**<sup>8</sup>

## And high costs for hospitals around the globe:

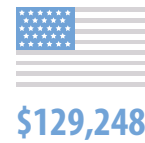


In the Netherlands pressure ulcers consume up to **€2.6 billion** of healthcare expenditure annually<sup>10</sup>

In the UK, pressure ulcers consume up to 4% of the annual healthcare budget with costs estimated at **£30,000 per case**<sup>9</sup>



The average cost of treating a pressure ulcer in the US is estimated at **\$129,248**<sup>11</sup>



### Powered surfaces



**P280**



**Primo™**



**ClinActiv™ ⊕/MCM™**



**Duo™ 2**

**Prevention & Treatment**

**Prevention & Treatment**

**Prevention & Treatment**

**Prevention & Treatment**

Recommended for patients/residents up to high risk and/or having up to Stage III pressure ulcers.

Recommended for patients/residents up to high risk and/or having up to Stage III pressure ulcers.

Recommended for patients/residents up to very high risk and/or having up to Stage IV pressure ulcers.

Recommended for patients/residents up to very high risk and/or having up to Stage IV pressure ulcers.

**High**

**High**

**Very High**

**Very High**

**RISK LEVEL**

# Enhancing Outcomes through Early Mobilisation

## Why early mobility?

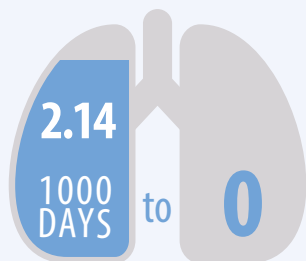
Complications of immobility include:<sup>12</sup>

- Increased length of stay
- Higher treatment costs
- Higher mortality rates
- Greater risk of work-related injuries

The implementation of an early mobility program in a critical care environment, such as the **Progressive Mobility™ Program** from Hill-Rom, can result in decreased length of stay, reduction in costs and improvement in the health and well-being of the patient.<sup>13-18</sup>

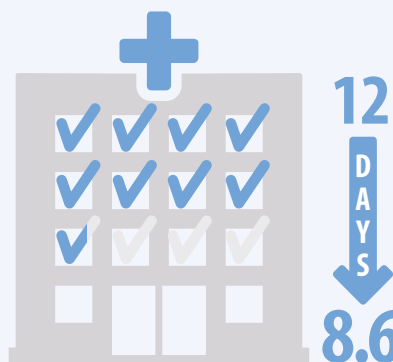


Early mobilisation has a direct correlation to the reduction of HAIs reduced by 60%<sup>17</sup>



Ventilator Associated Pneumonia (VAP) significantly decreased from a rate of **2.14 per 1,000 days to zero**<sup>17</sup>

## Results using a mobility program<sup>17</sup>



Hospital length of stay significantly **decreased from 12 to 8.6 days**<sup>17</sup>

# Hill-Rom Progressive Mobility Program

Due to the complications associated with immobility, implementing a **Progressive Mobility Program** can help achieve better clinical and financial outcomes.



## Breathe

For more effective breathing, reducing complications of immobility

- **HOB > 30° / HOB Alarm** – maintains optimal HOB angle



## Tilt

Getting the patient physiologically ready for sitting and standing

- **HOB > 30° / HOB Alarm** – maintains optimal HOB angle
- **17° Reverse Trendelenberg** – provides orthostatic conditioning



## Sit

Facilitates better breathing, enabling physiological adaptation to the upright position

- **EasyChair** – facilitates gas exchange
- **SlideGuard** – prevents patient migration and torso compression



## Stand

Allows patients to attempt standing with additional support

- **One-Touch Side Egress** – builds patient strength
- **Sit-to-stand Liko lifts** – provides partial weight bearing



## Move

Patients can be weak but able to cooperate with out-of-bed orders. One-Touch Side Egress – builds patient strength:

- **Sit-to-stand Liko lifts** – achieves out-of-bed orders
- **Liko stand-up and lifting solutions** – helps patients ambulate

# Enhancing Outcomes through Early Mobilisation

Reducing length of stay through early mobilisation provides better outcomes for patients and reduced cost of care.

The Hill-Rom 900 Accella bed is here to assist you with early mobilisation.



## Head-Of-Bed (HOB) Angle Alarm

A HOB angle alarm **ensures compliance** of local protocols.

This can be critical as studies have shown that **when the HOB is elevated to 45 degrees, there is only a VAP rate of about 5% compared to when the patients were lying supine where the rate was 23%.**<sup>19</sup>

## One-Touch Side Egress

**One-Touch Side Egress** allows the caregiver to egress in an optimal sequence by simply pressing one button.

**This feature:**

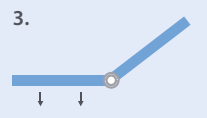
**Levels** the bed into a horizontal position



**Positions** the backrest such that the **integrated care-grip handle** is in the optimal ergonomic position for egress



**Lowers** the bed until an **ideal height** is reached for the patient to egress



# Simplifying tasks

The Hill-Rom 900 Accella bed is designed with caregiver efficiency in mind, simplifying tasks to free up valuable time to care for patients.



## Simple Weigh in-bed scale

Simple Weigh allows caregivers to **measure a patient's weight instantly without having to adjust accessories.**



● Area being weighed



Extensive hanging space offers caregivers a solution for multiple drainage bags.

Simple Weigh also **clearly displays the difference** from previous weight measurement.

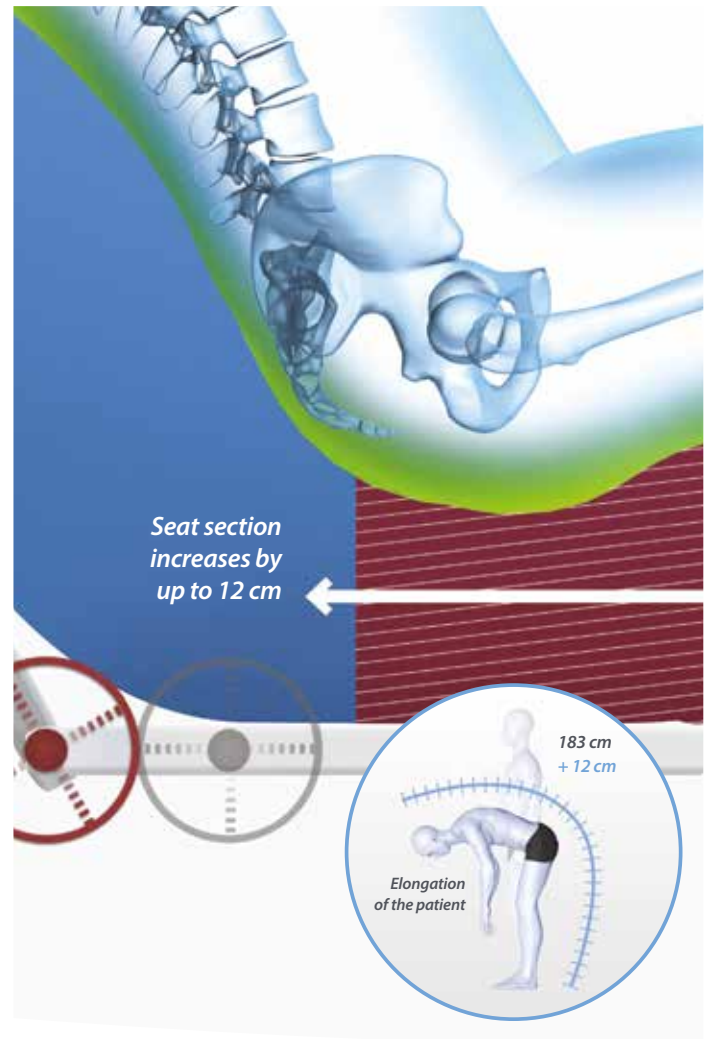
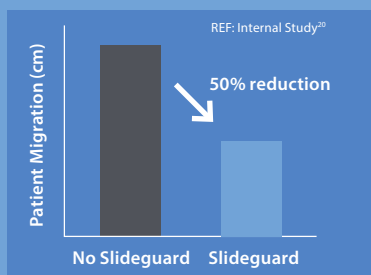
# Simplifying tasks

## SlideGuard™

SlideGuard technology can achieve a **50% reduction in patient migration** compared with other similar beds<sup>20</sup>, resulting in:

1. Less patient migration
2. Less friction and shear forces with less patient repositioning
3. Reduced torso compression

SlideGuard technology (a component of the intelligent AutoContour™ function) facilitates the natural elongation of the patient body by allowing the seat section of the bed surface area to extend by up to 12 cm as the bed is articulated.



## Graphical Caregiver Interface (GCI)

The intuitive GCI simplifies workflow by offering caregivers a bright and easy-to-use interactive touch screen that:

- Controls **head-of-bed** and **bed-exit alarms**
- Offers access to **Simple Weigh**, helping caregivers to weigh patients via a series of easy-to-follow prompts
- Displays **head-of-bed angle** and **horizontal profile of the bed**
- Features **service indicators** in the Settings menu



# Power of One Platform



Hill-Rom 900 Accella builds off the successful **Hill-Rom 900 platform**, with its proven reliability, benefiting from years of exemplary performance in hospitals around the globe.

Consistent across the entire platform are features designed for **patient safety and comfort**.



Hill-Rom 900 beds have been installed over 110,000 times globally.



## Maximise return on investment by:

- Reducing **maintenance and service** costs by sharing a common pool of **spare parts, service technicians** and compatible Hill-Rom **surfaces**
- **Intuitive bed controls** with recognisable iconography and standardised functionality facilitate easier staff training
- Beds across the entire platform are designed to **simplify workflow tasks** meaning that caregivers spend less time operating the bed and more time focusing on essential patient care
- **Standard features** such as an industry-leading 4 cm lateral space consumption for siderails, use less space and can be lowered effortlessly with one hand

Flexible design means care facilities are able to seamlessly move patients in the Hill-Rom 900 Accella across varying levels of acuity as their care needs change. This **minimises the impact on the patient and caregivers**.

Hill-Rom is a leading global medical technology company with more than 10,000 employees worldwide. We partner with healthcare providers in more than 100 countries, across all care settings, by focusing on patient care solutions that improve clinical and economic outcomes in five core areas: **Advancing Mobility, Wound Care and Prevention, Patient Monitoring and Diagnostics, Surgical Safety and Efficiency and Respiratory Health.** The people, products and programs of Hill-Rom work towards one mission: **Every day, around the world, we enhance outcomes for patients and their caregivers.**

#### References

- Vanderwee K, Clark M, Dealey C, Gunningberg L, Defloor T. Pressure ulcer prevalence in Europe: a pilot study *Journal of Evaluation in Clinical Practice*. 2007, 13(2): 227–235.
- Oliver D. Assessing the risk of falls in hospital: time for a rethink? *Canadian Journal of Nursing Research*. 2006; 38: 89–94.
- Tan et al. Direct Cost Analysis of Intensive Care Unit Stay in Four European Countries: Applying a Standardized Costing Methodology. *ISPOR Jan-Feb 2012*: 15:181–86
- Aiken LH, Clarke SP, Sloane DM, Sochalski JA, Busse R, Clarke H, et al. Nurses' reports on hospital care in five countries. *Health Aff*. 2001;20(3):43–53.
- Internal Hill-Rom study, 2017, measuring timing of AutoCPR function.
- Annual epidemiological report on communicable disease in Europe, 2008, ECDC [http://ecdc.europa.eu/en/healthtopics/healthcare-associated\\_infections/Pages/index.aspx](http://ecdc.europa.eu/en/healthtopics/healthcare-associated_infections/Pages/index.aspx).
- Samaniego IA. A sore spot in pediatrics: risk factors for pressure ulcers. *Pediatric Nurs*. 2003 Jul-Aug;29(4):278–82.
- Allman R, Goode PS, Burst N, Bartolucci A, Thomas DR. Pressure Ulcers, hospital complications, and disease severity: implications on hospital costs and length of stay. *Advances in Woundcare* 1999;12(1):22–30.
- Banks M, Graves N, Bauer J, Ash S. The costs arising from pressure ulcers attributable to malnutrition. *Clinical Nutrition*. 2010;29:180–6.
- Schuurman JP, Schoonhoven L, Defloor T, van Engelshoven I, van Ramshorst B, Buskens E. Economic evaluation of pressure ulcer care: A cost minimization analysis of preventative strategies. *Nursing Economics*. 2009;27(6):390–415.
- Brem H, Maggi J, Nierman D et al (2010) The High Cost of Stage IV Pressure Ulcers. *American Journal of Surgery* 200:473–477.
- Brophy et al. Reducing incidence of low-back injuries reduces cost. *Jul/Aug 2001*.
- Dasta JF, et al. Daily cost of an intensive care unit day: the contribution of mechanical ventilation. *Crit. Care Med*. 2005; 33:1266–1271.
- Bailey P, et al. Early activity is feasible and safe in respiratory failure patients. *Crit. Care Med*. 2007; 35:139–145.
- Morris PE, et al. Early intensive care unit mobility therapy in the treatment of acute respiratory failure. *Crit. Care Med*. 2008; 36:2238–2243.
- Schweickert WD, et al. Early physical and occupational therapy in mechanically ventilated, critically ill patients: a randomized controlled trial. *Lancet*. 2009; 373:1874–1882.
- Titsworth WL, et al. The effect of increased mobility on morbidity in the neurointensive care unit. *J. Neurosurg*. 2012; 116:1379–1388.
- Winkelman C. Bed rest in health and critical illness: a body systems approach. *AACN Adv. Crit. Care*. 2012; 20:254–266.
- Supine body position as a risk factor for nosocomial pneumonia in mechanically ventilated patients: a randomised trial. *Drakulovic MB, et al. Lancet*. 1999; 354:1851–1858.
- Internal Hill-Rom study, 2017, comparing Accella vs. competitor bed without SlideGuard.

#### Hill-Rom NP 50 / NP100 / NP150

These products are intended to help to prevent pressure ulcers in patients with no risk or at low risk (NP 50) and patients up to moderate risk (NP 100/NP 150), weighing between 30 kg and 150 kg with a minimum height of 1.46 m, in a range of healthcare environments.

Class I. Manufacturer: Hill-Rom S.A.S. – BP 14 ZI du Talhouët 56330 Pluvigner France

#### AccuMax Quantum VPC

The AccuMax Quantum VPC surface is a therapeutic pressure redistribution system that aids in the prevention/treatment of up to Stage IV pressure ulcers in patients at moderate risk for developing pressure ulcers and with a minimum weight of 40 kg and a minimum height of 1.46 m, when combined with recommended turning protocols.

Class I. Manufacturer: Hill-Rom Inc, 1069 State Route 49E, Batesville, Indiana, 47006 – 9167 USA  
European Representative: Hill-Rom S.A.S. – BP 14 ZI du Talhouët 56330 Pluvigner France

#### P280 / Primo

These devices are intended to help prevent and treat pressure ulcers up to Stage III in low to high risk patients, with a minimum weight of 30 kg and a minimum height of 1.46 m, in a range of healthcare facilities.

Class IIa. Notified Body: LNE/G-Med CE0459

Manufacturer: Hill-Rom S.A.S. – BP 14 ZI du Talhouët 56330 Pluvigner France

#### ClinActiv+ / ClinActiv+ MCM / Duo 2

These devices are intended to help prevent and treat pressure ulcers up to Stage IV in low to very high risk patients, with a minimum weight of 30 kg and a minimum height of 1.46 m, in a range of healthcare facilities.

Class IIa. Notified Body: LNE/G-Med CE0459

Manufacturer: Hill-Rom S.A.S. – BP 14 ZI du Talhouët 56330 Pluvigner France

The Hill Rom 900 Accella bed is intended for use in intensive, acute and ambulatory care settings for patients with a weight  $\geq 40$  kg, height  $\geq 146$  cm and BMI  $\geq 17$ .

Medical device (93/42/EEC): Class I

Weigh system (2014/31/EEC): Class III

Manufacturer: Hill-Rom S.A.S. – BP 14 ZI du Talhouët 56330 Pluvigner France

This medical device is a regulated health product which, pursuant to such regulation bears a CE mark. Hill-Rom recommends that you carefully read the detailed instructions for safe and proper use included in the documents accompanying the medical devices. The personnel of healthcare establishments are responsible for the proper use and maintenance of these medical devices.

Hill-Rom reserves the right to make changes without notice in design, specifications and models. The only warranty Hill-Rom makes is the express written warranty extended on the sale or rental of its products.

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For further information about this product or a service, please contact your local Hill-Rom representative or visit our webpage:

[www.hill-rom.com](http://www.hill-rom.com)

Enhancing outcomes for patients and their caregivers:

**Hill-Rom**