



The Science Behind Falls Management

HD Nursing, LLC is a Falls Management Solution Company dedicated to improving falls and injury management across the continuum of care. We provide the research and evidence-based clinical tools necessary for:

- Scientifically Validated Fall Risk Assessment using the Hester Davis Scale® (HDS)
- Individualized, Evidence Based HD Falls Care Plan - integrated with HDS Fall Risk Assessment Tool®
- HDS is the only validated fall risk assessment tool in electronic format (EHR)
- HDS - Highest Sensitivity of any validated Fall Risk Scoring Tool (HDS 90/91% - Morse 73%)
- HDS is available within **Epic**'s EMR and has been integrated into **Epic**'s 2014 Foundation System



The HD Falls Program was developed and validated over four years at University of Arkansas for Medical Sciences (UAMS) in Little Rock, AR. UAMS has partnered with HD Nursing, LLC through it's BioVentures Group to make the research and clinical tools available to industry.

Journal of Neuroscience Nursing

Validation of the Hester Davis Scale for Fall Risk Assessment in a Neurosciences Population

Amy L. Hester, Dees M. Davis

ABSTRACT

Background and Purpose: Fall risk assessment is a necessary component of fall prevention programs. Accurate instruments to predict the risk of falling are paramount in identifying the correct patients in need of fall prevention measures. The purpose of this study was to prospectively validate the Hester Davis Scale (HDS) for fall risk assessment in an acute care setting in the South Central United States. **Methods:** The HDS was prospectively validated in 1,904 patients on a neurosciences unit. **Results:** Using an initial cut score of 7 produced a sensitivity of 100% and specificity of 24.9%. Receiver Operating Characteristic Analysis evidenced a cut score of 10 that would produce a more desirable sensitivity and specificity of 90.9% and 47.1%, respectively. **Conclusion:** The results of the psychometric evaluation and validation of the HDS support its use in clinical practice.

Keywords: fall instruments, fall prediction, fall risk assessment, neuro falls

Psychometric Statistics of Commonly Used Adult Inpatient Fall Risk Prediction Tools

	Screening Tools			Assessment Tools
	MORSE ^a	Johns Hopkins ^b	HENDRICH II ^c	HDS ^{d, e}
Initial Paper Validation	1987	Not Validated	2003	2010
Revalidated in EMR	No	No	No	2012
Sensitivity	73%	Not Validated	75%	91% Paper 90% EMR

Abbreviations: EMR, Electronic Medical Record; ND, no data

^aData from Morse, Oberle • ^bData from Williams, Szekendi, Thomas • ^cData from Hendrich

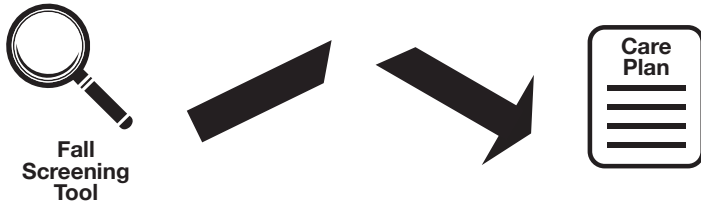
^dData from Hester, Davis • ^eData from Bane, Hester



HDS identifies the RIGHT at-risk patients

What Makes Us Different?

Hospital Falls Program (Common Approach)



- Developed separately – **not** linked.
- Screening tools too general to identify specific modifiable risk factors.
- Therefore, care plans only include general interventions – not targeting specific individualized fall risk factors - **ALL PATIENTS ARE TREATED THE SAME REGARDLESS OF RISK FACTORS.**
- General approach that **rarely** changes during patient stay.

HD Nursing Falls Program



- Developed, tested and validated together.
- HDS creates **individualized** patient fall risk profile.
- HD Care Plan - results of HDS drives an **individualized** HD Care Plan targeting specific modifiable risk factors.
- HDS: specific enough to identify changes in patient condition - allows for care plan interventions to be withdrawn or intensified based on patient's changing status.
- HD Care Plan eliminates Patient Sitters and includes use of material resources; drives targeted, efficient, and **cost effective** use.

Success Stories

UAMS Medical Center Little Rock, AR

- 2011:** UAMS lowers fall injury rates by 60%, **saves over \$1.2M in falls related costs and \$330,000 by eliminating Patient Sitters for falls risk**
- 2012:** The HDS is converted and validated in an electronic medical record
- 2013:** UAMS receives RHCC Intelligent Hospital Award Nomination for implementation of the HD Falls Program
- 2013:** UAMS lowers fall injury rates an additional 43%
- 2013:** UAMS recognized by University Healthsystem Consortium as a "Top Performer" in falls and injury prevention via UHC Member Spotlight
- 2013:** UAMS achieves lowest recorded fall rates in organization history

White River Medical Center Batesville, AR

- "The **HDS** is a risk assessment tool the clinicians believe in and trust." - Progressive Care Nurse Manager
- "The **HDS** Falls Program provides a more **accurate** reflection of the true fall risk in our patients that makes the volume of patients needing intervention more manageable and doable" - Senior Haven Nurse Manager
- PCU fall rates have declined and fall injury rates are **down 23%** since implementation of the **HD Falls Program**. Senior Haven saw significant improvement with a **56% reduction** in fall related injuries.