

# Early Detection Patient Monitoring

## Published Papers

### Exploring the Relationship Between Continuously Monitored Vital Signs, Clinical Deterioration, and Clinical Actions.

Peelen, R.V.; Eddahchouri, Y.; Spenkelink, I.M.; van Goor, H.; Bredie, S.J.H.J. Clin. Med. 2025, 14, 281.

### Comparing Continuous with Periodic Vital Sign Scoring for Clinical Deterioration Using a Patient Data Model

Peelen, R.V., Eddahchouri, Y., Koeneman, M. et al. J Med Syst 47, 60 (2023).

### Can Early Warning Systems Enhance Detection of High-Risk Patients by Rapid Response Teams

Reardon PM, Seely AJE, Fernando SM, Didcote S, Strachan I, Baudino JL, Kyeremanteng K. J Intensive Care Med. 2021 May;36(5):542-549

### Cardiorespiratory instability before and after implementing an integrated monitoring system

Hravnak M, Devita MA, Clontz A, Edwards L, Valenta C, Pinsky MR. Crit Care Med. 2011 Jan;39(1):65-72.

### Defining the Incidence of Cardiorespiratory Instability in Patients in Step-down Units Using an Electronic Integrated Monitoring System

Hravnak M, Edwards L, Clontz A, Valenta C, Devita MA, Pinsky MR. Arch Intern Med. 2008 Jun 23;168(12):1300-8.

### Integrated monitoring and analysis for early warning of patient deterioration

Tarassenko L, Hann A, Young D. Br J Anaesth. 2006 Jul;97(1):64-8.

### A randomised controlled trial of the effect of continuous electronic physiological monitoring on the adverse event rate in high risk medical and surgical patients

Watkinson P.J, V.S. Barber, J.D Price, A Hann, L. Tarassenko and J.D Young. Anaesthesia 2006 (61) 1031-1039

## Abstracts & Conference Papers

### Predictive Value of an Automated Neural-Network-Based Early-Warning System for Detecting Early Signs of Physiological Deterioration in Hospitalized Patients

John Woods et al, Methodist Research Institute Inc, Clarian Health Technical Report - 2009

### Multi-parameter monitoring for early warning of patient deterioration

Tarassenko L, Hann A, Patterson A, Braithwaite E, Davidson K, Barber V and Young D. Presented at the 3rd IEE International Seminar on Medical Applications of Signal Processing, London, 71-6 in 2005.

### Electronic Integrated Monitoring of Medical Emergency Team Calls to a Step-Down Unit

Hravnak M, et. al. Presented as a poster at the 2007 MET Conference. Published in Circulation, Volume 116, Issue 16 Supplement: October 16, 2007 / Abstracts From Scientific Sessions 2007.

### Ability of an electronic integrated monitoring system to impact duration of patient instability on a step down unit

Pinsky, M., et. al. American Journal of Critical Care, 2008; 17 (3), 279. Presented at the American Association of Critical Care Nurses National Teaching Institute, Chicago, IL; May 5, 2008.

### Impact of an Electronic Integrated Monitoring System Upon the Incidence and Duration of Patient Instability on a Step-Down Unit

Hravnak, Marilyn, et. al. Presented at the 4th International Symposium on Rapid Response Systems and Medical Emergency Teams on 9th May 2008.

## Abstracts & Conference Papers Continued...

### Telemetry-based Vital Sign Monitoring for Ambulatory Hospital Patients

Christina Orphanido et al, 31st Annual International Conference of the IEEE EMBS, Minneapolis, Minnesota, USA 2009

### Aggregate Vital Sign Monitoring Prior to Cardiac Arrest

Choukalas C.G., Galvan E.M, and Wallace A.W., University of California San Francisco

### Monitoring the ill: Is this another measurement or will it change outcomes?

Critical Care Medicine – 2011 Vol. 39 No.1 Visensia Editorial

### Visensia Index Predicts Life-saving Interventions in Pre-hospital Trauma Patients

Ayan Sen et al, Henry Ford Hospital, Detroit, MI

### A review of current and emerging approaches to address failure to rescue

Anaesthesiology – 2011 Aug Vol. 115 No.2 Taenzer et al

### Review of BioSign / Visensia by Dr Taenzer

Anaesthesiology - 2011 Sep. Tarassenko

### Identifying ICU patients at high risk for cardiac arrest: a retrospective analysis of the Visensia algorithm

Choukalas C.G., Takemoto S, Stotts J, University of California San Francisco, March 2015

## Single Centre Experiences

### Implementation of a Rapid Response Team with Automated Event Detection and Early Warning

Lisbeth Votruba and Diane Wehby from Saint Mary's Health Care, A Member of Trinity Health, Grand Rapids, Michigan

### Can the Visensia Index Score Predict Mortality in High risk Injured Patients?

Coba V, et. al, from the Department of Surgery, Henry Ford Hospital, Detroit, Michigan