CURRICULUM VITAE FOR PROMOTION AND TENURE

Bradley Dean Gordon

PROFESSIONAL ADDRESS

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IDENTIFYING INFORMATION

Education

Degree	Institution		Date Degree Granted
B.S.	Colorado State University Fort Collins, Colorado Biochemistry, Summa Cum Laude		1995
M.D.	Creighton University School of Me Omaha, Nebraska	dicine	1999
Residency	Regions Hospital Saint Paul, Minnesota Emergency Medicine		2002
Research	Emergency Medicine Basic Resear American College of Emergency M		2004
Fellowship (non-clinical)	University of Minnesota Health Informatics		2004
M.S.	University of Minnesota Minneapolis, Minnesota Health Informatics		2007
Certifications, Licenses			
American Board of Emergency	Medicine, Diplomate	2003 – presei	nt
American Board of Preventative Medicine Subspecialty of Clinical Informatics Diplomate		2013 – presei	nt
American College of Emergency Fellow	y Medicine	2007 – presei	nt

American Heart Association Basic Life Support Pediatric Advanced Life Support	2016 - 2018
American Academy of Pediatrics Advanced Pediatric Life Support	2013 - 2015
American College of Surgeons Advanced Trauma Life Support	2016 - 2020
Minnesota License (Medicine and Surgery) 43658	2001 - present
Wisconsin License (Medicine) 44707-020	2002-2013
Drug Enforcement Agency, MN License	2002 – present
Emergency Medical Technician – Basic	1992
Academic Appointments Associate Professor University of Minnesota Medical School, Twin Cities Campus Department of Emergency Medicine	2016 – present
Assistant Professor University of Minnesota Medical School, Twin Cities Campus Department of Emergency Medicine	2004 - 2016
Clinical Investigator HealthPartners Institute of Education and Research, Bloomington,	2004 – present MN
Academic Administrative Appointments Research Director Regions Hospital Department of Emergency Medicine	2006 - 2012
Clinical/Hospital Appointments Emergency Medicine Staff Physician Regions Hospital, Saint Paul, Minnesota	2002 – present
Medical Director of Informatics Regions Hospital	2007 – present
Director of Residency Information Systems Regions Hospital Emergency Medicine Residency	2002 – present
Emergency Medicine Staff Physician Hudson Hospital, Hudson, Wisconsin	2002 - 2013
Assistant Medical Director of Medical Informatics Regions Hospital	2006 - 2007
Director of Clinical Information Systems	2004 - 2010

Regions Hospital Department of Emergency Medicine Chief Resident 2001 - 2002**Regions Hospital Emergency Medicine Residency Current Membership and Offices in Professional Organizations** American College of Emergency Medicine 1996 - present Minnesota American College of Emergency Medicine 1999 – present Society for Academic Emergency Medicine 1996 – present American Medical Informatics Association 2002 - present Other professional employment, including military service Xcel Arena Physician 2002 - 2015St Paul, Minnesota

HONORS AND AWARDS FOR RESEARCH WORK, TEACHING, PUBLIC ENGAGEMENT, AND SERVICE

Creighton University School of Medicine	
Aesculapian Student Humanitarian Award	1997

RESEARCH AND SCHOLARSHIP

Grants and Contracts

External Sources

Co-investigator, Site Principal Investigator Overall Principal Investigator: Connelly, Donald R Agency Healthcare Research and Quality Title: A Community-shared Clinical Abstract to Improve Care (UC1HS16155) Funded Institution: Fairview Health Services Effort: 5% (in kind) Funding Dates: Sept 30, 2005 – Jan 31, 2010 Funded Salary Support: 0%

Principal Investigator National Library of Medicine Early Career Development Grant Title: Real-time Monitoring of Emergency Department Crowding (K22LM008573-01) Effort: 75% Funding Dates: Sept 30, 2004 - Sept 29, 2007 Direct Costs: \$150,000/year Funded Salary Support: 60%

Grant Award Recipient National Institutes of Health Loan Repayment Grant Title: Information Needs for Emergency Department Operations Research Funded Institution: Not Applicable Effort: Not Applicable Funding Dates: July 2004 – July 2006 Direct Costs: \$75,000/year Funded Salary Support: Not Applicable

Trainee - Fellow Overall Principle Investigator: Gatewood, Lael National Library of Medicine Title: Institutional Training Grant in Health Informatics (LM07041) Funded Institution: University of Minnesota Effort: 100% Funding Dates: August 2003 – July 2004 Direct Costs: Not Applicable Funded Salary Support: 40%

Local Sources

Principal Investigator HealthPartners Institute for Education and Research Title: Impact of Health Information Exchange Network on Clinical Decision Making in an Urban Emergency Department (A13-027) Funded Institution: Regions Hospital Overall Principle Investigator: Gordon, Bradley D Funding Dates: May 1, 2013 – April 31, 2014 Direct Costs: \$21,488/ year Funded Salary Support: 0%

Publications

Impact Analytics

<i>h</i> -Index	h(fl)- Index	Total Publications	First/Last Author Publications	Total Citations	First/Last Author Citations
6*	Not Available	8	4	105	65

* metric calculated from Google Scholar as Manifold not available to non-university paid faculty

-- citation counts as of Aug 2015

Peer-Reviewed Publications

Impact factors: Web of Knowledge – InCites Journal Citation Reports

- Gordon BD, Bernard K, Salzman J, Whitebird RR. Impact of Health Information Exchange on Emergency Medicine Clinical Decision Making. <u>The Western Journal of Emergency</u> <u>Medicine</u>. 2015;16(7):1047–1051. <u>http://doi.org/10.5811/westjem.2015.9.28088</u>
- Quaday KA, Salzman JG, Gordon BD. Magnetic resonance imaging and computed tomography utilization trends in an academic ED. <u>American Journal of Emergency</u> <u>Medicine</u>. 2014;32:524–528. <u>http://www.ajemjournal.com/article/S0735-6757(14)00086-2</u>

Journal Impact Factor: 1.274 (1yr) - 1.452 (5yr); Citations: 0; Role: Developed Study Concept with Dr. Quaday, Defined intellectual content; Data Acquisition, Data analysis, Manuscript editing and review.

- Quaday KA, Gordon BD, Browne A. Woman with severe chest pain; paraesophageal hernia with gastric volvulus. <u>Annals of Emergency Medicine</u>. 2013;61:e1–2. Journal Impact Factor: 4.676 (1yr) - 4.313 (5yr); Citations: 0; Role: Data Acquisition and image formatting; Manuscript review http://www.annemergmed.com/article/S0196-0644(12)01369-8/
- 4. Connelly DP, Park Y-T, Du J, Theera-Ampornpunt N, Gordon BD, Bershow BA, Gensinger, RA, Shrift M, Routhe DT, and Speedie SM The impact of electronic health records on care of heart failure patients in the emergency room. Journal of the American <u>Medical Informatics Association</u>. 2012;19:334-340 Journal Impact Factor: 3.932 (1yr) 4.182 (5yr); Citations: 9; Role: Grant development and study design partner; local coordination of data extraction and development of data extract queries in partnership with programmers; manuscript review and editing. <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3341780/</u>
- Hoot NR, Epstein SK, Allen TL, Jones SS, Baumlin KM, Chawla N, Lee AT, Pines JM, Klair AK, Gordon BD, Flottemesch TJ, LeBlanc LJ, Jones I, Levin SR, Zhou C, Gadd CS, Aronsky D. Forecasting emergency department crowding: an external, multicenter evaluation. <u>Annals of Emergency Medicine</u> 2009;54:514–522 Journal Impact Factor: 4.676 (1yr) - 4.313 (5yr); Citations: 12; Role: Data Acquisition; Manuscript review <u>http://www.annemergmed.com/article/S0196-0644(09)00615-5/</u>
- Gordon BD, Flottemesch TJ, Asplin BR. Accuracy of staff-initiated emergency department tracking system timestamps in identifying actual event times. <u>Annals of Emergency</u> <u>Medicine</u> 2008;52:504–511. Journal Impact Factor: 4.676 (1yr) - 4.313 (5yr); Citations: 14; Role: Guarantor of integrity of entire study, Developed study concept and design, Conducted Literature Review, Conducted experimental data acquisition and guidance of research assistant, performed data analysis, prepared manuscript. <u>http://www.annemergmed.com/article/S0196-0644(07)01804-5/</u>
- Flottemesch TJ, Gordon BD, Jones SS. Advanced statistics: developing a formal model of emergency department census and defining operational efficiency. <u>Academic Emergency</u> <u>Medicine</u> 2007;14:799–809 Journal Impact Factor: 2.006 (1yr) - 2.282 (5yr); Citations: 19; Role: Assisted primary author in definition of intellectual content, manuscript review and editing <u>http://onlinelibrary.wiley.com/doi/10.1111/j.1553-2712.2007.tb02356.x/</u>
- Asplin BR, Flottemesch TJ, Gordon BD. Developing models for patient flow and daily surge capacity research. <u>Academic Emergency Medicine</u> 2006;13:1109–1113. Journal Impact Factor: 2.006 (1yr) - 2.282 (5yr); Citations: 44; Role: Assisted primary author in definition of intellectual content, manuscript review and editing <u>http://onlinelibrary.wiley.com/doi/10.1197/j.aem.2006.07.004/</u>
- 9. **Gordon BD**, Asplin BR. Using online analytical processing to manage emergency department operations. <u>Academic Emergency Medicine</u> 2004;11:1206–1212.

Journal Impact Factor: 2.006 (1yr) - 2.282 (5yr); Citations: 7; Role: Guarantor of integrity of entire content, Defined intellectual content, Conducted Literature Review, prepared manuscript. http://onlinelibrary.wiley.com/doi/10.1197/j.aem.2004.08.015/

Articles Submitted for Publication

Educational Videos-Physician Education Material

SAEM Leadership Videos – On Mentorship Biros M & Gordon BD – SAEM Annual Meeting May 2003, Boston, MA

Chapters in Books

Harris, C, <u>The Toxicology Handbook for Clinicians</u>, 2006, Hanley & Belfus Chapters: Beta blocker overdose – Gordon BD Calcium channel blocker overdose – Gordon BD

Websites

EMREL – Emergency Medicine Residency Educational Library

(Version 1) 2002 – 2009: Hosted all conference material from residency education, including 3 years of conference videos recorded and archived for later viewing

EDNET – Emergency Department Intranet – Regions Hospital

(Version 1) 2001 – 2005:	Design, web code, software installation, maintenance of all
	content, maintenance of server operating system and server
	hardware.
(Version 2) 2005 – 2014:	Design, server software platform selection, custom module code,
	staff training for content maintenance, software maintenance
(Version 3) 2014 – present:	Co-design SharePoint site with J Nelson, MD, loading new
	content, staff training assistant

Regions Hospital Emergency Department Residency web site

(Version 1) 2001 – 2005:	Web design, web code, content maintenance, server software and
	hardware maintenance
(Version 2) 2005 – present:	Selection of software platform, configuration and design of
	software platform, server software installation and maintenance

Educational Server Management:

Install and maintain multiple server tools for educational content: Moodle, ED nursing web page, Digital pager tools, Helix Server (video streaming server software)

Presentations

Invited Oral Presentations at National Professional Meetings, Conferences, etc.

- Care Plans for Frequent Hospital Patients Reduce Costs Gordon BD Epic User Group Meeting Executive Session – August 2015 Epic Campus, Verona, WI
- Medication Alerts: 'Classics' Presentation Norris, G, Greco P, Gordon BD Epic User Group Meeting – September 2014 Epic Campus, Verona, WI
- Building an Residency Educational Video Online Distribution System Gordon BD, Ankel, FA Council of Residency Directors Annual Assembly March 2004, New Orleans, LA

Invited Oral Presentations at Local and Regional Professional Meetings, Conferences, etc.

- Strategies to Optimize the EHR for Pharmacists Midyear Clinical Meeting Minnesota Sogciety of Health System Pharmacists Goodnough-Welsch N, Gordon BD September 2015, Brooklyn Center, MN
- Integrating Electronic Resources into Modern Practice Gordon BD HealthPartners Primary Care Update September 2011, Minneapolis, MN
- Minnesota Health Information Exchange Update Gordon BD University of Minnesota Informatics Seminar October 2010, Minneapolis, MN
- How the Electronic Medical Record is Changing Medical Documentation Gordon BD Minnesota Defense Lawyers Association Annual Meeting August 2008, Duluth, MN
- Use of the Internet in the Modern Emergency Department Practice Gordon BD Minnesota ACEP Annual 'Hot Topics' Conference July 2003, Brainerd, MN
- Implementation of Epic Systems Order Entry at Regions Hospital Gordon BD Grand Rounds, Department of Internal Medicine, Regions Hospital January 2006, St Paul, MN
- 7. Operations Research in the Emergency Department **Gordon BD**

Celebration of Research HealthPartners Research Foundation Annual Meeting Sept 2004, Bloomington, MN

Peer-reviewed Oral Presentations at Professional Meetings, Conferences, etc.

- Using the EHR in Academic Projects Zwank MD, Gordon BD Society of Academic Emergency Meeting Annual Meeting May 2015, San Diego, CA
- Default Versus Open Text Narcotic Prescription Writing in the Emergency Department Electronic Medical Record Zwank M, Kennedy S*, Stuck L, Gordon BD Society of Academic Emergency Meeting Annual Meeting May 2014, Dallas, TX * resident co-author
- Emergency Department Capacity Monitoring: Making the 'Dashboard' a Reality Gordon BD National Library of Medicine Training Meeting July 2003, Bethesda, MD

Poster Abstract Presentations at Professional Meetings, Conferences, etc.

- 1. ADD C-spine Bernard
- Health Information Exchange Frequently Changes Emergency Physician Management Plan (poster presentation)
 Gordon BD, Salzman, J, Bernard K*, Whitebird R American College of Emergency Physicians Research Forum October 2014, Chicago, IL
 * student co-author
- Residency Applicant Communication Preferences and Use of Social Media in Residency Application (poster presentation) Hegarty CB, Taft S, Ankel FK, Gordon BD, and Raghunandan, S Society of Academic Emergency Meeting Annual Meeting June 2011, Boston, MA
- Effect of Computerized Order Sets on Use of D-Dimer and Brain Natiuretic Peptide Lab Studies (poster presentation) Isenberger, K, Gordon BD, Flottemesch, T Society of Academic Emergency Meeting Annual Meeting May 2008, Washington, DC
- Evaluation of the Accuracy of Time Stamps Created by an Emergency Department Operational Tracking System (poster presentation) Gordon BD, Flottemesch, T, Asplin, B Society of Academic Emergency Meeting Annual Meeting May 2008, Washington, DC

6. In the eye of the beholder: How emergency department doctors and nurses differ in their perception and approach to emergency department crowding (poster presentation) Flottemesch, T, Gordon BD, Feaver SL, Asplin BR

Other Key Activities and Accomplishments

User engagement, innovative workflow and technical setup presentations at national Epic EHR Meetings (all in Madison, WI or Verona, WI).

- Submission decisions are decided by Epic staff, therefore not peer-reviewed.
- In all cases, I either presented alone or with a technical analyst from HealthPartners •

Success with Medication Indications – Epic User Group Meeting – September 2016 Point of Care Ultrasound – A Workflow That Works – Physicians Advisory Council – April 2016 Surgical Case Request Orders – Epic User Group Meeting – September 2014 Medication Alerts: Drug-dose Warnings - Pharmacy Advisory Council - April 2014 Monitoring Hypoventilation – Perioperative Advisory Council – April 2013 Medication Alerts 101 - Pharmacy Advisory Council - April 2013 Note Quality in D-Minor – Epic User Group Meeting – September 2012 Maintaining Physician Engagement – Physicians Advisory Council – September 2012 Ensuring Timely Admission Orders – Epic User Group Meeting – September 2011 Unexpected Abnormal Radiology Results – Epic User Group Meeting – September 2011 SmartSet for Every Disposition – ASAP Emergency Department Forum – April 2011 Who Gets to Decide, An Overview of EHR Governance Models - Epic User Group Meeting -September 2010 Inpatient Chart Review Report Optimization – Epic User Group Meeting – Fall 2008 Inbound Patient Transfers to the ED – ASAP Emergency Department Forum – April 2008 Use of Alpha-numeric Pagers in Epic – ASAP Emergency Department Forum – September 2007 Integrating a Third Party Admission/Discharge/Transfer System to Support Emergency Department Rapid Arrival Initiatives – Epic User Group Meeting – September 2006 A primer on using the ED Map – Epic User Group Meeting September 2006

TEACHING AND CURRICULUM DEVELOPMENT

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University of Minnesota

Course/Lecture List

Regions Hospital Emergency Medicine Re	sidency
Journal Club	September 2016, August 2015, April 2015, September 2014, May 2014
Spontaneous Bacterial Peritonitis	March 2015
Hypertensive Emergencies	August 2014
Autoimmune Disease	September 2014, August 2012, September 2010
Beyond UpToDate and Google	March 2014
Hypersensitivity	March 2014, January 2013, March 2010, March 2008
Transplant Complications	August 2015, August 2013, July 2011, June 2008
Habits of Documentation	November 2009

Basic Informatics	
Complications of HIV	

February 2013, December 2008 July 2008, November 2007

ADVISING AND MENTORING

Undergraduate Student Activities

Undergraduate research projects

Kyle Bernard, University of Minnesota Medical StudentAugust 2013 – January 2014CareEverywhere Health Information Exchange EvaluationMy Role: Guided his assistance in a research project and manuscript prep.

Integrating C-Spine Decision Support Rules into EHR January 2014 – August 2014 My Role: Advisor for Medical Informatics Elective Project to implement operational changes to the HealthPartners Epic EHR designed to embed two widely known cspine rules into the EHR system

Undergraduate advising

Kyle Bernard	2013 - present
Med Student, Univ of Minnesota	
Ben Hermanson	2013 – present
Med Student, Kansas City Univ of Medicine and Biosciences	

Graduate Student Activities

Doctoral Committees Served on	
Jenna Laine EdD, Hamline University	2014 - 2015

Residents Supervised

Brian Mehus, Emergency Med Resident	2015 – present
Sakib Motalib, Emergency Med Resident	2013 - 2016
Sean Boley, Emergency Med Resident	2012 - 2015
Aaron Burnett, Emergency Med Resident	2006 - 2010
Joe Dolan, Emergency Med Resident	2005 - 2009

CLINICAL SERVICE

Clinical Leadership Accomplishments

Most Wired Hospital – Regions Hospital	2013, 2012
Meaningful Use Stage 1 – Regions Hospital	2013
Quality Improvement Projects	
Workplace Violence Employee Alert	2014 – present

Scope: Develop workflows, language and technology to display violence alerts to employees immediately upon opening a patient record when there is a potential workplace violence concern based on prior behavior by the patient or a visitor of a patient.

Outcomes: Development in progress. Deployment at first location anticipate late 2015.

Note Quality/Documentation Improvement

Meaningful Use Stage 2 – Regions Hospital

2012 - present

2014

- Scope: Develop workflows, quality measures, data collection and feedback methods to provide individual providers feedback about their clinical documentation.
- Outcomes: The team has created 3 successful pilots and is developing an implementation for a large hospital medicine group.

Procedural Sedation Documentation Alignment and Quality Reporting 2013 - 2015

- Scope: Align all locations in the HealthPartners enterprise with regard to the data and workflow when any procedural sedation activity is performed in any inpatient or outpatient location at 5 hospitals, 1 surgery center and 1 endoscopy center. Goal: capture discrete key quality indicator data elements on every sedation event to allow centralized oversight and reporting without damaging clinician workflow efficiency.
- Outcomes: All data elements are now aligned and in use. Almost all physician pre-sedation evaluation data is now captured in a discrete, reportable format before the procedure is performed (exception: endoscopy center)
- Perioperative Hypoventilation Prevention Regions Scope: Implemented workflow changes for anesthesia providers to document obstructive sleep apnea risk, track a risk category through the perioperative process, then into the inpatient post-operative setting. Standardizing all respiratory care post-operative orders for surgical patients
- Outcomes: 97% of operative patients now receive discrete risk designations and post-operative monitoring orders are driven to increased monitoring intensity for increased risk patients

Case Request Perioperative Improvement Project

Scope: Implemented process for surgeons to request their surgical cases via electronic order template with designated information required and recommended

Outcomes: 65% of surgical cases requested via order at Regions Hospital, 85% at HealthPartners Outpatient Surgery Center. Laterality error 'Good Catches' dropped 80% after implementation

Emergency Department Medication Preference List Development 2006, revised 2010 Scope: All orders placed by ED providers start with an 'order template' from either a preference list or from an order set. To build the lists, one year of prior ordering data used to create two preference lists, (one for medication orders to be placed in the ED, another for discharge prescriptions). The naming convention was standardized and orders were created for the most common conditions

2012 - 2015

2012 - 2014

Outcome: Lists have been in use continuously since 2006 and are often sited as easier to use and find desired orders by providers who have used similar systems at other hospitals' emergency departments.

Administrative Service Responsibilities	
Procedural Sedation Committee, Member	2013 – present
Decision Support Committee, Chair	2015 – present
Physicians Advisory Council for Epic, Co-Chair	2005 - 2016
Health Record Committee, Member	2007 - 2016
Medical Executive Committee Member-at-large (Hospital Services)	2012 – present 2007 – 2009
ED Research Committee, Member Chair	2012 – present 2006 – 2012
Medication Warning Oversight Committee, Co-Chair	2012 - 2015
Electronic Health Record Leadership Committee, Chair	2007 - 2015
Minnesota Health Information Exchange (MN HIE) Physician Advisor	2007 - 2009
Epic Senate, Regions Hospital, Member	2006 - 2007
Regions Hospital EMR Implementation	2005 - 2007
Steering Committee Member Physician Workgroup, Member	2005 - 2007
Hospital EMR Order Entry Project Physician Analyst	2005 - 2007
BEST ED Process Improvement Steering Committee, Member	2004
Emergency Department Operations Committee, Member Emergency Department Executive Committee, Member	2004 – 2014 2004 – present
Emergency Department EMR Implementation Team Lead and Physician Workflow Analyst	2004 - 2007
EMR Vendor Selection Steering Committee	2003
EMR Vendor Selection	
Physician Workgroup	2003
Emergency Department Workgroup, Chair	2003
Residency Web Site Committee Member	1999 - 2002

Clinical Service Responsibilities

Regions Hospital Emergency Department Staff Physician Average 1-1.5 eight hour shifts per week	2002- present
Hudson Hospital Emergency Department Staff Physician	2002 - 2011
PROFESSIONAL SERVICE AND PUBLIC OUTREACH Service To The Discipline/Profession/Interdisciplinary Area(s)	
Editorships/Journal Reviewer Experience Annals of Emergency Medicine, Reviewer Approximately 11 manuscripts reviewed	2005 – present
Academic Emergency Medicine, Reviewer Approximately 4 manuscripts reviewed	2009 – present
Program review experience	
HealthPartners Health Sciences Research Review Subcommittee	2006 - 2008