



ACCE Healthcare Technology Foundation  
5200 Butler Pike  
Plymouth Meeting, PA 19462-1298  
Phone: 610-825-6067  
[www.acce-htf.org](http://www.acce-htf.org)

*President*

**Wayne Morse** MSBME MBA CCE

*Vice President*

**Jennifer C. Ott** MSBME CCE

*Secretary*

**William Hyman** ScD PE

*Treasurer*

**Henry Montenegro** MS CCE

*Immediate Past President*

**Yadin David** EdD PE CCE

*Board of Directors*

**J. Tobey Clark** MSEE CCE

**Stephen L. Grimes** FACCE SHIMSS

**Ode Keil** MS MBA CCE

**Jim Keller** MSBE

**Frank R. Painter** MSEng CCE

**Bryanne Patail** BS MLS FACCE

**Elliot B. Sloane** PhD

**Henry Stankiewicz Jr.** MSBME

**James O. Wear** PhD CCE CHSP FASHE

*Advisory Board*

**Dave Dickey** MS CHC CCE

**Denise Korniewicz** DNSc RN FAAN

A Call For Action

Date: December 1, 2006

Dear Clinical Engineering Colleague;

The ACCE Healthcare Technology Foundation (**AHTF**) has begun **distribution of the** white paper – ***Impact of Clinical Alarms on Patient Safety*** (<http://www.acce-htf.org/White%20Paper.pdf>), which I hope you will both read and act on. This paper reviews the literature related to clinical alarm issues and analyzes related adverse event databases. Efforts to improve alarms features through technological, standards, and regulatory means are also assessed and evaluated. Significant findings consisted of 1) recommendations to the medical device industry to greatly improved parameter acquisition accuracy, use “smart” alarm technology, and intelligent alarm systems including appropriate tie-in to IHE, and 2) recommendations to consider ISO/IEC 60601-1-8 improved alarm standards. From a patient care perspective, clear outcomes of the study included a strong clinical response showing false alarms to be the most significant issue, along with the need to manage alarms through prioritization, training and work processes assessment.

A clinically focused manuscript based on this study for publication in a major nursing journal has been submitted. This paper contains the following key suggestions/recommendations:

1. Review and revise, where appropriate, existing policies related to clinical alarm management (i.e., use of defaults; changing of alarm limits, expected clinical responses to alarm conditions, etc.).
2. Perform frequent clinical alarm monitoring rounds, to alert users to any variations from unit specific guidelines.
3. Develop audit tools to measure compliance with established policies and policies related to clinical alarm management.
4. Development and completion of a checklist associated with clinical alarm management, and document compliance at shift change.
5. Conduct inservice and simulation training associated with new equipment.

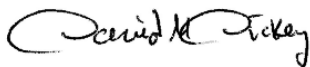
6. Conduct a monthly discussion of adverse or near-miss events associated with clinical alarms, including staff nurses, patient safety personnel and clinical engineering staff.
7. Implement an annual review of data associated with nuisance versus non-nuisance clinical alarms.
8. Develop a system-wide education plan associated with the proper use of clinical alarms that would help ensure safe patient management, competency and knowledge about the proper (alarm) responses or actions to take in response to such alarms.
9. Develop of unit specific clinical alarm management protocols, which include a focus on accurate parameter acquisition and setting, prioritization of alarms, and a reduction of the number of alarms where possible.

In order to quantify how the CE profession can impact patient safety as related to this project, I ask for your help in disseminating and acting on the above referenced document. Specifically, I would like you to do the following:

1. **Print** or use the hard copy of the white paper, and schedule a meeting with your hospital's CEO, Risk Management, Safety Director and Nursing Executive to discuss. Or, as an option, bring the matter to the attention of your hospital's patient safety and/or risk management committee.
2. **Discuss** the overall content of the paper, as well as its specific recommendations.
3. **Document the outcome** of your efforts by filling out the attached form, and fax it back to me at **(810) 342-4306 by March 31, 2007** (no names, please, so that all returned survey forms can remain confidential).

Your participation is greatly needed, and appreciated.

Sincerely,



David M. Dickey, CHC, CCE  
Board Advisor

CC: AHTF Clinical Alarms Task Force



**IMPACT OF CLINICAL ALARMS ON PATIENT SAFETY: A CALL FOR ACTION**

1. My facility is a
  - a. Hospital less than 200 beds \_\_\_\_\_
  - b. Hospital between 200-400 beds \_\_\_\_\_
  - c. Hospital with over 400 beds \_\_\_\_\_
  - d. Other facility: \_\_\_\_\_
  
2. Discussed white paper and suggested recommendations with:
  - a. Risk Mgt: \_\_\_\_\_
  - b. Safety Director: \_\_\_\_\_
  - c. Nursing Executive: \_\_\_\_\_
  - d. Entire Safety Committee: \_\_\_\_\_
  - e. Other healthcare executive: \_\_\_\_\_
  
3. Interest/likelihood of taking action of some form within the next 6 months:
  - a. High \_\_\_\_\_
  - b. Med \_\_\_\_\_
  - c. Low/No action likely will be taken \_\_\_\_\_
  
4. Action(s) which will **most likely** be taken at your facility in response to awareness generated by the clinical alarms white paper:
  - \_\_\_ None. We already have alarm awareness protocols and management practices in place
  - \_\_\_ None. We don't perceive this to be a problem at our facility.
  - \_\_\_ None. While we need to do something, we have limited resources.
  - \_\_\_ Perform daily clinical alarm monitoring rounds.
  - \_\_\_ Development and completion of a checklist associated with clinical alarms.
  - \_\_\_ Provide new or additional inservice training on proper use of device alarms in selected care units.
  - \_\_\_ Monthly discussion of adverse events associated with clinical alarms.
  - \_\_\_ Implementation of annual review of data associated with nuisance versus non-nuisance clinical alarms.
  - \_\_\_ Development of a system-wide education plan associated with the proper use of clinical alarms.
  - \_\_\_ Development of unit specific clinical alarm management protocols/policies.
  - \_\_\_ Other:

---

**THANK YOU FOR YOUR SUPPORT. PLEASE FAX TO (810) 342-4306**