**Daniel  Shine**

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Longmont Colorado 80504

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**Career History**

**University of Colorado School of Medicine** (7/2014 -

Aurora, CO

*Instructor in Medicine, Consultant*

The University of Colorado School of Medicine, located near Denver, educates 700 medical students. Accomplishments as consultant to the Dean’s Office include:

* Drafting recommendations for changes in Colorado’s approach to physical examination in teaching both undergraduates and graduates. These recommendations were based on deliberations of an ad hoc Dean’s committee.
* Ongoing participation in implementing recommended changes.
* Lectures to medical students and residents in internal medicine.

**NYU Langone Medical Center**   (6/2005 – 9/2013)

New York, NY

*Chief of Medicine*

NYU Langone Medical Center is an 800-bed medical center consisting of a university hospital, a specialty hospital, and a rehabilitation institute located, along with NYU School of Medicine and a major VA teaching affiliate, on an urban campus in midtown Manhattan. Accomplishments include:

* Created a divisional structure with section heads and regular leadership meetings.
* Working with senior private attendings, conceived and implemented a thoroughgoing reorganization of the medicine service based on an interdisciplinary "Firms" concept of care.
* Organized a hospitalist program now over 20 FTE. Staffing on weekends is identical to weekdays with overlapping weekendalist/ day hospitalist rounds.
* Created a “hospitalist scholars” program combining half time mentored research and half time off hours hospitalist work to provide high quality off hours coverage and subsidize young physician scientists.
* Re-structured credentialling and privileging to add transparency, protect patient safety, and comply with TJC.
* Worked with hospital administration on Lean projects including end of life, ward reorganization, and pharmacy services.
* Created a twice-weekly long stay rounds with care management that brought ALOS from nearly 9 to under 5.
* Closed the intensive care unit to non-intensivists.
* Created an ongoing, innovative, and robust QI effort in medicine considered by our QI leadership to be the best in the medical center.
* Worked with the medical director of the new Integrated Care Network to

broaden concepts of quality and safety to include continuum of care issues in

preparation for bundled payment

* Developed a risk-adjusted length of stay, readmission, and resource utilization report to individual physicians on a regular basis benchmarked to colleagues' local performance as well as national standards.
* Created an innovative interdisciplinary bedside rounds teaching program working with the Dean of the Nursing School.
* Challenged hospital culture by organizing university-hospital subspecialty services in based on responsibility for all patients by a single attending.
* Decreased Medicine Service ALOS from 8 to 4.9 and under the University Hospital Consortium expected.
* Reorganized nurse practitioner positions and budgeting to provide 24-hour, 7-day coverage.
* Created a web- and Iphone-based real-time evaluation system currently used to evaluate teaching, with proposed adoption for patient satisaction.
* Improved safety and efficiency of ICU care, eliminating the ICU to step down hand-off by creating nearby step down beds under ICU control.
* Created a web-based communication system as well as an i-phone based communication system for residents, students, and (soon) nurses based on iphones and automatic routing using electronic schedule monitoring.
* Guided efforts to correct deficiencies and turn around near-probation status from the Residency Review Committee in Medicine.
* Created a 24 x 7 senior on-call for the Medicine Service.
* Created an admission order set aligned with and helping to assure institutional quality goals. Conceived other IT innovations (including an electronic signout presented to University Hospital Consortium) that are models for the medical center.
* Actively pursued revitalization of the medical attending staff, conducting frequent office visits. Conducted successful approaches to leading faculty of other Manhattan hospital systems.
* Began an orthodox Jewish outreach program based on a zip code analysis of LOS.
* Retained personal clinical and academic viability by regular ward rounding, grant writing, publication, and presentation to national meetings.

**Monmouth Medical Center**   (6/1997 - 6/2005)

Long Branch, NJ

*Chairman, Department of Medicine*

Monmouth Medical Center is a 500-bed community teaching hospital, a member of the 10-hospital St. Barnabas Health Care System and affiliated with Drexel University School of Medicine. Accomplishments include:

• Worked with System leadership to devise and implement a quality report card throughout the 10-hospital Saint Barnabas Health System.

• Chaired the system-wide search for a risk adjustment, decision support vendor.

• Created a data-driven quality improvement program in Medicine.

• Participated in computer vendor selection for the Health System.

• Created teaching and on-call services made up of private and full time physicians using mixed reimbursement models.

• Participated in the Health System QI task force.

• Organized community outreach for the hospital, including free care for fire and police personnel.

• Conceived and implemented a transition of the hospital clinics to a Federally Qualified Health Center, serving as board of trustees member for the hospital.

• Provided inpatient and outpatient clinical services and teaching.

**Lincoln Medical and Mental Health Center**   (12/1993 - 6/1997)

Bronx, NY

*Director, Department of Medicine/Vice Chair NY Medical College*

Lincoln Medical and Mental Health Center is a 500-bed municipal hospital located in New York City's South Bronx, a depressed area. Accomplishments include:

• Created systems and clinical protocols to deal with a major AIDS epidemic in the South Bronx during the 1990's

• Managed a free-standing residency program with 80 residents.

• Created protocols and scheduling to manage a 100,000 visit outpatient clinic.

• Served as Vice Chair for New York Medical College, Lincoln's academic affiliate.

• Provided clinical and teaching services inpatient and out.

**Bronx Lebanon Hospital Center**   (7/1987 - 12/1993)

Bronx, NY

*Division Head General Internal Medicine*

Bronx Lebanon Hospital Center consists of two affiliated hospitals several miles apart in New York's South Bronx, an underserved area. Accomplishments include:

• Founded a Division of General Internal Medicine

• Recruited a faculty of twelve academic generalists and organized both inpatient and outpatient services to deal with a very large and sudden increase in AIDS cases.

• Wrote a primary care track training grant.

• Managed throughput intitiatives and community outreach at two culturally distinct sites in the South Bronx in New York.

• Served as a provider of clinical services and teaching inpatient and out.

**Beth Israel Medical Center**   (7/1985 - 6/1987)

New York, NY

*Medical Director NY Healthcare*

NY Healthcare was formed in 1984 as a multispecialty group practice, owned by Beth Israel Medical Center, with the purpose of increasing the referral base and recruiting more insured patients.

Accomplishments include:

• Participated in negotiations over an HMO contract with Maxicare.

• Recruited physicians in multiple specialties.

• Established a walk-in clinic in Mid-Town Manhattan.

• Served as a provider of clinical services

**Montefiore Medical Center**   (7/1984 - 6/1985)

Bronx, NY

*Medical Director Outpatient Department*

Montefiore Medical Center is an 1100 bed academic medical center in New York's North Bronx.

Accomplishments include:

• Led the ambulatory care area including initiatives to enhance productivity and outcomes, particularly patient satisfaction.

• Served as a provider of clinical services and ambulatory teaching.

**Montefiore Medical Center**   (7/1981 - 6/1984)

Bronx, NY

*Medical Director Drug Abuse Treatment Program*

Montefiore Medical Center's Drug Abuse Treatment Program provides inpatient and outpatient substance abuse and medical care through an inpatient unit and three outpatient facilities in New York's South Bronx. Accomplishments include:

• Re-organized, funded, and directed a program devoted only to drug abuse issues to re-focus on primary and secondary medical care and develop an AIDS research program to respond to the first wave of AIDS cases in the South Bronx.

**US Public Health Service Hospital**   (6/1980 - 7/1981)

Brighton, MA

*Medical Director Alcoholism and Substance Abuse*

US Public Health Service Hospitals were closed in 1981, turning over facilities to community groups. I oversaw transfer of substance abuse services in the Boston facility: The Brighton Marine Hospital. Accomplishments include:

• As medical director helped establish the first outpatient private non-profit substance abuse facility in Massachusetts.

• To accomplish the above, dealt with the federal, state, and regulatory authorities as well as recruiting staff and raising money.

**Harvard Medical School**   (6/1978 - 6/1980)

Boston, MA

*Fellow in Clinical Pharmacology and Medicine*

Performed research and consulted on pharmacologic problems arising on the wards of the Beth Israel Medical Center and Peter Bent Brigham Hospital.

**University of Massachusetts Medical Center**   (7/1976 - 6/1978)

Worcester, MA

*Resident in Medicine*

Pursued postgraduate work in general medicine on the wards of a newly created hospital: the University of Massachusetts Medical Center.

**Education**

Georgetown University School of Medicine   (1976)

Doctor of Medicine

Trinity College Dublin (Ireland)   (1974)

Master of Arts, English Literature

Trinity College Dublin (Ireland)   (1972)

Bachelor of Arts, English Literature

**Certifications**

American Board of Internal Medicine (1979)

**Languages**

Russian

Spanish

Latin

**Post-Graduate Training**

1977 Internal Medicine (intern). Program Director James Dalen MD. Worcester City Hospital, Worcester, MA.

1978 Internal Medicine (resident). Program Director James Dalen MD. University of Massachusetts Medical Center, Worcester, MA.

1980 Clinical Pharmacology (fellow). Program Director Joseph Ingelfinger, MD. Harvard University School of Medicine, Boston, MA.

1980 Internal Medicine (fellow). Program Director Eugene Braunwald MD, Peter Bent Brigham Hospital, Boston, MA

**Licensure**

1978 Commonwealth of Massachusetts License #41129

1979 Board Certified, American Board of Internal Medicine

1981 State of New York License #148914

1997 State of New Jersey License #66184

**Academic Appointments**

1980 Instructor in Medicine, Boston University School of Medicine, Boston, MA.

1981 Instructor in Medicine Albert Einstein College of Medicine, New York, NY.

1981 Instructor in Social Medicine Albert Einstein College of Medicine, New York, NY.

1984 Assistant Professor of Medicine Albert Einstein College of Medicine, New York,

NY.

1985 Assistant Professor of Medicine Mount Sinai School of Medicine, New York, NY.

1987 Assistant Professor of Medicine Albert Einstein College of Medicine, New York,

NY.

1989 Associate Professor of Medicine Albert Einstein College of Medicine, New York, NY.

1994 Associate Professor of Medicine New York Medical College, New York, N.Y.

1998 Associate Professor of Medicine MCP Hahneman College of Medicine,

Philadelphia, PA.

2002 Associate Professor of Medicine Drexel University College of Medicine,

Philadelphia, PA.

2005 Associate Professor of Medicine New York University School of

Medicine, New York, NY.

2015 Instructor in Medicine University of Colorado School of Medicine.

# Hospital and Outpatient Appointments

1978 Attending Physician, Washingtonian Hospital for the Addictions, Boston, MA.

1980 Medical Director, Addiction Treatment Center of New England, Boston.

1980 Attending Physician, Boston City Hospital, Boston, MA.

1980 Physician in Charge, US Public Health Service Hospital, Brighton, MA.

1981 Medical Director Montefiore Medical Center, New York Drug Abuse Treatment Program, New York, NY.

1984 Medical Director Outpatient Department, Montefiore Medical Center, New York, NY.

1985 Medical Director New York Beth Israel Medical Center, New York Healthcare, New York, NY.

1987 Chief, Division of General Medicine, Bronx Lebanon Hospital Center, New York, NY

1990 Assoc. Director Dept of Medicine, Bronx Lebanon Hospital Center, New York, NY.

1994 Director, Dept of Medicine Lincoln Medical and Mental Health Center New York, NY.

1994 Vice Chairman, Dept of Medicine New York Medical College, Valhalla, NY.

1997 Chairman, Dept of Medicine Monmouth Medical Center, Long Branch, NJ.

2005 Chief of Medicine, New York University Hospitals Center, New York, NY

**Awards and Honors**

1974 BA *cum laude,*Trinity College, Dublin (Ireland)

1976 Mosby Scholar in Pharmacology, Georgetown University School of

Medicine

2000 The McKeen Cattell Memorial Award for Most Outstanding Paper,

American College of Pharmacology

2015 Excellence in reviewing, American Association of Medical Colleges

**Memberships**

1987 Society for General Internal Medicine, member

1990 American College of Physicians, member

1997 American College of Physicians, fellow

2006 NYU Hospitals Center representative to the Association of American Medical Colleges Group on Resident Affairs

**Publication Reviewer Positions**

2002 - Journal of the American Medical Association

2002 - Journal of General Internal Medicine

2010 - Journal of Managed Care

1. - Annals of Internal Medicine
2. - American Journal of Medicine
3. - Hospital Medicine

2021- Journal of Hospital Medicine

**Grant Reviewer Positions**

2007 Reviewer R18 Grants Agency for Healthcare Research and Quality. Bethesda Md.

**Major Administrative Responsibilities**

1980-1981 Medical Director, Addiction Treatment Center of New England. Co-founded the first private non-profit treatment center for the addictions. Took responsibility for regulatory compliance with federal and commonwealth requirements, quality assurance, protocol development, and outreach planning. Shared responsibility for fiscal planning.

1980-1981 Medical Director, US Public Health Service Hospital, Brighton. Took medical responsibility for care on an inpatient unit including protocol development, compliance with national USPHS standards, and quality assurance.

1981-1984 Medical Director, Montefiore Medical Center Drug Abuse Treatment Program. Took responsibility for regulatory compliance with state and national methadone standards, quality assurance, protocol development. liason with nursing and administration. Conceived and implemented a unique primary care approach and staffing to the methadone clinics managed by Montefiore during the early days of the AIDS epidemic, allowing both longitudinal care and a research base at an institution active in early AIDS research.

1984-1985 Medical Director, Montefiore Medical Center Outpatient Department. Took responsibility for scheduling, quality assurance, protocol development, nursing and administrative leadership.

1985-1987 Medical Director, New York Healthcare. An outpatient building acquired by Beth Israel Medical Center, New York. Continued cancer screening services previously conducted there by Strang Clinic, developed a multispecialty group practice in internal medicine and radiology, conducted outreach activities, participated in marketing and planning decisions. Advised Beth Israel on the future development of their clinics.

1987-1994 Medical Director, Ambulatory Care Network and Chief, Division of General Internal Medicine, Bronx Lebanon Hospital Center; Vice Chairman, Department of Medicine, New York Medical College. Recruited a new division of general medicine consisting of ten academically trained general internists. Created a general medicine training track with a grant from the USPHS. Brought fourth year students from Albert Einstein on regular rotation in ambulatory medicine. Organized the institutional effort to convert the medical residency to conform with New York State Council on Graduate Medical Education requirements. As Vice Chairman oversaw departmental quality assurance.

1994-1997 Director, Department of Medicine and Residency Training, Lincoln Medical and Mental Health Center, New York. Oversaw credentials, quality assurance, the clinical research program for 100 medical residents, inter-actions with other clinical departments and with administration, nursing, and ancillary services. All 53 physicians reported to the director.

1997-2005 Chairman, Department of Medicine Monmouth Medical Center, Long

Branch. Oversaw credentials, quality assurance, clinical research program for 36 medical residents, interactions with other clinical departments and with administration, nursing, and ancillary services. Interacted with 200 private as well as full time physicians in providing teaching and clinical care. Upgraded computer systems creating an intranet, automatic resident/covering resident paging system, census tracking in outpatient and hospital areas, cost and quality based reports from administrative data. Worked with the 9-hospital St. Barnabas Healthcare System to create ongoing quality monitoring reports, select risk adjustment vendors, and establish a system-wide metrics capability.

2005-2013 Chief of Medicine Service, New York University Langone Medical Center, New York. Oversee credentials, quality assurance, systems development, hospitalism, development and functioning of a firm system, and regulatory compliance. Interact with 400+ faculty in Medicine. Created and monitor educational programs including bedside rounding and evidence based medicine. Implemented physician order entry and other electronic medical record components in Medicine.

**Boards and Community Organizations**

1981 Co-founder The Addiction Treatment Center Of New England.

and medical director The largest private, non-profit center in New

England for the treatment of the addictions. Brighton, MA.

1985-1987 Board member Beth Israel Medical Center HMO Advisory

Board to conduct negotiations with MaxiCare. New York, NY.

2004 Fire and police Created a community based screening program

screening program for fireman and police in nearby towns.

Monmouth County. Long Branch, NJ.

2004 Paul McGuire Health Helped found and staff a trailer based

Trailer health clinic for uninsured (largely illegal

immigrant) patients. Freehold, NJ.

2004-2005 Trustee Monmouth Family Care Center Long Branch.

Conceived and implemented transition to federally qualified status of Monmouth Medical Center’s primary care clinics. Long Branch, NJ.

2017- Lawry Clinic Advisory Board, University of Colorado Medical Center. Denver, CO.

**Invited Presentations**

* “Seroepidemiology of HIV Infection in Healthy Intravenous Drug Users.”First International Conference on Acquired Immunodeficiency Syndrome, Atlanta, 1985.
* “Delivery of Health Care Services to Drug Abusers”.Harvard AIDS Institute. Boston, MA 1992.
* “Resident Education and the Costs of Patient Care”Association of American Medical Colleges, annual meeting, Washington, DC Nov. 3, 2001.
* “Studying Quality Without the Chart.”National Association for Healthcare Quality annual meeting Phoenix, Arizona Sept 2003.
* “A server based universal sign-out tool.” University Health System Consortium 2007 Quality and Safety Fall Forum: Redesigning the work of health care through enhanced communication, collaboration, and innovation. Palm Desert, CA October, 2007.
* "Quality and Safety Performance Information: Making It Actionable for All." University Health System Consortium 2008 Fall Quality and Safety Fall Forum: The accountability conundrum. Scottsdale, AZ, 2008.
* "Meaningful Use Standards." "Development of Smart Order Sets." Eclypsis Users Network Annual Conference. Dallas, Tx, 2009.
* "Re-imagining the Progress Note." National webinar presentation. Eclypsis Corporation. 2009.
* “Evaluating Attending Physicians One Discharge at a Time.” Society for General Internal Medicine Regional Meeting. Newark DE. 2012.

**Peer Reviewed Publications**

1. **Shine** **D**. Problems in drug therapy of alcohol withdrawal Pharmacy and Therapeutics Review 1979; 3:1-3.
2. Ingelfinger J, Isakson G, Costello C, and **Shine D**. Reliability of the toxic screen. Clin Pharmacol Therap 1979;39:456-461.
3. Shine D. Tricyclic antidepressant toxicity. Studies in Human and Veterinary Toxicology 1980; March, 233-234.
4. **Shine D** and Demas P. Knowledge and attitudes about drug abuse among house staff and attending physicians. J Med Ed 1984; 54:579-582.
5. Friedland G, Harris C, Small C, and **Shine D**. Intravenous drug abusers and the acquired immune deficiency syndrome: demographic and drug use patterns. Arch Int Med 1984; 184:512-516.
6. **Shine D.** Diagnosis and management of acquired immune deficiency syndrome in intravenous drug users. Adv Alcohol Subst Abuse 1985; 5(1-2):25-34.
7. **Shine D**, Moll B, Emeson E, et al. A seroepidemiologic study of drug abusers without AIDS. Am J Drug and Alcohol Abuse 1987; 13:4-11.
8. Friedland GH, Harris C, Butkus-Small C, **Shine D**, Moll B, Darrow W, Klein RS. Intravenous drug abusers and the acquired immunodeficiency syndrome (AIDS). Demographic, drug use, and needle-sharing patterns. Arch Intern Med 1985;145:1413-7.
9. **Shine D**. The Diagnosis of drug dependence by primary care providers. J Gen Int Med 1991; 6 supp: 532-534.
10. Sobel E, **Shine D**, DiPietro D, Rabinowitz M. Condom use among HIV-infected patients in South Bronx, New York. AIDS 1996;10:235-6.
11. **Shine D**, McDonald, J. A computer model for the measurement of compliance using a dual tracer technique. Br J Clin Pharmacol 1997; 43:283-290.
12. **Shine D**, McDonald, J. Limits of confidence in tracer compounds as a means of measuring patient compliance with medication. J Clin Pharmacol 1999; 9:1-9.
13. **Shine D**, Beg S, Jaeger J, Pencak D, Panush R. Association of resident coverage with cost, length of stay and profitability at a community hospital. J Gen Int Med 2001; 16:1-8.
14. **Shine D**, Jessen L, Bajaj J, Pencak D, Panush R. Actual and potential effects of medical resident coverage on reimbursement for inpatient visits by attending physicians. J Gen Int Med 2002; 17: 428-434.
15. **Shine D**, Sundaram P, Torres D, Johnstone B, Sangiuliano B. Can computerized cost data substitute for chart review? J Healthcare Quality 2002; 24 (6): 26-33.
16. **Shine D**, Kumar J, Patel J, Malik A, Jaeger J, Maida M, Old L, Burroughs G. A randomized trial of initial warfarin dosing based on simple clinical criteria. Thromb Haemost 2003; 89: 297-304.
17. Gangi S, Saidi F, Patel K, Johnstone B, Jaeger J, **Shine D**. Cardiovascular complications after gastrointestinal endoscopy: Occurrence and risks in a large hospital system. Journal of Gastrointestinal Endoscopy 2004;60:679-685.
18. Ugwu O, Chrysochoou G, Ashok M, Waxler J, **Shine D**. Assigning patients with heart failure to observation status: BNP, ejection fraction, or physician judgment. Congestive Heart Failure 2006; 12:26-31.
19. Rao P, Andrei A, Fried A, Gonzalez D, **Shine D**. Assessing quality and efficiency of discharge summaries. Am J Med Qual 2005;20:337-43.
20. **Shine D**, Rao P, Andrei A, Fried A. Pounds of cure: chart weight as a measure of service intensity. South Med J. 2006;99:346-7.
21. Alam K, Wallach S, Diaz N, **Shine D**. How do internal medicine residency programs evaluate their resident float experiences? South Med J. 2006; 99:919-23.
22. Narasimhaswamy S, Vedi C, Xavier Y, Tseng C, **Shine D**. The effect of standards on pain. J Gen Int Med 2006; 21:689-693.
23. **Shine D**, Pearlman E, Watkins B. Measurement of resident hours using frequency of interactions with the electronic medical record. Am J Medicine 2010;123(3):286-90.
24. Ohta B, **Shine D**. Establlishing goals of care – facilitating care transitions [abstract]. Gerontologist 2010;50:481.
25. **Shine D**, Weerahandi H, Hochman K, Wang L, Radford M. Guided ordering: clinician interactions with complex order-seets. International Journal of Medical Informatics. 2013 Feb;82(2):73-9.
26. **Shine D**. Risk adjusted mortality: problems and possibilities. Computational and Mathematical Methods in Medicine. 2012;2012:82946.
27. **Shine D.** Studying documentation. Editorial. Journal of Hospital Medicine 2013; 8(12):728-730.
28. Blecker S, Austrian JS, **Shine D**, Braithwaite RS, Radford MJ, Gourevitch M. [Monitoring the pulse of hospital activity: Electronic health record utilization as a measure of care intensity](http://onlinelibrary.wiley.com/doi/10.1002/jhm.2068/abstract). Journal of Hospital Medicine 2013; 8(9): 513–518.
29. Blecker S, Goldfeld K, Park N, **Shine D**, Austrian JS, Braithwaite RS, Radford MJ, Gourevitch MN. [Electronic health record utilization, intensity of hospital care, and patient outcomes.](http://www.ncbi.nlm.nih.gov/pubmed/24333204) Am J Med. 2014 Mar;127(3):216-21.
30. Blecker S, Austrian J, **Shine D**, Braithwaite RS, Radford MJ, Gourevitch MN. Monitoring the pulse of hospital activity: electronic health record utilization as a measure of care intensity. J Gen Med 2013. 28:S122-S122.
31. Blecker S, **Shine D**, Park N, Goldfeld K, Braithwaite RS, Radford M, Gourevitch MN. Association of weekend continuity of care with hospital length of stay. International J for Quality in Health Care 2014:551-563.
32. **Shine D**. Discharge before noon: an urban legend. Am J Med 2015; 128(5):445-446.
33. Frank M, Gonzales E, Harrington L, Meyer T, Zwillich, C, Anderson R, **Shine D**. The demise of he physical exam: lessions from the university of Colorado medical school task force on physical examination. SGIM Forum 2016;39(5):1-2.
34. Zorian A, **Shine D**, Mourad M. Discharge by noon: Toward a better understanding of benefits and costs. J Hosp Med 2021; 16(6):384.

Fiction

**Shine D.** Quality Murders. Novel. Black Opal Press. 2016.

**Shine D.** Privates. Novel. Black Opal Press. 2020.

Reviews, Books and Book Chapters authored

1. **Shine D.** “Substance Abuse” in Emergency Medicine: A Comprehensive Review, 2nd Ed. Editors: Kravis T and Warner C. Aspen Systems, Rockville, MD 1987.
2. **Shine D**. “Drug Dependence and Abuse” in Textbook of General Internal Medicine. Editor: Noble J. Little, Brown and Co., New York, 1987.
3. **Shine D.** “Drug Abuse” in Textbook of Primary Care, 2nd Ed. Editor: Noble J. Mosley 1996 pp 1709-1732.

Letters

**Shine D**, Pearlman E, Watkins B. Measuring Duty Hours Made Simple. Am J Medicine 2010;123(11):E19.

**Shine D.** Rules for shotgun testing. Am J Medicine 2015;125(10):57.