



## Publishing Activities

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Peer-Reviewed Articles  
Oral Presentations and Posters

March 5, 2018

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## Scientific Publications

- 1 THE RI ASSOCIATION WITH POSTDISCHARGE ADVERSE EVENTS AFTER HIP FRACTURE SURGERY  
*The Rothman Index Is Associated With Postdischarge Adverse Events After Hip Fracture Surgery in Geriatric Patients*, McLynn RP, Ottesen TD, Ondeck NT, Cui JJ, Rubin LE, and Grauer JN, **National Center for Biotechnology Information**, February 05, 2018.
- 2 PREDICTING SHORT-TERM MORTALITY FOR ADVANCED CANCER PATIENTS USING THE RI  
*Development of Imminent Mortality Predictor for Advanced Cancer (IMPAC), a Tool to Predict Short-Term Mortality in Hospitalized Patients With Advanced Cancer*, Kerin Adelson, Donald K.K. Lee, Salimah Velji, Junchao Ma, Susan K. Lipka, Joan Rimar, Peter Longley, Teresita Vega, Javier Perez-Irizarry, Edieal Pinker, and Rogerio Lilenbaum, **American Society of Clinical Oncology**, December 05, 2017.
- 3 THE RI AS A PREDICTOR OF POSTDISCHARGE ADVERSE EVENTS AFTER ELECTIVE SPINE SURGERY  
*The rothman index as a predictor of post-discharge adverse events after elective spine surgery*, Ryan P. McLynn, Nathaniel T. Jonathan J. Cui, David R. Swanson, Blake N. Shultz, Patawut Bovonratwet, Jonathan N. Grauer, **The Official Journal of the North American Spine Society**, November 08, 2017.
- 4 PREDICTION OF ADVERSE EVENTS IN PATIENTS UNDERGOING MAJOR CARDIOVASCULAR PROCEDURES  
*Prediction of Adverse Events in Patients Undergoing Major Cardiovascular Procedures*, Bobak J. Mortazavi , Nihar Desai, Jing Zhang, Andreas Coppi, Fred Warner, Harlan M. Krumholz, Sahand Negahban, **IEEE Journal of Biomedical and Health Informatics**, November 03, 2017. Vol. 21, No. 6
- 5 ROTHMAN INDEX PREDICTS ICU MORTALITY AT 24 HOURS  
*Rothman Index Predicts ICU Mortality at 24 Hours*, Michael Perkins, Melissa Knauert, Shyoko Honiden, Jonathan Siner, Junchao Ma, Donald Lee, Edieal Pinker, Margaret Pisani, **Official Publication of The American College of Chest Physicians**, October 31, 2017.
- 6 UTILIZING THE ROTHMAN INDEX TO PREDICT CLINICAL DETERIORATION  
*Rothman Index Variability Predicts Clinical Deterioration and Rapid Response Activation*, Brian C. Wengertter, Kevin Y. Pei, David Asuzu, Kimberly A. David, **The American Journal of Surgery**, July 26, 2017.
- 7 USING THE RI AS A PALLIATIVE CARE TRIGGER  
*Using the Rothman Index and Length of Stay as a Trigger for Palliative Care in the Medical Intensive Care Unit and Step-Down Units*, Rebecca Gagne Henderson, MSN, APRN, ACHPN, Barbara McCloskey, DNSc, RN, Ellen Walter, BSN, RN, Joan Rimar, DNSc, RN, Mei Bai, PhD, RN, Ernest D. Moritz, MD, **Journal of Hospice & Palliative Nursing**, June 2017 - Volume 19 - Issue 3 - p 232-237.
- 8 IDENTIFYING ONCOLOGY PATIENTS AT RISK FOR POSTOPERATIVE READMISSION  
*Using the Rothman Index to Identify Oncology Patients at Risk for Postoperative Readmission*, Anh Butz MD, MS, Michael El Alam MD, William Irvin MD, Dale Stovall MD, **The American College of Obstetrics & Gynecology**, May 7, 2017
- 9 ROTHMAN INDEX PREDICTS PERIOPERATIVE OUTCOMES AFTER LUNG TRANSPLANTATION  
*Rothman Index Predicts Perioperative Outcomes After Lung Transplantation*, S. Daouk, H. Fakh, L. Mramba, T. Machuca, S. Chandrashekar, A. Emtiazjoo, I. Faruqi, A. Pelaez, **The Journal of Heart and Lung Transplantation**, April, 2017 DOI: <http://dx.doi.org/10.1016/j.healun.2017.01.1178>
- 10 HEALTH SPILLOVERS AMONG HOSPITAL PATIENTS  
*Health Spillovers Among Hospital Patients: Evidence from Roommate Assignments*, Olga Yakusheva, **American Journal of Health Economics**, January 31, 2017 - Volume 3 - Issue 1 - p 76-107.
- 11 PEDIATRIC RI MODEL DEVELOPMENT AND VALIDATION  
*Development and validation of a continuously age-adjusted measure of patient condition for hospitalized children using the electronic medical record*, Michael Rothman, Joseph J. Tepas III, Andrew J. Norwalk, James E. Levin, Joan M. Rimar, Albert Marchetti, Allen L. Hsiao, **Journal of Biomedical Informatics**, January 3, 2017.

- 12 EARLIER IDENTIFICATION OF SEPSIS USING THE ROTHMAN INDEX  
*Sepsis as 2 Problems: Identifying Sepsis at Admission and Predicting Onset in the Hospital Using an Electronic Medical Record-Based Acuity Score*, Michael Rothman, Mitchel Levy, R. Phillip Dellinger, Stephen L. Jones, Robert L. Fogerty, Kirk G. Voelker, Barry Gross, Albert Marchetti, Joseph Beals IV, *Journal of Critical Care*, December 2, 2016.
- 13 USING AN EMR-BASED ACUITY SCORE TO REDUCE MORTALITY AT AN ACADEMIC MEDICAL CENTER  
*Mortality Reduction Associated with Surveillance Using an EMR-based Acuity Score at an Academic Medical Center*, Katherine Walsh, Shannan Hamlin, Belimat Askary, IHI Scientific Symposium, *BMJ Quality & Safety Supplement*, Nov, 2016.
- 14 PATIENTS NEGATIVELY IMPACTED BY DISCONTINUITY OF NURSING CARE DURING ACUTE HOSPITALIZATION  
*Patients Negatively Impacted by Discontinuity of Nursing Care During Acute Hospitalization*, Olga Yakusheva, PhD, Deena K. Costa, PhD, RN, and Marianne Weiss, DNSc, RN *Medical Care* November 2016
- 15 IDENTIFYING PATIENTS AT RISK FOR 30-DAY READMISSION, HIGH COST, AND LONGER LOS  
*Assessment of a Novel Tool for Identifying Hospitalized Patients with Heart Failure At Risk for 30-Day Readmission, High Cost, And Longer Length of Stay*, Karen Merl Banoff, Kerry Milner, Joan Rimar, Anna E. Greer and Maureen Canavan *Nursing Economics/July-August 2016/Vol. 34/No.4*
- 16 PREDICTING CARDIO-PULMONARY ARREST  
*The Performance of the Rothman Index in the Prediction of In-Hospital Cardio-Pulmonary Arrest in Adults [abstract]*, Malkhasyan K, Brian P, Rimar J, Andreozzi A, Hannah-Shmouni F, Donohue T. *Journal of Hospital Medicine* 2016; 11 (suppl 1).
- 17 USE OF RI IN DETERMINING SEVERITY OF ILLNESS  
*"Deterioration to Door Time": An Explanatory Analysis of Delays in Escalation of Care for Hospitalized Patients*, Sankey, CB, McAvay, G, Siner, JM, Barsky, CL, Chaudhry, SI *Journal of General Internal Medicine*. 2016 DOI: 10.1007 /s11606-016-3654-x.
- 18 PREDICTIVE VALUE OF ROTHMAN INDEX IN PATIENTS THAT DEVELOP FEBRILE NEUTROPENIA  
*Predictive Value of Rothman Index in Patients That Develop Febrile Neutropenia*, Luis Alberto Rubio, David Banach, Alfred I Lee, *The American Society of Hematology*, December 3, 2015-vol. 126 no. 23 2107 DOI: <https://doi.org/>
- 19 USING A NURSING SWAT (RRT) TEAM TO REDUCE MORTALITY AT A COMMUNITY HOSPITAL  
*Mortality Reduction Associated with Proactive Use of EMR-Based Acuity Score by an RN Team at an Urban Hospital*, Michael Rothman, PhD, Joan Rimar, Sheila Coonan, Stephan Allegretto, Thomas Balcezak, IHI Scientific Symposium, *BMJ Quality & Safety Supplement*, Nov, 2015.
- 20 USE OF RI IN ICU CAPACITY MANAGEMENT  
*Impact of Severity-Adjusted Workload on Health Status of Patients Discharged from an ICU*, Song - Hee (Haley) Kim, Edieal Plnker, Joan Rimar, Elizabeth Bradley, *Social Science Research Network, SSRN*, August 14, 2015.
- 21 DETECTING NEED FOR INTERVENTION AT A PEDIATRIC HOSPITAL  
*Evaluation of Electronic Medical Record Vital Sign Data versus a Commercially Available Acuity Score in Predicting Need for Critical Intervention at a Tertiary Children's Hospital Model*, Yong Sing da Silva, MD, Melinda Fiedor Hamilton, MD, MSc, Christopher Horvat1, MD, Ericka L. Fink, MD, MS, Fereshteh Palmer, MS, Andrew J. Nowalk, MD, PhD, Robert S. B. Clark, MD, *Pediatric Critical Care Medicine*. 2015.
- 22 IDENTIFICATION OF HEART FAILURE PATIENTS AT RISK FOR READMISSION, LONGER LENGTH OF STAY AND HIGH COST  
*Assessment of a novel tool for identifying hospital heart failure patients at risk for 30-day readmission, longer length of stay and high cost*, Banoff, KM, Milner, K, Rimar, J, Greer, AE, Canavan, ME, *Nursing Economics*, 2015, in press.
- 23 PREDICTING DISCHARGE AND READMISSION RATES IN AN INPATIENT HEMATOLOGY  
*Using the Rothman Index to Predict Discharge and Readmission Rates in an Inpatient Hematology Unit*, Roger Y. Kim, Xiaopan Yao, Peter Longley, Joan Rimar, Chryssanthi Kournioti and Alfred Ian Lee, *The American Society of Hematology*, December 4, 2014- vol. 124 no. 21 1302 DOI: <https://doi.org/>

- 24 DETERMINING THE IMPACT OF ATTENDING PHYSICIANS ON OUTCOMES  
*Estimating the Value Added of Attending Physicians on Patient Outcomes*, Jason M. Fletcher, Leora I. Horwitz, and Elizabeth Bradley, National Bureau of Economic Research, Working paper No. 20534, October 2014, JEL No. I11,I12.
- 25 DETERMINING THE IMPACT OF INDIVIDUAL NURSES ON OUTCOMES  
*Nurse Value-Added and Patient Outcomes in Acute Care*, Olga Yakusheva (Marquette University), Health Services Research (2014), Invited submission to Best of Academy Health Annual Research Meeting - 2014., DOI: 10.1111/1475-6773.12236.
- 26 EVALUATING THE IMPACT OF NURSING EDUCATION  
*Economic Evaluation of the 80% Baccalaureate Nurse Workforce Recommendation – A Patient-level Analysis*, Olga Yakusheva, PhD, Richard Lindrooth, PhD, and Marianne Weiss, DNSc, RN  
Olga Yakusheva (Marquette University), *Medical Care* 2014, 52(10), 864-869.
- 27 APPLICATION OF RI TO PREVENT ICU READMISSIONS  
*Using the Rothman index to prevent early unplanned surgical intensive care unit readmissions*  
Greta L. Piper, MD\*, Lewis J. Kaplan, MD, FACS, FCCM, FCCP\*, Adrian A Maung, MD\*, Felix Y. Lui, MD, FACS\*, Kimberly Barre, RN\*, Kimberly A. Davis, MD, MBA, FACS, FCCM, Yale University School of Medicine, *J of Trauma and Acute Care Surgery*, 77(1) 2014 pp78-82.
- 28 PALLIATIVE CARE - A CASE STUDY  
*Shared Decision-making at End-of-life is Aided by Graphical Trending of Illness Severity*, David B. Bittleman, MD, G. Duncan Finlay, MD, Alan B. Solinger, PhD, *BMJ Case Reports*, 2014, published online 13 January 2014. doi: 10.1136/bcr-2013-201522.
- 29 COMPARISON OF THE ROTHMAN INDEX WITH MEWS  
*Measuring the Modified Early Warning Score and the Rothman Index: Advantages of Utilizing the Electronic Medical Record in an Early Warning System*, G. Duncan Finlay, MD, Michael J. Rothman, PhD, Robert A. Smith, PhD, FCCM, *Journal of Hospital Medicine* (2014) 9(2), 116-119, 2013 Dec 19. doi: 10.1002/jhm.2132.
- 30 VALIDATION OF THE ROTHMAN INDEX TO IDENTIFY PATIENTS AT RISK OF READMISSION WITHIN 30-DAYS  
*Identifying Patients at Increased Risk for Unplanned Readmission*, Elizabeth Bradley, PhD (1), Olga Yakusheva, PhD (2), Leora I. Horwitz, MD (3), Heather Sipsma, PhD (1), Jason Fletcher, PhD (1)  
(1) – Yale School of Public Health, (2) – Dept. of Economics Marquette University,  
(3) – Yale University School of Medicine (Center for Outcomes Research & Evaluation)  
*Medical Care*, 51(9) 2013 pp761-766.  
a. A SPECIAL EDITORIAL in MEDICAL CARE  
*Big Data Meets the Electronic Medical Record: A Commentary on “Identifying Patients at Increased Risk for Unplanned Readmission”* Greg de Lissovoy PhD, MPH *Medical Care*, 51(9) 2013 pp759-760.
- 31 CLINICAL RESULTS FROM ORLANDO REGIONAL MEDICAL CENTER – UNPLANNED TRANSFERS TO ICU  
*Proactive vs. Reactive Rapid Response Systems: Decreasing Unplanned ICU Transfers*, Valerie Danesh, Lotricia Guerrier, Orlando Health, Edgar Jimenez, Orlando Regional Medical Center, Critical Care Medicine, Dec. 2012, Volume 40 supplement 112, Congress Abstracts, Society of Critical Care Medicine, 42nd Critical Care Congress, San Juan, Puerto Rico, January 19-23, 2013, both published and accepted for oral presentation.
- 32 RETROSPECTIVE STUDY OF THE ROTHMAN INDEX AS A PREDICTOR OF POST-OPERATIVE COMPLICATIONS FOR COLORECTAL SURGERY  
*Automated Analysis of Electronic Medical Record Data Reflects the Pathophysiology of Surgical Complications*, Joseph J. Tepas, MD, U of Florida College of Medicine, Allen L. Hsiao, MD, Yale University School of Medicine and Yale New Haven Hospital, Joan M. Rimar, DNSc, RN, Yale New Haven Hospital. *Surgery*. Oct 2013;154(4):918–26.
- 33 RI MODEL DEVELOPMENT AND VALIDATION  
*Development and validation of a continuous measure of patient condition using the Electronic Medical Record*, Michael J. Rothman, Steven I. Rothman, Joseph Beals IV.  
*Journal of Biomedical Informatics*, Oct 2013;46(5):837–48. <http://dx.doi.org/10.1016/j.jbi.2013.06.011>.

- 34 A NOVEL WAY OF INTERPRETING RISK IN LABORATORY RESULTS  
*Risks of Mortality Associated with Common Laboratory Tests: A novel, simple and meaningful way to set Decision Limits from data available in the Electronic Medical Record*, Steven I. Rothman, Alan B. Solinger - *Clinical Chemistry and Laboratory Medicine* 51(5) 2013.
- 35 EXCESS RISK METHOD  
*Placing clinical variables on a common linear scale of empirically-based risk as a step toward construction of a general patient acuity score from the Electronic Health Record: A modeling study* – Steven I. Rothman, Michael J. Rothman, Alan B. Solinger, *BMJ Open* 3(5) 2013.
- 36 CLINICAL VALIDITY OF NURSING ASSESSMENTS  
*Clinical Implications and Validity of Nursing Assessments: A Longitudinal Measure of Patient Condition from Analysis of the Electronic Medical Record* – Michael J. Rothman, Alan B. Solinger, Steven I. Rothman, G. Duncan Finlay, *BMJ Open* 2(4) 2012.
- 37 CLINICAL RESULTS FROM ORLANDO REGIONAL MEDICAL CENTER – IMPROVING ROUNDING FOR RAPID RESPONSE TEAMS  
*Algorithm-based proactive Rapid Response Team rounds: Developing - a safety net for patients and nurses*, Valerie Danesh, Orlando Health, Edgar Jimenez, Orlando Regional Medical, presented at the 2012 Congress of Critical Care Medicine, published in a supplemental issue of *Critical Care Medicine* Dec 2011.

## Oral Presentations and Posters

- 1 APPLYING PREDICTIVE ANALYTICS TO REDUCE HOSPITAL MORTALITY  
*Applying predictive analytics to reduce hospital mortality and improve nurse-provider communication*, Amanda Shrout, Christine Sullivan, Janice Marlett, Andrea Earl, **NACNS 2018 Annual Conference**, February 28 - March 3, 2018. Poster Presentation.
- 2 DOES A TRACK AND TRIGGER SYSTEM PROMOTE TIMELY INTERVENTION?  
*“Does a “Track & Trigger” System Promote Timely Intervention?”*, Heather Nolette, **Transforming Healthcare Nursing Conference**, February 15-16, 2018. Poster Presentation.
- 3 A MULTIDISCIPLINARY APPROACH TO IDENTIFYING ILL PATIENTS IMPROVES SEPSIS SURVIVAL  
*A multidisciplinary approach to identifying and managing very ill patients improves sepsis survival and overall survival while reducing cost*, S. Hoq MD, R. O’Connell MD, M. Misra MD, J. O’Neil RN, S. Gazi MD, S. Afrin MD, J. Palumbo MBA, **IHI National Symposium**, December 11, 2017.
- 4 LEVERAGING THE USE OF EHR DATA  
*Development and Validation of a Continuously Age-Adjusted Measure of Patient Condition for Hospitalized Children Using the Electronic Medical Record*, Michael Rothman, **AMIA 2017 Annual Symposium**, November 5, 2017. *Oral Presentation*
- 5 THE EFFECTIVENESS OF “TRACK AND TRIGGER” SYSTEMS  
*The Effectiveness of “Track and Trigger” Systems with Deteriorating Patients*, Heather Nolette, BSN, RNI, **9th Annual Nursing Research & Evidence-Based Practice Symposium**, November 2-3, 2017. *Poster Presentation*
- 6 ROTHMAN INDEX PREDICTS ICU MORTALITY AT 24 HOURS  
*Rothman Index Predicts ICU Mortality at 24 Hours*, Michael Perkins, Melissa Knauert, Shyoko Honiden, Jonathan Siner, Junchao Ma, Donald Lee, Edieal Pinker, Margaret Pisani, **CHEST Annual Meeting 2017**, October 31, 2017. *Oral Presentation*
- 7 REDUCING MORTALITY THROUGH THE USE OF AN EARLY WARNING SYSTEM  
*Reducing Mortality Through the Use of an Early Warning System*, Katherine Walsh, MS, Dr PH, RN, Meredith Cowan, MS, RN-C, RNC-OB, **ANCC National Magnet Conference**, October 13, 2017. *Oral Presentation*
- 8 LEVERAGING TELEHEALTH STRATEGIES TO PROVIDE PATIENT SAFETY  
*Advancing Your Telehealth Strategy to Deliver Value-Based Care, Better Serve At-Risk Populations and Increase Efficiency*, Daria Byrne EdD, MSN, RN, **Health IT Summit: Nashville**, June 27, 2017. *Oral Presentation*
- 9 QUANTIFYING PATIENT CONDITION  
*Intelligent Surveillance: Quantifying Patient Condition*, Michael Rothman, PhD, **Health IT Summit: Boston**, June 15, 2017. *Oral Presentation*
- 10 IMPLEMENTATION OF A CLINICAL SURVEILLANCE TOOL  
*Rothman Index Implementation*, Matthew Loser, Carolyn Scott, RN, M.Ed., MHA, **2017 Cerner North Atlantic Regional Users Group**, June 13, 2017. *Oral Presentation*
- 11 EVALUATION OF THE ROTHMAN INDEX  
*Story Behind the Score: In-depth Evaluation of the Pediatric Rothman Index as a Clinical Decision Support Tool*, Meredith Winter, MD, **The 13th International Conference on Rapid Response Systems and Medical Emergency Teams**, May 12, 2017. *Oral Presentation*
- 12 CLINICAL VIGNETTES & INNOVATIONS  
*A Safety Net: Sustained Reductions in Mortality through Informed Surveillance and Proactive Intervention*, Thomas Donohue, MD, **The 13th International Conference on Rapid Response Systems and Medical Emergency Teams**, May 11, 2017. *Oral Presentation*

- 13 COMPARISON OF EXISTING PEDIATRIC EARLY WARNING SCORES AND THEIR BENEFITS AND DRAWBACKS  
***Approach to the Pediatric Patient with Clinical Documentation***, Christopher Horvat, MD, **The 13th International Conference on Rapid Response Systems and Medical Emergency Teams**, May 11, 2017. *Oral Presentation*
- 14 A RESEARCH AND QUALITY IMPROVEMENT AGENDA FOR PEDIATRIC RAPID RESPONSE SYSTEMS  
***Approach to the Pediatric Patient with Clinical Documentation***, Christopher Bonaide, MD, MSCE, **The 13th International Conference on Rapid Response Systems and Medical Emergency Teams**, May 11, 2017. *Oral Presentation*
- 15 STUDY OF THE PREDICTIVE VALUE OF THE ROTHMAN INDEX  
***Rothman Index has Good Predictive Value for Mortality in a Large Academic Medical Center***, Carlos Pacheco MD, Carol Scholle, Sarah Cua-Martin, Darlene Lovasik MN, RN, CCRN-K, Colleen CochenourMSN, RN-BC, Richard L. Simmons MD, Raghavan Murugan MD **The 13th International Conference on Rapid Response Systems and Medical Emergency Teams**, May 11, 2017.
- 16 TRANSFORMING DATA INTO LIFESAVING INTELLIGENCE  
***Predictive Analytics: Transforming Data into Lifesaving Intelligence***, Carolyn Scott, **Chicago Health IT Summit**, May 11, 2017. *Oral Presentation*
- 17 VALUE OF THE ROTHMAN INDEX IN PREVENTING READMISSIONS  
***The Preventable Readmissions Reduction Situation and IT's Charge to Help: Panel Discussion***, Michael Rothman, PhD, **San Jose Health IT Summit**, April 13, 2017. *Oral Presentation*
- 18 MORTALITY REDUCTION CASE STUDY  
***Reducing Mortality With An Early Warning System***, Katherine Walsh, Meredith Cowan, **AONE 2017**, Session ID: 530. March 31, 2017. *Oral Presentation*
- 19 USING AN EMR-BASED ACUITY SCORE TO REDUCE MORTALITY AT AN ACADEMIC MEDICAL CENTER  
***Mortality Reduction Associated with Surveillance Using an EMR-based Acuity Score at an Academic Medical Center***, Katherine Walsh, **28th Annual IHI Scientific Symposium**, December 5, 2016. *Oral Presentation*
- 20 PEDIATRIC PREDICTOR OF ACUTE CARE TO INTENSIVE CARE TRANSFER  
***A Commercially Available Acuity Score is a Predictor of Acute Care to Intensive Care Transfer***, Christopher M. Horvat MD, Srinivasan Suresh MD, Fereshteh Palmer MS, Melinda Fiedor Hamilton MD, George S. Almasi PhD, Jaclyn Ashline BSN, Michael J. Rothman PhD, and Robert S. Clark MD, **8th World Congress on Pediatric Intensive and Critical Care**, June 4-8, 2016.
- 21 RI-BASED SWAT TEAM SURVEILLANCE REDUCES MORTALITY  
***Improving Patient Surveillance Reduce Mortality***, Thomas Donahue, **27th Annual National Forum on Quality Improvement in Health Care**, May 23-25, 2016. *Oral Presentation*
- 22 PROACTIVE ROUNDING BY RRT REDUCES CODE BLUES  
***Caring Around the Clock: Proactive Rounding by the RRT Nurse Using PeraTrend***, Blas Villa, RN, CCRN, Esther H. Vandermeulen, RN, BSN, CCRN, **American Association of Critical-Care Nurses (NTI: National Teaching Institute) Conference**, May 2, 2016.
- 23 IMPLEMENTATION OF CONDITION E TO ENHANCE INTERVENTION TIMELINESS  
***Implementation of Condition E (Early, EMR based recognition of clinical deterioration) to enhance intervention timeliness and match resource intensity at a tertiary care children's hospital***, Horvat C, Palmer F, Suresh S, Clark R. Platform Presentation. Medical Informatics Track. **Pediatric Academic Societies Annual Conference**. Baltimore MD. May 1, 2016.
- 24 PREDICTING POST-DISCHARGE ADVERSE EVENTS IN A MICU  
***Rothman Index as a predictor of post-discharge adverse events in a Medical Intensive Care Unit***, Deepa B. Gotur, Janice Zimmerman, **CHEST World Congress**, April 14-17, 2016.
- 25 EMR SURVEILLANCE INTERVENES TO REDUCE RISK ADJUSTED MORTALITY  
***EMR Surveillance Intervenes to Reduce Risk Adjusted Mortality***, Katherine Walsh, DrPH, Michael Rothman, PhD, **HIMSS16 Annual Conference**, March 2, 2016.

- 26 PREDICTING CARDIAC ARREST IN A CICU  
*Retrospective Evaluation of the Pediatric Rothman Index as a Predictor of Cardiac Arrest in a CICU*, Christopher Horvat, MD, Joan Sanchez-de-Toledo, MD PhD, Sarah Wilson, Fereshteh Palmer, RN BSN, Michael Rothman PhD, Stacey Finn, MS, George Almasi, PhD, Ricardo Munoz, MD, **45th Critical Care Congress**, Feb 20-24, 2016.
- 27 IMPACT OF RI AUTOMATED ALERTS  
*Prospective Evaluation of the Pediatric Rothman Index as a Measure of Pediatric Inpatient Acuity*, Christopher Horvat, MD, Melinda Hamilton, MD MSc, George Almasi, PhD, Fereshteh Palmer, RN BSN, Cynthia Valenta, MSN, Cristyne Kyper, CRNP, Michael Rothman PhD, Robert Clark, MD, **45th Critical Care Congress**, Feb 20-24, 2016.
- 28 MACHINE AND DEEP LEARNING  
*Five on Five Session Machine and Deep Learning*, Suresh S, 'Pediatrics 2040' innovation conference, Video: 22:55 - 28:30. Laguna Niguel, CA. January 9, 2016.
- 29 A CHIEF QUALITY OFFICER DESCRIPTION OF THE PEDIATRIC EXTENSION OF THE ROTHMAN INDEX  
*Preventing Avoidable Death - An EMR-powered CQO*, Stuart Dobbs, George Almasi, Michael Rothman, December 2015, **27th Annual National Forum on Quality Improvement in Health Care**, Dec 6-9, 2015.
- 30 A NURSE SWAT TEAM REDUCES MORTALITY  
*Mortality Reduction Associated with proactive Use of EMR-Based Acuity Score by an RN Team at an Urban Hospital*, Michael Rothman, Joan Rimar, Sheila Coonan, Stephen Allegretto, Thomas Balcezak, **27th Annual National Forum on Quality Improvement in Health Care - Scientific Symposium**, Dec 7, 2015.
- 31 PREDICTING POOR OUTCOMES AMONG PATIENTS WITH FEBRILE NEUTROPENIA  
*Predictive Value of Rothman Index in Patients that Develop Febrile Neutropenia*, Joan Luis Alberto Rubio, BS, David Banach, MC, MPH and Alfred I Lee, MD, PhD, **57th Annual Meeting of the American Society of Hematology**, Dec 5, 2015.
- 32 EXCESS RISK METHODOLOGY  
*Excess Risk and the Rothman Index - Building and Validating a General Measure of Patient Acuity*. 2nd Annual Workshop on Data Mining in Medical Informatics at the Annual Meeting of the American Medical Informatics Association, Nov 14, 2015.
- 33 REDUCTION IN RAPID RESPONSE CALLS AND CODE BLUES  
*A Retrospective Study of the Impact of Increased Nursing Staff Use of the Rothman Index System on a Patient Care at Blessing Hospital*, Penny Phillips, MS, RN-BC, Kathy Jochem, MS, RN, ACNS-BC, Carol-Ann Moseley, PhD, RN, Marilyn Shepard, PhDc, MBA, CDE, CNE, CWOCN, **42nd Biennial Convention of the Honor Society of Nursing, Sigma Theta Tau International**, Nov 7, 2015.
- 34 USE OF RI IN ICU CAPACITY MANAGEMENT  
*Acuity-based Capacity Management at an Academic Medical Center*, Edieal Pinker, Halie Kim, **Manufacturing & Service Operations Management Conference 2015**, June 29, 2015.
- 35 THE RELATIONSHIP BETWEEN THE BRADENRISK ASSESSMENT SCALE AND THE ROTHMAN INDEX  
*The Relationship between the BradenRisk Assessment Scale and the Rothman Index in Hospitalized Adults*, Marilyn Murphy Shepherd, MSN, MBA, CDE, CNE, CWOCN **47th Annual WOCN Annual Conference**, June 6-10, 2015.
- 36 RISK OF HIGH NORMAL POTASSIUM  
*High Normal Potassium is Dangerous to All Patients, not just AMI*, A Solinger, SI Rothman **Pathology Informatics Summit 2015, 8, 2014 - 2nd World Congress on Pathology Informatics**, May 5, 2015.
- 37 COMPUTING REFERENCE RANGES AS A FUNCTION OF PHYSIOLOGICAL RISK  
*A New Theory of Reference Intervals Based on Clinical Risks*, GD Finlay, A Solinger, SI Rothman **Pathology Informatics Summit 2015, 8, 2014 - 2nd World Congress on Pathology Informatics**, May 5, 2015.

- 38 DETECTION OF EMERGENT CONDITION FOR PEDIATRICS  
*Using EMR Data to Detect Emergent Conditions at a Pediatric Hospital*, Michael Rothman, PhD, Melinda Hamilton, MD, Christopher Horvat, MD, Fereshteh Palmer, RN, Robert Clark, MD, IHI Scientific Symposium, 26th Annual IHI National Forum on Quality Improvement in Health Care, Dec. 8, 2014.
- 39 HEMATOLOGICAL ONCOLOGY PATIENTS: PREDICTING READMISSION RATES  
*Using the Rothman Index to Predict Discharge and Readmission Rates in an Inpatient Hematology Unit* Roger Y. Kim, BS, Xiaopan Yao, PhD, Peter Longley, RN, DNP, Joan Rimar, DNSc, RN, Chryssanthi Kournioti, MD and Alfred Ian Lee, MD, PhD, 56th American Society of Hematology Annual Meeting, December 6-9, 2014.
- 40 THE IMPACT OF ROOMMATE ASSIGNMENTS ON OUTCOMES USING THE ROTHMAN INDEX  
*Peer Effects Among Hospitalized Patients: Evidence from Roommate Assignments* Olga Yakusheva, PhD, 2014 Health & Healthcare in America: From Economics to Policy Conference, June 24, 2014.
- 41 ESTIMATING THE VALUE-ADD FOR INDIVIDUAL NURSES USING THE ROTHMAN INDEX  
*Value Added of Nurses in Acute Care* Olga Yakusheva, PhD, 2014 Health & Healthcare in America: From Economics to Policy Conference, June 23, 2014.
- 42 IDENTIFYING PATIENTS FOR A PALLIATIVE CARE CONSULT  
*Rothman Index Palliative Care Consultation Trigger* Rebecca Gagne Henderson, APRN, ACHPN, PhD(c); Joan Rimar, RN, DNSc; Stephen Allegretto, BS, MPH; Richard Hintz, poster, 2014 Joseph A. Zaccagnino Patient Safety and Clinical Quality Conference, May 15, 2014.
- 43 HEART FAILURE PATIENTS: 30-DAY READMISSIONS  
*Association of New Clinical Condition Tool to Hospital Length of Stay, Direct Variable Cost, & 30-Day Readmission*, Banoff, KM1,3, Rimar J2, Milner, K3, Price, A3, Canavan, M4, 1KMB Consulting, LLC; 2Yale New Haven Health System, New Haven, CT; 3Sacred Heart University, Fairfield, CT, 4Yale University, New Haven, CT, Eastern Nurse Research Society, 26th Annual Scientific Sessions, April 9-11, 2014.
- 44 APPLICATION OF RI TO PREVENT ICU READMISSIONS  
*Using the Rothman Index to Prevent Unplanned SICU Readmissions* Greta L. Piper, MD\*, Lewis J. Kaplan, MD, FACS, FCCM, FCCP\*, Adrian A Maung, MD\*, Felix Y. Lui, MD, FACS\*, Kimberly Barre, RN\*, Kimberly A. Davis, MD, MBA, FACS, FCCM, Yale University School of Medicine, 27th EAST (Eastern Association for the Surgery of Trauma) Annual Scientific Assembly, January 17, 2014.
- 45 APPLICATION OF RI TO DETECT IN-HOSPITAL PATIENT INTERACTION  
*Peer Effects Among Hospitalized Patients: Evidence from Roommate Assignments* Olga Yakusheva (Marquette University), American Economic Association, Health Economics Research Organization, January 3, 2014.
- 46 APPLICATION OF RI TO DETECT PHYSIOLOGICAL DETERIORATION  
*Improving Patient Care Vigilance: Utilizing the Electronic Health Record (EHR) to Visualize Real-time Patient Acuity* Michael J. Rothman, PhD, Alan B. Solinger, PhD, Steven I. Rothman, MSEM, G. Duncan Finlay, MD, Scientific Symposium of the 25th Annual National Forum on Healthcare Improvement, Dec. 9, 2013.
- 47 APPLICATION OF RI TO IMPROVE CONTINUITY OF CARE  
*Improving Patient Care Vigilance: Adapting a New Acuity Measure to Improve Continuity of Care in an Integrated Visual Dashboard* Michael J. Rothman, PhD, Joseph Beals IV, PhD, Scientific Symposium of the 25th Annual National Forum on Healthcare Improvement, Dec. 9, 2013.
- 48 DEFINING DECISION SUPPORT RULES AND VISUALIZATION BASED ON RI  
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- 49 RETROSPECTIVE STUDY OF THE ROTHMAN INDEX AS A PREDICTOR OF 7-DAY READMISSION FOR ONCOLOGY PATIENTS WITH SOLID TUMORS  
*Rothman Index as a Predictor for Type of Discharge and Readmission Rates in a Cancer Hospital – the Yale Experience.* Daniel Morgensztern, Bing Xia, Chryssanthi Kournioti, Erin Wysong Hofstatter, Maureen Raucci, Ashley Keyes, Alienne Morrione, Elizabeth Blasiak, Elizabeth Rosenberg, Joan Rimar, Michael J. Rothman, Rogerio Lilenbaum; Yale University School of Medicine, New Haven, CT; Yale Cancer Center, New Haven, CT; Smilow Cancer Center, New Haven, CT; Yale New Haven Hospital, New Haven, CT; PeraHealth, Charlotte, NC, poster at – Annual Meeting of the American Society for Clinical Oncology, June, 2013.
- 50 SEPSIS, SEVERE SEPSIS, SEPTIC SHOCK – VISUALIZING DETERIORATION  
*Seeing Sepsis: A Picture is worth...* Joan Rimar, RN, DNSc, Peggy Simonette, RN, MSN, Brian Keane, BS, MS, Wendy O'Brien, BS, Charles Torre, Jr., Stephen Allegretto, DNSc, RN, Janis Bozzo, MSN, RN, Nancy F. Considine, BS, poster, 2013 Joseph A. Zaccagnino Patient Safety and Clinical Quality Conference, May 2, 2013.
- 51 EARLY IDENTIFICATION OF DETERIORATION – SHANNON HOSPITAL  
*Rothman Index: Leveraging the EHR to Identify Patient Decline Earlier*, Wilma Powell Stuart, Janette Dailey, (Shannon Hospital) Presentation at HIMSS, March 7, 2013.
- 52 IDENTIFYING AT-RISK PATIENTS  
*Patient Condition Index Tool Stratifies At Risk Patients; Improving Critical Thinking in a Complex Environment*, Lori Hubbard, BSN, RN; Diane Vorio, MS, MSN, RN, NEA-BC; Joan Rimar, DNSc, RN, Janis Bozzo, MSN, RN, Nancy F. Considine, BS, Yale-New Haven Hospital, accepted for presentation at the ANA Nursing Quality Conference, poster, Feb 6-8, 2013, Atlanta, GA.
- 53 CLINICAL RESULTS FROM YALE – NEW HAVEN HOSPITAL – COLORECTAL SURGERY  
*Automated Analysis of Electronic Medical Records Data Reflects the Pathophysiology of Surgical Complications*, Joseph J. Tepas, MD, U of Florida College of Medicine, Allen L. Hsiao, MD, Yale University School of Medicine and Yale New Haven Hospital, Joan M. Rimar, DNSc, RN, Yale New Haven Hospital, 70th Annual Meeting of the Central Surgical Association on March 16, 2013. *Oral Presentation*
- 54 MORTALITY AND NURSING ASSESSMENTS  
*Risks of Mortality Associated With Nursing Assessments: A Quantitative Indication of their Reliability, Validity, and Clinical Implications*, Michael J. Rothman, Alan B. Solinger, Steven I. Rothman, G. Duncan Finlay, 2012 State of the Science Conference in Nursing Research, Washington, DC, September 13, 2012, *Oral Presentation*
- 55 PATIENT SURVEILLANCE RESULTS FROM ORLANDO REGIONAL  
*Using data-driven algorithms in RRS proactive rounding - the air traffic controller has arrived*, The 7th International Symposium on Rapid Response Systems, Sydney, May 7, 2012, Edgar Jimenez, MD, Orlando Regional Medical Center. *Oral Presentation*
- 56 VISUALIZATION OF PATIENT CONDITION  
*Visualizing Patient Condition – Biomedical Informatics Dept., Stanford University*, May 7, 2012, Michael Rothman, invited lecture. *Oral Presentation*
- 57 VISUALIZATION TO FACILITATE COMMUNICATION  
*Visualizing Your Patient's Condition – Facilitating Communication between Caregivers to Improve Care* – Michael Rothman, George Almasi, Duncan Finlay, Daniel Rothman, presented at the U. of Pennsylvania School of Nursing, 8th Annual National Patient Safety Conference, November, 2011.

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US Patent Nos. 8,092,380; 8,100,829; 8,355,925; 8,403,847 and 8,454,506;  
Canadian Patent No. 2,599,387 and other Canadian and foreign patents pending.