

Measuring



and



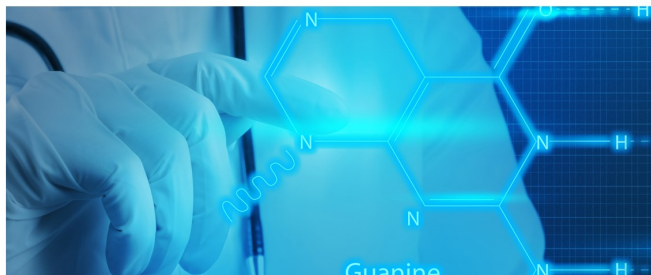
Rewarding



Quality

November 12 & 13, 2015

Measuring and Rewarding Quality



Health Sector Advisory Council
November 12 & 13, 2015



Thursday, November 12

21c Museum Hotel, 111 Corcoran St., Durham, NC 27701

6:00 pm Social and Cocktails

7:00 Dinner

Friday, November 13

Faculty Hall, The Fuqua School of Business, 100 Fuqua Drive, Durham, NC

7:30 am Shuttle from 21c to Fuqua

8:00 Breakfast with Health Sector Management students

9:00 Welcome and Introduction

- *David Ridley, PhD*
Faculty Director, Health Sector Management
Dr. and Mrs. Frank A. Riddick Associate Professor of the Practice
The Fuqua School of Business, Duke University

- 9:15** Policies to Promote Quality
- *Mark McClellan, MD, PhD*
Senior Fellow
Director of the Health Care Innovation and Value Initiative
Brookings Institution
 - *Bill Gradison, MBA, DCS*
Commissioner
Medicare Payment Advisory Commission (MedPac)
- 10:30** Break
- 10:45** Measuring Quality: Data, Analysis, and Reporting
- *Amy Abernethy, MD, PhD*
Chief Medical Officer and Senior Vice President of Oncology
Flatiron Health
- 11:15** Panel Discussion on Measuring and Rewarding Quality
- *Brian Caveney, MD, JD, MPH*
Vice President and Medical Director
Blue Cross Blue Shield of North Carolina
 - *Tiffany Gavin, MBA*
4C Project Director
Boston Medical Center
 - *Frank Sloan, PhD*
J. Alexander McMahon Professor of Health Policy and Management
Professor of Economics
Duke University
- 12:00 pm** Lunch
- 1:15** Productivity and Quality in Health Care
- *Ryan McDevitt, PhD*
Assistant Professor
The Fuqua School of Business, Duke University
- 2:00** Closing Comments
- *David Ridley, PhD*
- 2:15** Adjourn

Speakers

Amy P. Abernethy, MD, PhD is the Chief Medical Officer and Senior Vice President of Oncology at Flatiron Health, a healthcare technology company focused on organizing the world's cancer data and making it actionable for providers, patients, researchers and life sciences. At Flatiron, Dr. Abernethy leads the Oncology and Science parts of the organization. She is a hematologist/oncologist and palliative medicine physician, and internationally recognized cancer clinical researcher.

With over 400 publications, Dr. Abernethy is an expert in cancer outcomes research, clinical trials, patient reported outcomes, evaluation of healthcare quality, health services research, clinical informatics and patient-centered care. She is an appointee to the National Academy of Medicine's (formerly the Institute of Medicine) National Cancer Policy Forum, on the Executive Board for the Personalized Medicine Coalition, and Past President of the American Academy of Hospice & Palliative Medicine.

Before joining Flatiron, Dr. Abernethy was Professor of Medicine at Duke University School of Medicine, and ran the Center for Learning Health Care in the Duke Clinical Research Institute and Duke Cancer Care Research Program in the Duke Cancer Institute. For more than a decade, she has pioneered the development of technology platforms to spur novel advancements in cancer care, including the development of systems by which big data can support tracking cancer care, drug development, personalized medicine and scientific discovery.

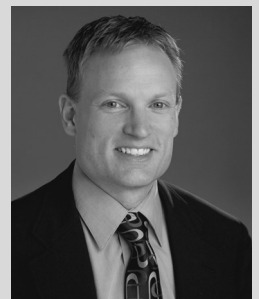
Dr. Abernethy went to the University of Pennsylvania as an undergraduate, and then medical school at Duke, where she also did her Internal Medicine residency, a year as Chief Resident, and her hematology/oncology fellowship. She has her PhD from Flinders University in Australia, focused on evidence-based medicine. She is also on the Board of Directors of athenahealth, Inc.

Brian Caveney, MD, JD, MPH is the Vice President and Senior Medical Director Blue Cross & Blue Shield of North Carolina. Dr. Caveney is responsible for development and implementation of strategies to manage health care costs while improving the health outcomes of Blue Cross members. He also leads quality programs to measure and incent performance improvement in the provider network to reward better outcomes in BCBSNC's move to value-based reimbursement.

Prior to joining BCBSNC, Dr. Caveney served as physician and assistant professor at Duke University Medical Center for 7 years. An avid Duke basketball fan, he is still an active adjunct faculty member at Duke.



Abernethy



Caveney



Gavin

Tiffany Gavin, MBA is the 4C Project Director at Boston Medical Center. The 4C project is a three year grant funded program from the Center for Medicare & Medicaid Innovation (CMMI) and was created to help parents and pediatricians manage care for the most medically complex children in the community.

Ms. Gavin has ten years of experience in healthcare ranging from corporate planning to operations leadership and received her MBA from Duke University in 2013. Outside of work, Ms. Gavin is an avid runner who enjoys cooking, traveling and spending time with her family.



Gradison

Bill Gradison, MBA, DCS has long been involved in health policy issues. During his 18 years in the House of Representatives he was the Ranking Member of the Ways and Means Health subcommittee as well as Ranking on the House Budget Committee. He later served as President of the Health Insurance Association of America. He was a founding Member of the Public Company Accounting Oversight Board set up under the Sarbanes-Oxley Act to register, inspect, and if necessary discipline the auditors of public companies. He also served as Vice Chairman of the U.S. Bipartisan Commission on Comprehensive Health Care (the “Pepper Commission”) and Vice Chair of the Commonwealth Fund Task Force on Academic Health Centers.

He has served for the last four years as a Commissioner on the Medicare Payment Advisory Commission set up by the Congress to advise it on Medicare payment issues. For over a decade Mr. Gradison was a Scholar in Residence in the Health Sector Management Program at Fuqua. He is a graduate of Yale University and earned his MBA and Doctorate at the Harvard Business School.



McClellan

Mark McClellan, MD, PhD is a senior fellow and director of the Health Care Innovation and Value Initiative at the Brookings Institution. Within Brookings, his work focuses on promoting quality and value in patient centered health care. A doctor and economist by training, he also has a highly distinguished record in public service and in academic research. Dr. McClellan is a former administrator of the Centers for Medicare & Medicaid Services (CMS) and former commissioner of the U.S. Food and Drug Administration (FDA), where he developed and implemented major reforms in health policy. These include the Medicare prescription drug benefit, the FDA’s Critical Path Initiative, and public-private initiatives to develop better information on the quality and cost of care. Dr. McClellan will be joining Duke University as the Director of the new Duke-Margolis Center for health policy.

Dr. McClellan chairs the FDA’s Reagan-Udall Foundation, is co-chair of the Quality Alliance Steering Committee, sits on the National Quality Forum’s Board of Directors, is a member of the Institute of Medicine, and is a research associate at the National Bureau of Economic

Research. He previously served as a member of the President's Council of Economic Advisers and senior director for health care policy at the White House, and was an associate professor of economics and medicine at Stanford University.

Ryan C. McDevitt, PhD is an Assistant Professor of Economics at the Fuqua School of Business. His research focuses primarily on the field of empirical industrial organization. Within health care, he has studied how medical groups strategically choose physicians based on their gender and how to measure healthcare productivity in a way that accounts for different levels of treatment quality. He has also conducted large-sample studies on various topics, including firms' responses to changes in their reputations and the correlation between a firm's name choice and its quality. In addition, he has collaborated on papers that consider the economic benefits of broadband Internet and the impact of social frictions on consumers' purchases.



McDevitt

Professor McDevitt received a B.A. from Williams College and a PhD from Northwestern University, both in economics. Before joining the faculty at Duke, he worked as an analyst in Morgan Stanley's Investment Banking Division and taught Competitive Strategy at the Kellogg School of Management and the Simon School of Business.

David Ridley, PhD is the Dr. and Mrs. Frank A. Riddick Associate Professor of the Practice of Business and Economics. He is also the Faculty Director of the Health Sector Management program at Duke University's Fuqua School of Business.



Ridley

Dr. Ridley's research has been published in economics, medical, and scientific journals. He was the lead author of a paper proposing the priority review voucher program to encourage development of drugs and vaccines for neglected diseases. The voucher program became law in the U.S. in 2007. He received his PhD in Economics from Duke University.

Frank Sloan, PhD is the J. Alexander McMahon Professor of Health Policy and Management and Professor of Economics at Duke University since 1993. He is the former Director of the Center for Health Policy, Law and Management at Duke (CHPLM) that originated in 1998. He holds faculty appointments in five departments at Duke, with Economics being his primary appointment. He did his undergraduate work at Oberlin College and received his PhD in economics from Harvard University.



Sloan

Before joining the faculty at Duke in July 1993, he was a research economist at the Rand Corporation and served on the faculties of the University of Florida and Vanderbilt University. He was Chair of the Department of Economics at Vanderbilt from 1986-89. His current research interests include alcohol use and smoking prevention, long-term care, medical malpractice, and cost-effectiveness analyses of medical technologies. He also has a

long-standing interest in hospitals, including regulation of hospitals, health care financing, and health manpower.

Dr. Sloan has served on several national advisory public and private groups. He has been an elected member of the National Academy of Medicine since 1982 and a chaired or chaired five committees of the Academy. He was formally a member of the Physician Payment Review Commission. He is the author of about 400 journal articles and book chapters and has coauthored and coedited about 20 books. Recently published books are Medical Malpractice (MIT Press, 2008, coauthored with L. Chepke) and Incentives and Choice in Health Care (MIT Press, 2008, co-edited with H. Kasper), a textbook, Health Economics (MIT Press, 2012). Between 2012 and 2014, he was President of the American Society of Health Economists. Since 2014, he has been Founding Editor of the American Journal of Health Economics.

status of blood-collecting organizations — policies that the WHO endorses and that were stressed again in a 2011 World Health Assembly resolution. These principles can also be established within a country through legislation or policy and can be achieved within a biologics manufacturing environment.

Additional concerns are that treating blood as a medication might increase costs and interfere with the function of blood systems that have grown up outside the oversight of health ministries and other regulatory agencies. The immediate direct costs of introducing regulated manufacturing systems are high, but indirect savings from improved patient outcomes and donor safety, though harder to calculate, are substantial. Furthermore, the manufacture of blood components that meet set quality standards might allow costs to be recovered through provision of separated plasma suitable for fractionation.

Finally, national investment in and oversight of blood systems, far from being disruptive, have led to improved availability and quality of blood for transfusion.

The Expert Committee on Selection and Use of Essential Medicines will hold its biennial meeting in April 2013. An application to include whole blood and red cells on the next Model List has been submitted and posted on the WHO website (www.who.int/selection_medicines/committees/expert/19/en/index.html) for public comment. Patient advocacy groups, professional associations, national blood services, regulatory agencies, and others should review and comment on this application. Adding blood to the Model List would encourage governments to invest in infrastructure and the governance of blood systems and increase their efforts in blood-donor recruitment and blood collection, which should lead to the provision of safe and cost-effective therapy, prevent

deaths and disabilities from blood shortages, and improve health globally.

The opinions expressed in this article are those of the author and do not necessarily represent those of the National Institutes of Health, the Department of Health and Human Services, or the U.S. government.

Disclosure forms provided by the author are available with the full text of this article at NEJM.org.

From the Department of Transfusion Medicine, Clinical Center, National Institutes of Health, Bethesda, MD.

1. The selection and use of essential medicines. Geneva: World Health Organization, 2003 (<http://apps.who.int/medicinedocs/en/d/j/s4875e/5.2.html>).
2. Klein HG, Spahn DR, Carson JL. Red blood cell transfusion in clinical practice. *Lancet* 2007;370:415-26.
3. Akech SO, Hassall O, Pamba A, et al. Survival and haematological recovery of children with severe malaria transfused in accordance to WHO guidelines in Kilifi, Kenya. *Malar J* 2008;7:256-64.
4. Guide to the preparation, use and quality assurance of blood components. 16th ed. Strasbourg, France: European Directorate for the Quality of Medicines and HealthCare, 2010.
5. AABB standards for blood banks and transfusion services. 28th ed. Bethesda, MD: AABB, 2012.

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The Patient Experience and Health Outcomes

Matthew P. Manary, M.S.E., William Boulding, Ph.D., Richard Staelin, Ph.D., and Seth W. Glickman, M.D., M.B.A.

Do patients' reports of their health care experiences reflect the quality of care? Despite the increasing role of such measures in research and policy, there's no consensus regarding their legitimacy in quality assessment. Indeed, as physician and hospital compensation becomes increasingly tied to patient feedback, health care providers and academics are raising strong objections to the use of patient-experience surveys. These views are fueled by studies indicating that patient-experience measures at best have no relation to the quality of delivered care and at

worst are associated with poorer patient outcomes. Conversely, other studies have found that better patient experiences — even more than adherence to clinical guidelines — are associated with better outcomes. Which conclusion is correct? We believe that when designed and administered appropriately, patient-experience surveys provide robust measures of quality, and our efforts to assess patient experiences should be redoubled.

Critics express three major concerns about patient-reported measures, particularly those assessing "patient satisfaction." First,

they argue that patient feedback is not credible because patients lack formal medical training. They believe that patient-satisfaction measures actually capture some aspect of "happiness," which is easily influenced by factors unrelated to care. Articles in the popular press have even suggested that employing singing, costumed greeters would raise patient-experience scores. However, Jha and colleagues found that overall satisfaction with care is positively correlated with clinical adherence to treatment guidelines.¹ One explanation for this correlation is that patients base their satisfac-

Representative Questions from the HCAHPS Survey.*

Question Number	Survey Section	Question	Answer Options
3	Your Care from Nurses	During this hospital stay, how often did nurses explain things in a way you could understand?	Never, Sometimes, Usually, Always
17	Your Experiences in This Hospital	Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?	Never, Sometimes, Usually, Always
20	When You Left the Hospital	During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?	Yes, No

* The standard and expanded Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) surveys may be found at www.hcahpsonline.org/surveyinstrument.aspx.

tion rating on an accurate “sense” of the quality of technical care. That would make patient-experience measures and clinical adherence measures redundant, which might imply that patient feedback has no additional value — but then the concern about credence would be meritless.

Another explanation is that the measures used to capture patient satisfaction reflect interpersonal care experiences, such as patient-provider communication, which correlate with technical care but represent a unique dimension of quality. Health care is, after all, a service, so measures of its quality should include assessment of the extent to which the patient and service provider reach a common understanding of the patient’s situation.² For example, a language barrier between patient and physician may affect the course — and therefore quality — of treatment. We have found that patient-reported measures not only are strongly correlated with better outcomes but also largely capture patient evaluation of care-focused communication with nurses and physicians, rather than noncare aspects of patient experience, such as room features and meals.^{3,4} Consequently, when collected through well-designed survey instruments that direct patients to report their experiences rather than their general “feel-

ings,” such as the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey (see table), even a controversial measure such as “satisfaction” appears to be tied both theoretically and empirically to quality.

A second concern is that patient-experience measures could be confounded by factors not directly associated with the quality of processes. For example, some observers believe that patients base their assessment of their experience on their health status, regardless of the care they’ve received. However, if feedback is determined by outcome, there should be no correlation between patient-experience measures and outcome when analyses control for clinical adherence. Yet several studies, including two of our own,^{3,4} have shown such correlations in multiple data sources in relation to multiple disease conditions, which indicates that patient-experience measures don’t simply reflect clinical adherence-driven outcomes but also represent a different dimension of quality that is otherwise difficult to measure objectively.

The third concern is that patient-experience measures may reflect fulfillment of patients’ a priori desires — for example, their request for a certain drug, regardless of its benefit. If that

explanation were valid, then our finding that higher satisfaction is linked to better outcomes would indicate that patients can judge better than clinicians the best course of treatment. This implication is not intuitive, and the concern is not consistent with the data. For example, studies have shown that patient-experience measures and the volume of services ordered are not correlated; in fact, increased patient engagement leads to lower resource use but greater patient satisfaction.

How, then, do we explain the inconsistent results concerning patient-experience measures and health outcomes? There are five points to consider. First, one must think about whether these measures focus on a specific event or visit. We find that when focused on a specific hospital visit, they are consistently correlated with accepted outcome measures, such as mortality and readmission rates. In contrast, the use of general evaluations of health plans tends to produce null to opposite results. One reason may be that health-plan surveys tend to assess all care provided by a plan over a long period, leaving patients to determine which interactions should factor in to evaluations.

Second, survey instruments should focus on patient-provider interactions — the aspect of care

Categories of Experiences Assessed by the HCAHPS Survey, in Order of Degree of Correlation with Overall Satisfaction.*

1. Communication with nurses
2. Pain management
3. Timeliness of assistance
4. Explanation of medications administered
5. Communication with doctors
6. Cleanliness of room and bathroom
7. Discharge planning
8. Noise level at night

* Data are from Boulding et al.³

for which patient-reported measures are most credible — and evaluate interactions with all providers and coordination within the care team. When we analyzed the factors influencing overall patient-experience scores in hospital settings, we found that aspects of nursing care and communication were more predictive than interactions with physicians. In the HCAHPS survey, communication with physicians ranked fifth out of eight categories in terms of correlation with overall satisfaction (see box).³ Some studies with null findings or negative associations between patient-experience measures and outcomes evaluated only communication with physicians. Limiting patient-experience measurement to a single dimension may exclude the interactions that most strongly affect experiences and outcomes. This fact alone could explain why many studies show no relation between outcomes and patient experiences.

Third, timeliness of measurement is important. For example, the HCAHPS survey questionnaire is collected no later than 42 days after the patient's discharge. Conversely, surveys conducted by health plans and primary care physicians typically require patients to consider interactions that occurred a year or

more previously, which can introduce considerable recall inaccuracies and bias.

Fourth, to eliminate confounders and alternative explanations, outcome measures should be risk-adjusted and closely related to the interaction of interest. These two factors might explain the finding by Fenton et al. of a negative association between patient-experience measures and outcomes, since the average lag between the measured experience and the outcome was 3.9 years and the researchers controlled for risk by means of self-reported health status.⁵ In contrast, in the hospital studies that showed positive associations,^{1,3,4} risk was controlled for with the use of empirical data, and patients' assessments were done during hospitalization or within 30 days after discharge.

Fifth, there's no common approach for defining "patient satisfaction." Each study we've examined used a measure labeled "satisfaction," yet none of the survey instruments included questions using that word, and the researchers did not use the same set of measures. Nevertheless, if these measures address a specific event or visit, focus on provider-patient interactions, and are assessed in a timely manner, they seem to capture an important and otherwise unmeasured dimension of quality of care. But a common measure of patients' overall assessment of care — grounded in sound research — would facilitate cross-study comparisons and might reduce confusion and skepticism regarding what patient "satisfaction" actually measures.

Although there are unresolved methodologic issues related to the measurement and interpretation of patient experiences — regarding survey content, risk ad-

justment, and the mode and timing of survey administration — we believe that both theory and the available evidence suggest that such measures are robust, distinctive indicators of health care quality. Therefore, debate should center not on whether patients can provide meaningful quality measures but on how to improve patient experiences by focusing on activities (such as care coordination and patient engagement) found to be associated with both satisfaction and outcomes, evaluate the effects of new care-delivery models on patients' experiences and outcomes, develop robust measurement approaches that provide timely and actionable information to facilitate organizational change, and improve data-collection methods and procedures to provide fair and accurate assessments of individual providers.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

From the Fuqua School of Business, Duke University, Durham, NC (M.P.M., W.B., R.S.); and the Department of Emergency Medicine, University of North Carolina School of Medicine, Chapel Hill (S.W.G.).

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1. Jha AK, Orav EJ, Zheng J, Epstein AM. Patients' perception of hospital care in the United States. *N Engl J Med* 2008;359:1921-31.

2. Parasuraman A, Zeithaml VA, Berry LL. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *J Retailing* 1988;64:12-40.

3. Boulding W, Glickman SW, Manary MP, Schulman KA, Staelin R. Relationship between patient satisfaction with inpatient care and hospital readmission within 30 days. *Am J Manag Care* 2011;17:41-8.

4. Glickman SW, Boulding W, Manary M, et al. Patient satisfaction and its relationship with clinical quality and inpatient mortality in acute myocardial infarction. *Circ Cardiovasc Qual Outcomes* 2010;3:188-95.

5. Fenton JJ, Jerant AF, Bertakis KD, Franks P. The cost of satisfaction: a national study of patient satisfaction, health care utilization, expenditures, and mortality. *Arch Intern Med* 2012;172:405-11.

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Maria Crennan

SooMin Lee

The health sector is increasingly intricate, dynamic and far-reaching – a global network of business, government, and non-profit entities that **impacts people and economies like no other**. The demand for and development of new health care products and services calls for leaders with both business acumen and **insight into the industry's complexities**. Equally critical is the need for **creative new approaches** to improve patient outcomes, access to care and cost management strategies.

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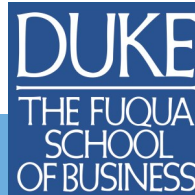


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David Ridley, PhD

Faculty Director, Health Sector Management

Dr. and Mrs. Frank A. Riddick Associate Professor of the Practice



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See description above.

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See description above.

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Elective Courses

See examples above. Please note, not all daytime elective courses are available to EMBA students.





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