



**PART 5 — SUSTAINABLE PHYSICIAN BEHAVIOR
CHANGE (ALIGNMENT)**

PROVIDER SURVIVAL STRATEGIES IN AN AT-RISK ENVIRONMENT



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Provider Survival Strategies in an At-Risk Environment – Full Report

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In this compilation of a six-part series, A&M is focused on providing context for the actions deemed necessary by providers to succeed in an increasingly at-risk, value-based environment. All healthcare is local. Siloed activities now require convergent integration. Each provider needs to consider federal (Medicare) and state (Medicaid) reimbursement and regulatory initiatives, local market conditions such as demographics, socioeconomics, competitive intensity, market share and relative performance, and its own capabilities and risk profile.

<https://www.alvarezandmarsal.com/insights/provider-survival-strategies-risk-environment>



SUSTAINABLE PHYSICIAN BEHAVIOR CHANGE (ALIGNMENT)

During the past decade, there has been an acceleration in the “corporatization” of healthcare, with hospitals merging into ever-larger health systems, health systems acquiring physician practices, and insurance companies privatizing (e.g., Anthem) and acquiring each other. As a result, many (primarily older) physicians feel disengaged, have suffered a partial loss of autonomy, are less productive and generate less income. Significant gaps in perception regarding involvement, role and trust have emerged between administrators and physicians. A physician generational divide has emerged.

Primary care physicians are among the lowest-paid practitioners in a fee-for-service reimbursement system driven by procedures. Patient engagement, prevention and care coordination efforts have not been adequately, if at all, rewarded. Health systems in a risk-based, value-oriented care delivery system will need to reconsider their compensation system based on throughput. A reduction

in ambulatory care-sensitive condition hospital admissions and readmissions, as well as a more conservative approach to ancillary services, and surgical and non-surgical procedures will drive future profitability.

The implementation of the Medicare Access and CHIP Reauthorization Act (MACRA) by CMS in 2019 will fundamentally alter Medicare physician reimbursement. The implementation of Merit-based Incentive Payment Systems (MIPS) features bonus and penalty opportunities ranging from +/- 4 percent of Medicare reimbursement in 2019 to +/- 9 percent by 2022. Composite score details are still being developed. Common elements are consistent with value-based care initiatives and include a focus on population health; care coordination, information exchange and clinical outcomes; patient safety, the experience of care, engagement and self-management; and comparative episode, condition and total (per capita) costs.

During the past decade, there has been an acceleration in the “corporatization” of healthcare, with hospitals merging into ever-larger health systems and insurance companies privatizing (e.g., Anthem) and acquiring each other. The five largest for-profit hospital systems own 425 hospitals, whereas the top 10 largest non-for-profit systems have 383 hospitals; 15 health systems account for 16.6 percent of the total.¹¹⁹ Health systems have also become the largest employer of physicians, either directly or through the purchase of practice assets.

Insurance companies have also consolidated, leading to limited competition in most major markets. In 2014, the five largest companies — United, Anthem, Aetna, Humana and Cigna — accounted for 46 percent of market share and generated \$380 billion in revenues.¹²⁰ The U.S. Herfindahl-Hirshman Index, a measure of market share distribution, for large group (4,442) and small group (4,527) insurance, implies highly concentrated markets with limited competition.¹²¹

Provider and insurance company consolidation has altered the “balance of power,” resulting in a loss of autonomy and a reduction in income for many physicians. A generational divide has also emerged between highly experienced physicians and more recent graduates of residency programs.

2016 represented the first year that physician practice ownership declined to under 50 percent; physicians are now more often employed (47 percent) or independent contractors (6 percent) than practice owners. The percentage of small, autonomous practices (<5 physicians) is declining, whereas practices with >50 physicians have grown.

Physician practice acquisitions have been driven primarily by the potential for incremental market share gains (ancillary services, procedures) and contractual upgrades with insurance companies. *Two-thirds of physicians believe that hospital employment will not improve quality or reduce costs.* Significant gaps in perception exist between hospital executives and physicians in terms of mutual trust, degree of involvement and/or collaboration and problem resolution.

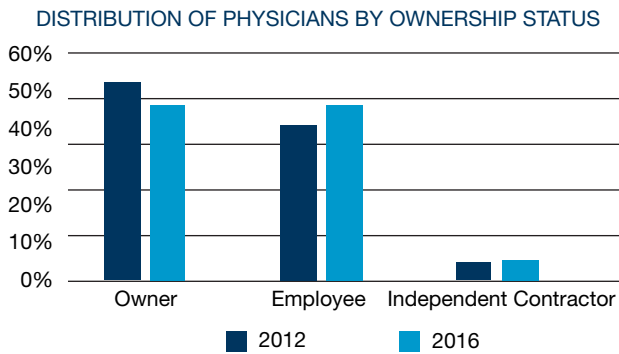
FIGURE 71 | PHYSICIAN SITUATION ANALYSIS

SITUATION ANALYSIS	OPPORTUNITIES
<ul style="list-style-type: none"> ▪ Increasing employment of physicians ▪ Gap in perception between physicians and management ▪ Loss of physician autonomy ▪ Negative physician morale ▪ Declining physician productivity ▪ Physician disengagement ▪ Specialty procedure compensation bias ▪ MACRA 	<ul style="list-style-type: none"> ▪ Physician generation divide ▪ Compensation re-alignment ▪ Back to the future: Physicians being doctors <ul style="list-style-type: none"> ▪ Data-enabled change ▪ Physician-led utilization management

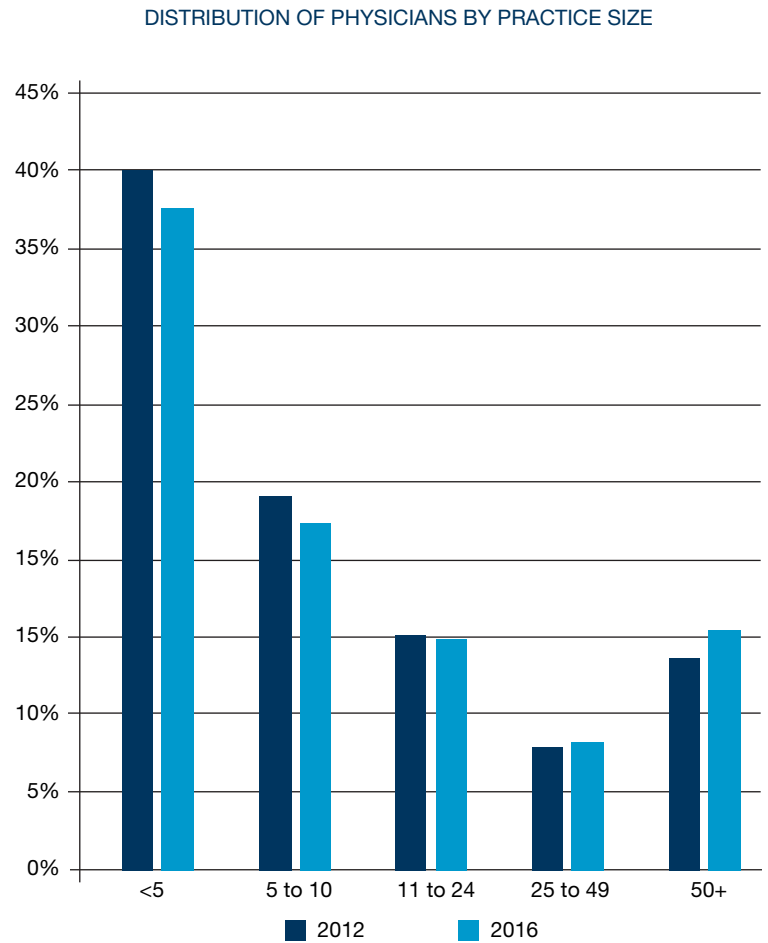
Source: HealthIT.gov. Policymaking, Regulation, & Strategy. Meaningful Use. www.healthit.gov/policy-researchers-implementers/meaningful-use



FIGURE 72 | DECLINING PHYSICIAN OWNERSHIP

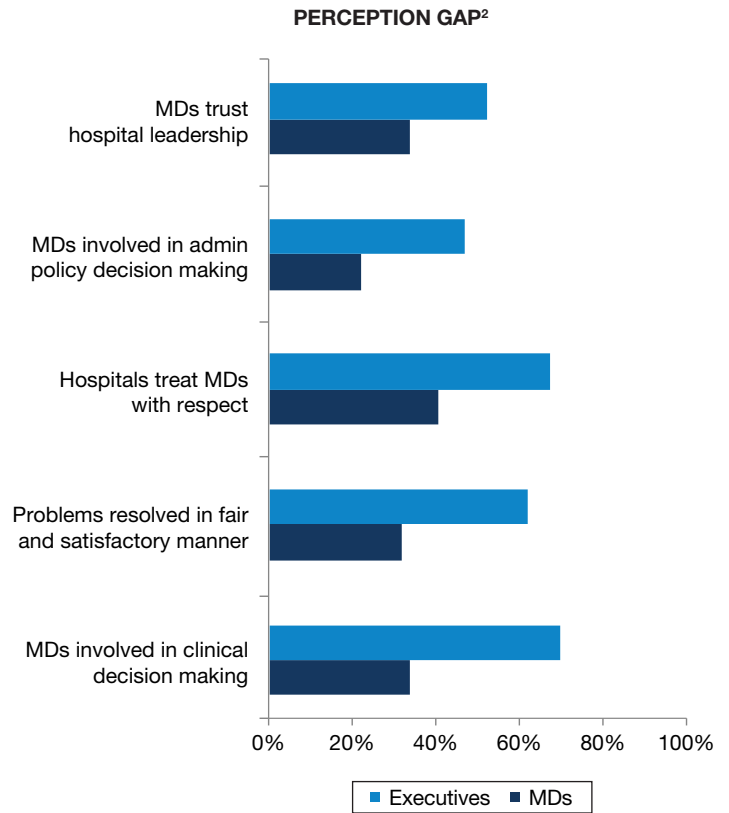
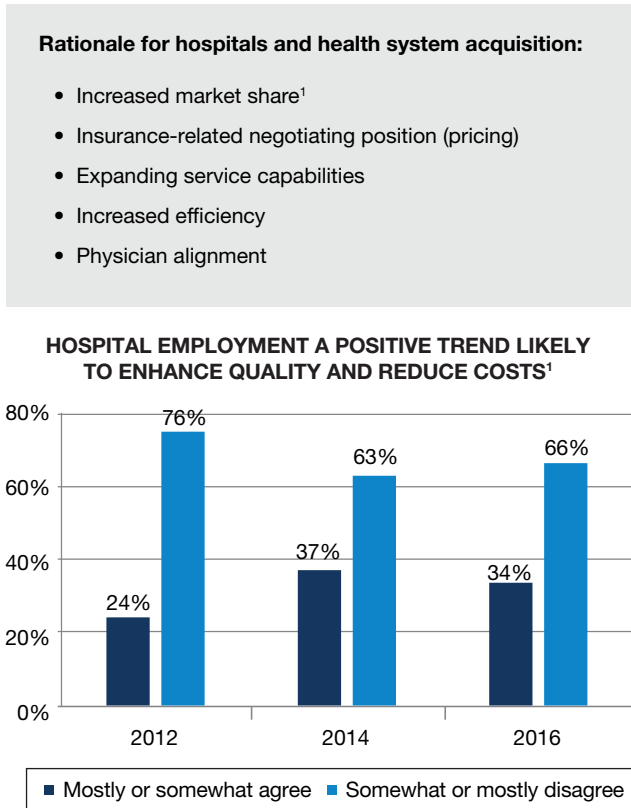


	2012	2014	2016
Wholly owned by physicians	60.1%	56.8%	55.8%
At least some hospital ownership	23.4%	25.6%	25.4%
Wholly owned by hospital	14.7%	15.6%	16.1%
Jointly owned by physicians and hospital	6.0%	7.3%	6.2%
Unknown whether wholly or jointly owned	2.6%	2.7%	3.1%
Direct hospital employee	5.6%	7.2%	7.4%
Wholly owned by not-for-profit foundation	6.5%	6.4%	6.7%
Other ²	4.4%	4.0%	4.7%
	100%	100%	100%
Sample Size	3466	3500	3500



Source: AMA Physician Benchmark Survey, 2016. Beckers 2015

FIGURE 73 | PHYSICIAN PERCEPTION GAP



Source: ¹Biennial Physician Survey, 2016. http://www.physiciansfoundation.org/uploads/default/Biennial_Physician_Survey_2016.pdf;
²<https://www.advisory.com/research/medical-group-strategy-council/practice-notes/2015/june/who-is-to-blame-for-physician-burnout>;

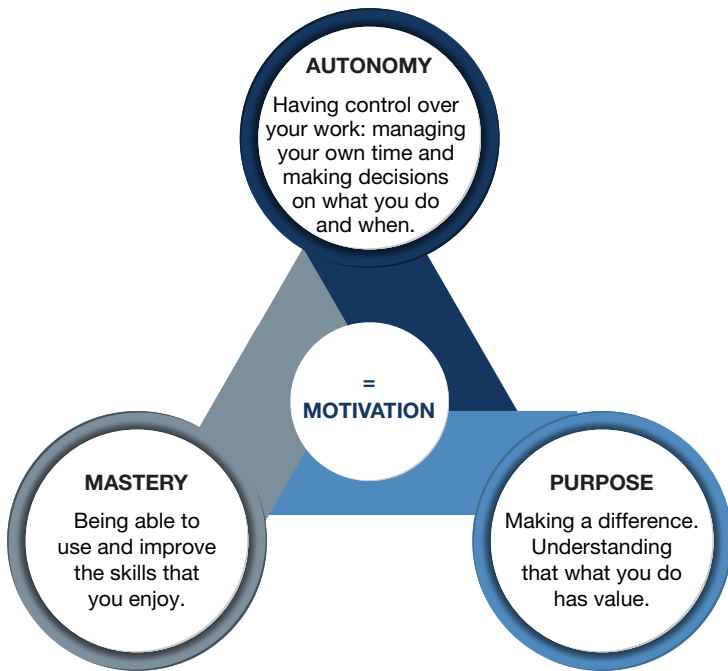
The (historical) motivators for a career in medicine include autonomy and freedom from external control; mastery, personal growth and fulfillment; and purpose and importance as reflected by achievement, status and reputation. Physician motivation is being affected by the change in their employment status and role within the healthcare ecosystem. Anecdotal feedback also suggests a decline in income and/or the additional efforts required to sustain current levels of income.

Fundamental “mindset” differences among physicians and hospital / health system administrators have contributed to the perception gaps. Physicians tend to focus on patients

based on their clinical expertise in an autonomous manner, whereas administrators focus on efficiency, standardization and reimbursement maximization.

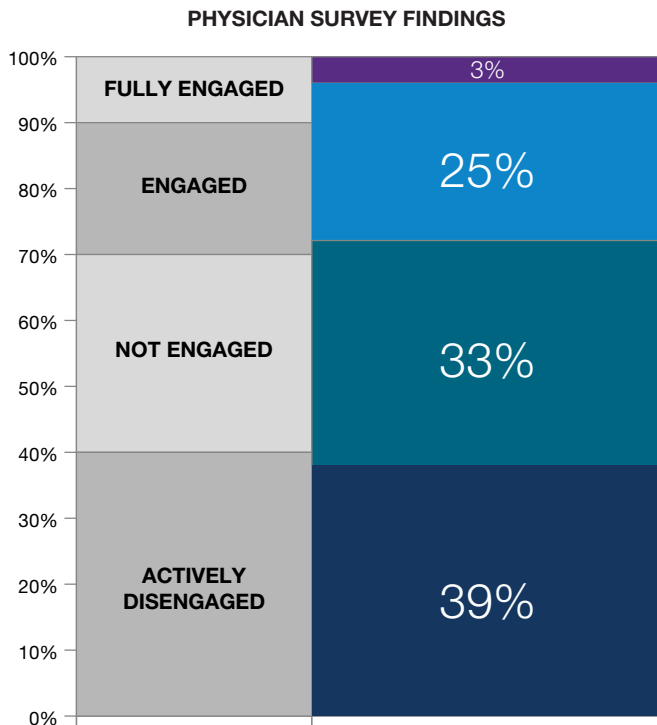
Physician morale remains negative, though improving. A majority of physicians profess somewhat or very negative feelings about the current and future state of the medical profession. Only 50 percent would recommend a career in medicine.¹²² Nearly two-thirds of physicians are either actively disengaged (39 percent) or not engaged (33 percent), resulting in lost productivity and significant opportunity costs.

FIGURE 74 | EROSION OF PHYSICIAN MOTIVATION



	PHYSICIANS	HOSPITAL AND/OR HEALTH SYSTEM ADMINISTRATION
Focus of efforts	Clinical expertise; cognitive	Efficiency; process and policy
Primary loyalty	Patients	Organization
Accountability	Individual; self-reliant	Shared; interdependent
Work flow	Practice style	Standardized

FIGURE 75 | LEVEL OF PHYSICIAN ENGAGEMENT, 2016



- In one hospital studied, fully engaged physicians gave the hospital an average of **51% more inpatient referrals** and **3% more outpatient referrals** than physicians who were not engaged.
- Fully engaged physicians were **26% more productive** than less engaged physicians, which amounted to an additional \$460,000 on average inpatient revenue per physician per year.

¹<https://www.jacksonhealthcare.com/physician-trends/articles/physician-engagement-alignment-2016-report/>; ²Gallup study on physician engagement quoted in "What Too Many Hospitals are Overlooking" by Craig Kamins www.gallup.com/businessjournal/181658/hospitals-overlooking.aspx

Motivation and engagement are being negatively affected, with data suggesting 3.9 fewer patients, or 16.7 percent, being seen daily in 2016 as compared to 2008. Hours worked have declined by 7.2 percent during this period.

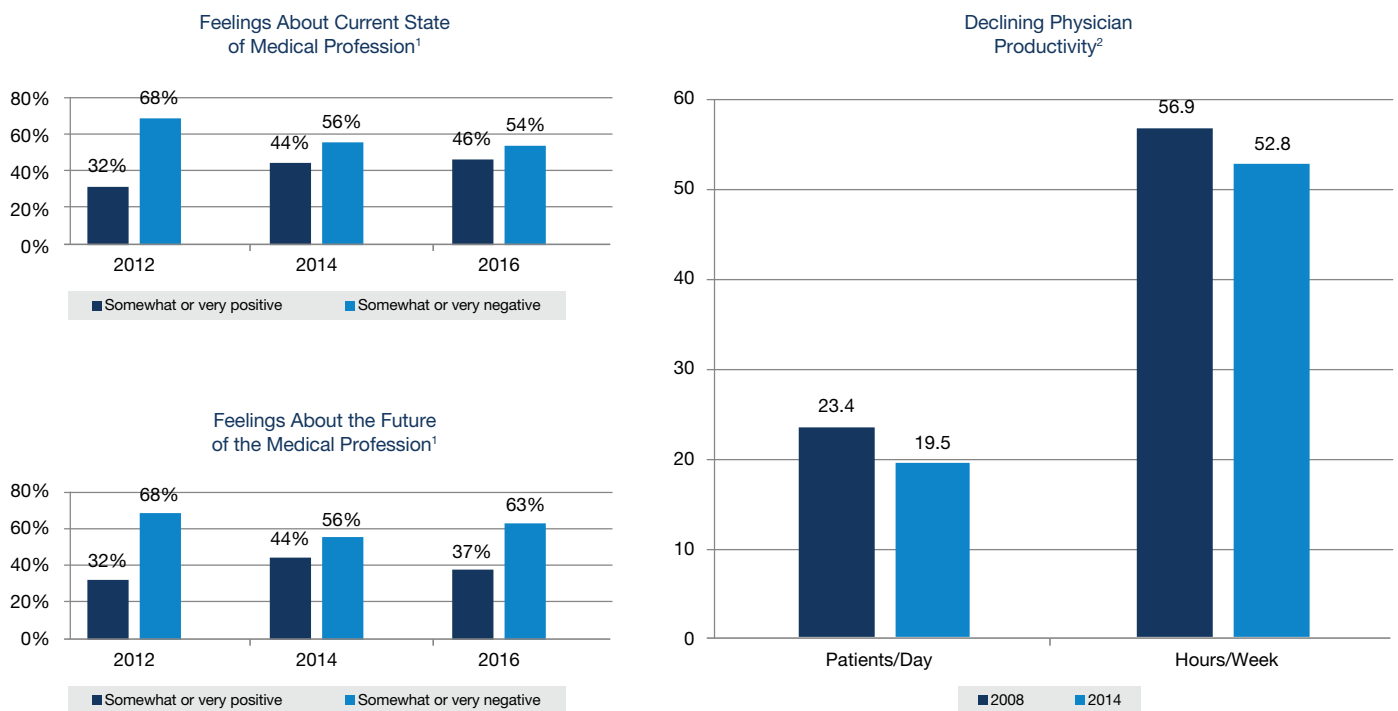
According to the 2016 Survey of America’s physicians (n=17,000), physicians estimate that 21 percent of their time is spent on nonclinical matters.¹²³ Electronic medical records have not emerged as the panacea envisioned by the HITECH Act of 2009, as the majority of physicians, 59.4 percent, believe patient interactions have been reduced, and 55.4 percent attribute a decline in efficiency to EMRs. Nearly three-quarters of physicians experience feelings of professional burnout: always, 17.2 percent; often, 31.4 percent; and sometimes, 25.4 percent.

The leading inpatient (EPIC, Cerner, Meditech, CPSI) and ambulatory (EPIC, Allscripts, eClinicalWorks, NextGen) electronic medical records have not yet completed their evolution from coding, documentation and process-driven

improvements (i.e., “consistent use of structured problem, medication and allergy lists, e-prescribing”) to health outcomes.¹²⁴ Significant limits to interoperability across the continuum of care exist. Data extraction and the use of analytics (e.g., provider / procedure variation, decision support) remain an opportunity.

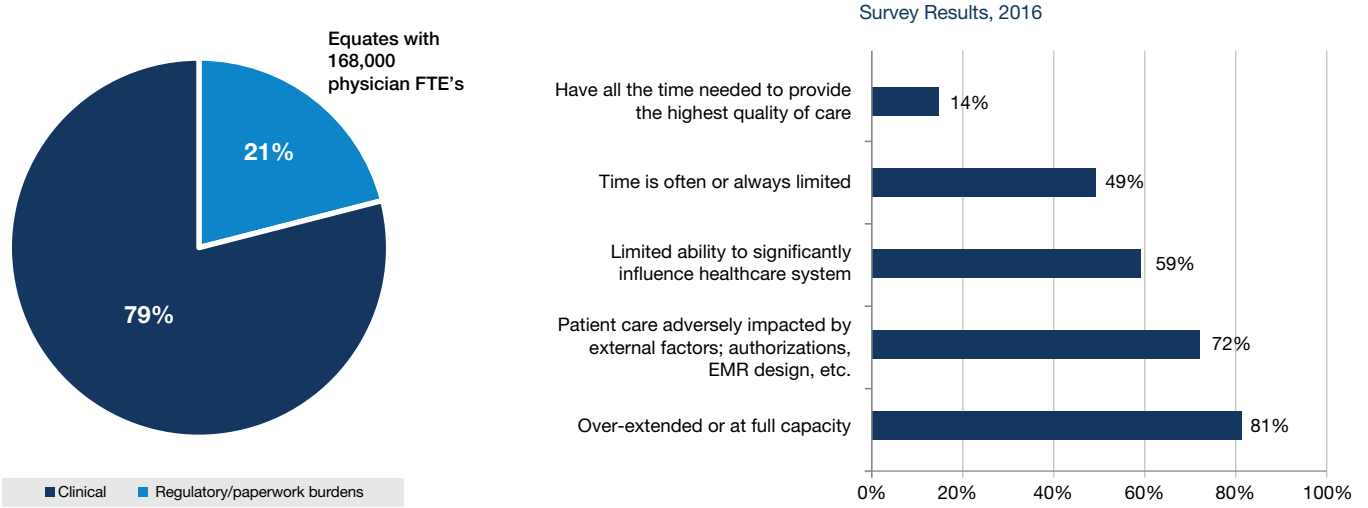
A study published this month in the Annals of Family Medicine titled “Tethered to the EHR: Primary care physician workload assessments using EHR log data and time motion observations” concluded that primary care physicians “spend more than one-half of their workday, 5.9 hours (of 11.4 hours), interacting with the electronic health record during and after clinic hours.”¹²⁵ The measured results far exceeded their own perception of time spent with electronic health records of 21 percent, the equivalent of 2.4 hours, captured in a 2016 survey.¹²⁶ Documentation, computerized physician order entry (CPOE) and prescription refills alone account for three hours per day.

FIGURE 76 | NEGATIVE PHYSICIAN MORALE AND PRODUCTIVITY



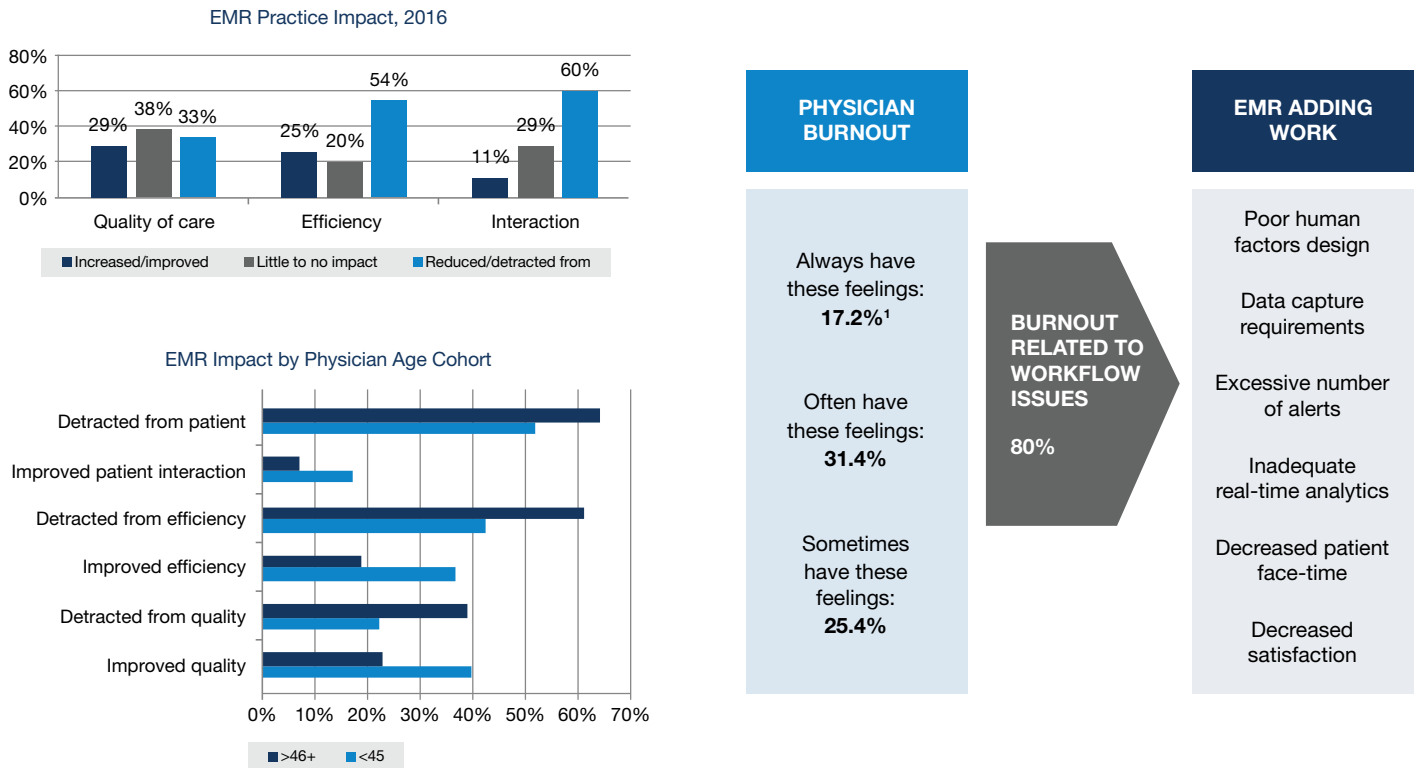
¹http://www.physiciansfoundation.org/uploads/default/Biennial_Physician_Survey_2016.pdf; ²The Physician Employment Trend: What You Need to Know. Fam Pract Manag. 2015 Jul-Aug;22(4):11-15. <http://www.aafp.org/fpm/2015/0700/p11.html>

FIGURE 77 | FACTORS CONTRIBUTING TO PHYSICIAN PRODUCTIVITY DECLINE



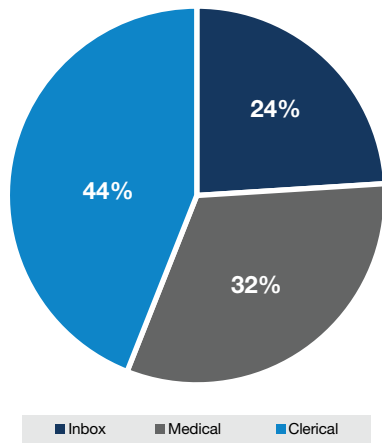
http://www.physiciansfoundation.org/uploads/default/Biennial_Physician_Survey_2016.pdf

FIGURE 78 | IMPACT OF ELECTRONIC MEDICAL RECORDS



http://www.physiciansfoundation.org/uploads/default/Biennial_Physician_Survey_2016.pdf; *2NEJM Catalyst. Are EMRs to Blame for Physician Burnout? Interview* · October 24, 2016 <http://catalyst.nejm.org/electronic-medical-records-blame-physician-burnout/>

FIGURE 79 | PRIMARY CARE PHYSICIAN TIME SPENT PER DAY ON EHR TASKS



EHR TASK CATEGORY	DESCRIPTION
Clerical	Administrative, Billing and Coding, Documentation, Order Entry and System Security
Medical Care	Chart Review (Imaging, Laboratory, Medications, Notes) and Point of Care Support (Evidenced Based Medicine)
Inbox	Refills and Results Management, Letter Generation, MyChart Portal, Telephone Call

Annals of Family Medicine. Tethered to the EHR: Primary Care Physician Workload Assessment Listing EHR Event Log Data and Time-Motion Observations; September/October 2017 vol. 15 (5): 419-426

A significant generation divide has emerged between physicians older and younger than 45 years of age. Assuming medical school and completion of residency training at 30–35 years of age implies a breakpoint approximating 10–15 years of clinical practice. The generational divide reflects significant changes in care delivery, including hospital consolidation and emergence of large health systems, physician practice acquisitions, new insurance company products (e.g., HMOs, PPOs and high-deductible plans), industry consolidation, medical technology evolution (e.g., stents, imaging), electronic medical records and digital health. Younger physicians — those <45 years of age — are more optimistic about the future.

In 2015, there were 784,600 physicians in the U.S., 230,400 primary care (excluding 27,900 hospitalists) and 565,100 non-primary care physicians.¹²⁷ In its 2017 update of projected physician supply and demand, the Association of American Medical Colleges (AAMC) forecast a shortage of primary care physicians ranging from 7,300 (25th percentile) to 43,100 (75th percentile) in 2030.¹²⁸ A 20 percent shortage in 2030 is also forecast for medical specialists, thereby limiting the ability to increase their primary care patient load.

A range of scenarios were generated to create the output. The AAMC model is an update and does not reflect a significant change in reimbursement and the process of care:

- A baseline shortage of 8,400 primary care physicians in 2015 is forecast to reach 19,500 in 2020.
- Increased use of care extenders. Physician-to-physician assistant ratio declines from 7.2: 1 in 2015 to 3.5:1 in 2030. Advanced practice registered nurse (APRN) ratio declines from 3.6:1 to 1.9:1.
- One-third of all physicians will be >65 within the next decade.
- Physicians currently <age 35 will continue to work about 13 percent fewer hours than earlier cohorts.
- Increased use of population health. Short-term decline in demand offset by longer-term impact of longevity.
- No change in the demand for healthcare services among the Medicaid (and uninsured populations) despite Medicaid expansion.
- Shortages primarily driven by incremental need for family / general practitioners and internal medicine specialists due to rapid growth of the aging population >65 years, from 46.6 million in 2015 to 72.8 million in 2030, an increase of 56.3 percent, as compared to the <18 population, growing at 5 percent during the 15-year period.

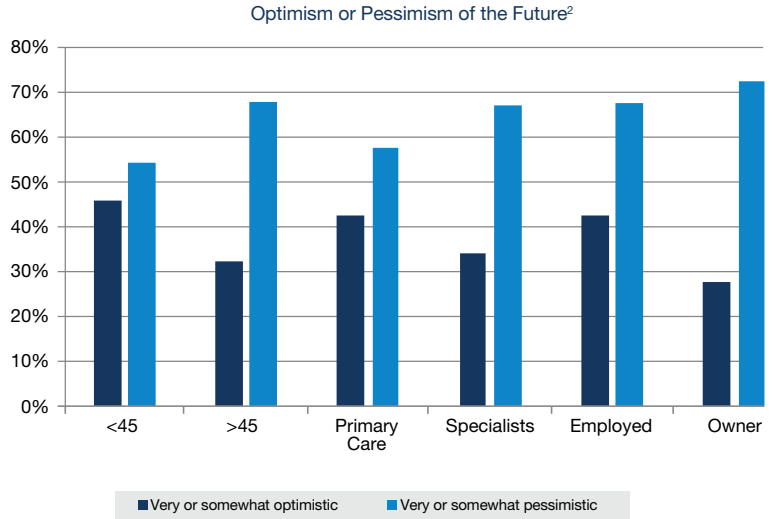
FIGURE 80 | GENERATION DIVIDE AMONG PHYSICIANS

Satisfied physicians are more likely to be:

- Between 25-44 years
- Work 8 hours per day
- Be employed and have never worked in private practice
- Have chosen employment for lifestyle reasons
- Have a greater number of patients with private insurance

Dissatisfied physicians are more likely to be*:

- Between 45-64 years
- Work >8 hours per day
- Own a solo practice
- Say patients are delaying treatments
- Say have lost patients due to ACA



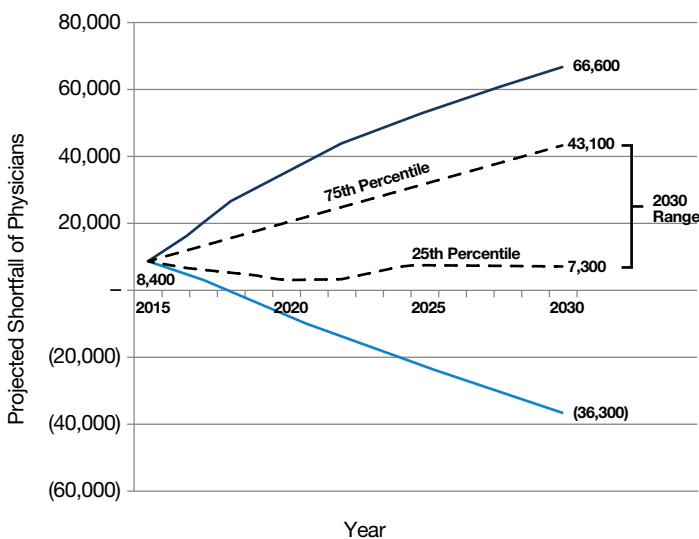
*11% of active physicians between 65-75; 26% between 55-64 with many planning to retire within 5-10 years¹

¹AAMC. *The Complexities of Physician Supply and Demand: Projections from 2014 to 2025. 2016 update* https://www.aamc.org/download/458082/data/2016_complexities_of_supply_and_demand_projections.pdf. ²Biennial Physician Survey 2016 http://www.physiciansfoundation.org/uploads/default/Biennial_Physician_Survey_2016.pdf

A&M believes the projected 75th percentile, a shortage of 43,100, is likely understated given the ongoing reduction in physician productivity and the assumption of a 50 percent increase in the ratio of nurse practitioners and physician assistants to primary care physicians. Care

extenders are not physicians; their training is relatively limited. The current fee-for-service environment devalues cognitive skills and is focused on relative value units (throughput). A value-based ecosystem is focused on health outcomes, thereby greatly enhancing the role

FIGURE 81 | PROJECTED SHORTFALL OF PRIMARY CARE PHYSICIANS, 2015-2030



Nurse practitioner (advanced practice registered nurses) requirements vary from state to state:

- All states require an RN license
- All states require some form of advanced training beyond undergraduate RN training
- 27 states require a masters degree in nursing (or a related clinical field)
- 35 states require national certification
 - Evidence of completion of a minimum of 500 clinical clock hours of faculty-supervised practice;
 - Evidence of completion of the APRN core courses: advanced physical assessment, advanced pharmacology, and advanced pathophysiology;
- California requires specialization as adult nurse practitioner, pediatric nurse practitioner, obstetrical-gynecological nurse practitioner and family nurse practitioner
- Delaware requires practice in the specialty for which you are applying of either 600 hours over the past two years or 1500 hours over the past five years,
- Mississippi requires completion of a 720 hour residency that was monitored by either a licensed physician or certified APRN

The Complexities of Physician Supply and Demand: Projections from 2015 to 2030; 2017 Update https://aamc-black.global.ssl.fastly.net/production/media/filer_public/a5/c3/a5c3d565-14ec-48fb-974b-99fafaecb00/aamc_projections_update_2017.pdf



of primary care physicians and their ability to manage complex, comorbid patients, i.e., “frequent flyers.” The 75–84 year old cohort — the population with a rapid increase in Medicare expenditures due to an increase in the number of comorbidities and their severity (e.g., class, stage) — is forecast to increase from 13.6 million in 2015 to 25.2 million in 2030, an increase of 85.3 percent. Team-based case management is resource-intensive and requires a focus on prevention and the timely intervention of physicians well-versed in pharmaceutical optimization and self-management.

Primary care physicians are among the lowest-paid practitioners in a fee-for-service reimbursement system driven by procedures. Patient engagement, prevention and care coordination efforts have not been adequately, if at all, rewarded. Health systems in a risk-based, value-oriented care delivery system will need to reconsider its compensation system based on throughput. A reduction in ambulatory care-sensitive condition hospital admissions and readmissions, as well as a more conservative approach to ancillary services and surgical and non-surgical procedures, will drive future profitability.

The implementation of MACRA by CMS in 2019 will fundamentally alter Medicare physician reimbursement. The Merit-based Incentive Payment Systems (MIPS), to be applied to the vast majority of physicians, and (advanced) Alternative Payment Model (APMs), applied to ACOs, episodes of care and medical homes, will increase provider focus on a composite score of quality, cost, the use of information and clinical practice improvement; weighting will evolve over time. MACRA will replace the individual system scores for the Physician Quality Reporting System (PQRS), Value-based Payment Modifier (VM) and Medicare EHR Incentive Program for Eligible Professionals.¹²⁹ MIPS bonus and penalty opportunities will range from +/- 4 percent of Medicare reimbursement in 2019 to +/- 9 percent by 2022.¹³⁰ Hospitals are not MIPS participants.



FIGURE 82 | PHYSICIAN COMPENSATION BY SPECIALTY

SPECIALTY	TOTAL COMPENSATION
Highest Paid	
Orthopedic Surgery: Spine	\$777,262
Cardiology: Interventional	\$587,500
Orthopedic Surgery: General	\$576,677
Gastroenterology	\$529,233
Dermatology	\$457,419
Lowest Paid	
Hospitalist: Internal Medicine	\$278,471
Psychiatry: General	\$255,543
Internal Medicine: General	\$247,319
Pediatrics: General	\$231,637
Family Medicine (without OB)	\$230,456

SPECIALTY	COMPENSATION/ wRVU
Hematology/Oncology: Oncology	\$86.51
Orthopedic Surgery: General	\$71.99
Anesthesiology: Pain Management	\$70.00
Hospitalist: Internal Medicine	\$69.15
Orthopedic Surgery: Spine	\$65.11
Psychiatry: General	\$63.95
Cardiology: Interventional	\$63.59
Dermatology	\$63.51
Cardiology: Noninvasive	\$63.00
Surgery: General	\$62.95
Gastroenterology	\$62.84
Pulmonary Medicine: General	\$62.44
Urology	\$57.51
Internal Medicine: General	\$53.09
Obstetrics/Gynecology: General	\$51.94
Emergency Medicine	\$50.34
Ophthalmology	\$48.19
Family Medicine (without OB)	\$47.92
Pediatrics: General	\$46.86

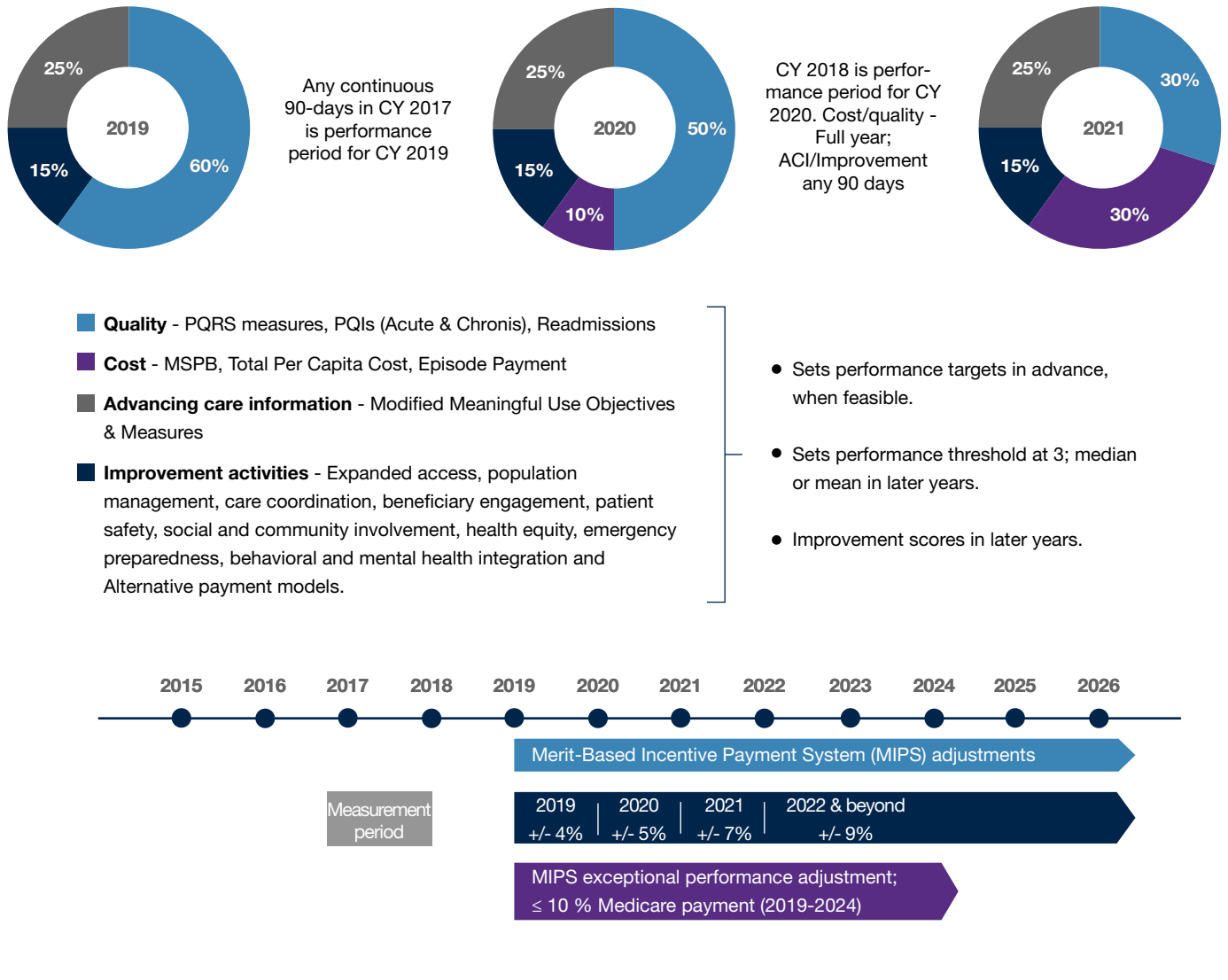
HOW RVUS ARE CALCULATED

- Each CPT code has numeric value representing its relative value or weight
- 3 measures multiplied by a conversion factor to create a fee schedule (allowable reimbursement).
- Total RVUs (TRVU) are calculated for each CPT by adding:

$$\begin{array}{r}
 \text{Physician Work RVU (wRVU)} \\
 + \text{Practice Expense RVU (peRVU)} \\
 + \text{Malpractice Expense RVU (mpRVU)} \\
 \hline
 \text{Total RVU (TRVU)} \\
 \hline
 \text{X Conversion Factor (CF)} \\
 \hline
 \text{Fee Schedule (allowable reimbursement)}
 \end{array}$$

Source: MGMA, 2016

FIGURE 83 | MACRA TO FUNDAMENTALLY ALTER MEDICARE PHYSICIAN COMPENSATION



Composite score details are still being developed. Common elements include a focus on population health; care coordination, information exchange and

clinical outcomes; patient safety, the experience of care, engagement and self-management; and comparative episode, condition and total (per capita) costs.

FIGURE 84 | MACRA COMPOSITE SCORE DETAILS

<p>QUALITY (2019 WEIGHT: 60%; 2021 WEIGHT: 30%)</p> <p>Six measures with no domain required – select from over 300 measures. One cross-cutting (e.g., care plan) and one outcome measure required. Focus areas:</p> <ul style="list-style-type: none"> - Clinical care, inclusive of gaps in care - Safety (e.g., diagnostic accuracy) - Care coordination (e.g., team-based, new technologies such as telehealth) - Patient and caregiver experience - Affordable care 	<p>COST (2019: 0% > 2021: 30%)</p> <ul style="list-style-type: none"> - Compare resources used to treat similar care episodes and clinical condition groups across practices - Can be risk-adjusted to reflect external factors - CMS will calculate from claims
<p>ADVANCING CARE INFORMATION (2019-21: 25% UNCHANGED)</p> <ul style="list-style-type: none"> - Former Meaningful Use - Use of certified electronic health record (EHR) technology in day-to-day practice - Emphasis on interoperability and information exchange. - Removes reporting for CPOE(Computerized Provider Order Entry) and Clinical Decision Support 	<p>IMPROVEMENT ACTIVITIES (2019-21: 15% UNCHANGED)</p> <ul style="list-style-type: none"> - Expanded practice access - Population management - Care coordination - Beneficiary engagement - Patient safety and practice assessment - Participation in an APM

Adopted from CMS Quality Measure Development Plan. Supporting the Transition to the Merit-based Incentive Payment System (MIPS) and Alternative Payment Models (APMs); May 2, 2016; and presentation by Health Catalyst, "Making Sense of MACRA," May 2016

Compensation realignment is required for an at-risk environment. Productivity-based compensation unrelated to outcome is a function of volume, not value. Incentive-based compensation is necessary to facilitate behavior change consistent with the strategic reorientation of an organization. A fundamental challenge for health system

leadership and human resources personnel responsible for compensation will be a reorientation to population health metrics focused on the total cost of care, inclusive of prevention, rather than the near-term maximization of inpatient and ancillary revenues.

FIGURE 85 | COMPENSATION REALIGNMENT

ELEMENTS OF COMPENSATION	PCP COMPENSATION IN CURRENT VOLUME-BASED REIMBURSEMENT WORLD	PCP COMPENSATION IN FUTURE VALUE-BASED REIMBURSEMENT WORLD
Productivity	4864 RVUs*	Panel of 2500 patients
Compensation Rate	\$41.00	Not Applicable
Productivity-Based Compensation	\$199,424	Not Applicable
Guaranteed Salary	none	\$136,924
Incentive-Based Compensation	\$7,500	\$60,000
For Service Quality	\$2,500	\$10,000
For Clinical Quality	\$5,000	\$50,000
Per-Patient Per-Month Management Fee	none	\$4.00 (x2500 patients) = \$10,000
Total Compensation*	\$206,924	\$206,924

*Based on 2012 MGMA median for family medicine.

ENDNOTES

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AUTHOR'S BIOGRAPHY

David Gruber, MD, MBA, is a Managing Director and the Director of Research with Alvarez & Marsal's Healthcare Industry Group in New York, specializing in strategy, commercial due diligence, analytics, new ventures and health benefits. Dr. Gruber brings 32 years of diversified healthcare experience as a consultant, corporate executive, Wall Street analyst and physician.

Dr. Gruber's A&M publications include: Getting (Much) Closer to the Cost Precipice; Safety Net Hospitals at Risk: Re-thinking the Business Model; Behavioral Health: Key to Chronic Disease Costs; Healthcare: Economic Value Need Not Apply (Yet); and Post-Acute Care: Disruption (and Opportunities) Lurking Beneath the Surface.

Before joining A&M, he spent three years as the Founder of Healthcare Convergence Associates, a consulting firm focused on the convergence of healthcare, technology and the consumer. His initiatives included wireless and tele-health opportunities, chronic obstructive pulmonary disease (COPD) technology assessment, pharmacy benefit management (PBM) diabetes innovation, and retail health and wellness. He was also involved in three healthcare-related information technology (IT) start-ups.

Until 2008, Dr. Gruber was Vice President of Corporate Development and New Ventures with the Johnson & Johnson Consumer Group of Companies. His primary focus was in dermatology / aesthetics, consumer engagement and wireless health across the company. From 1995 to 2004, he worked on Wall Street as a top-ten rated medical supplies and devices analyst at Lehman Brothers, Piper Jaffray and Sanford Bernstein. He was the lead analyst for the initial public offering of Intuitive Surgical (robotics) and Given Imaging, and a merchant banking investment in Therasense.

Prior to entering Wall Street, Dr. Gruber was Vice President of Planning and Business Development for the \$1.6 billion healthcare group at Bristol-Myers that included Zimmer, ConvaTec, Linvatec and Xomed-Treace. While at Bristol-Myers, he represented the company with the Health Industry Manufacturing Association (HIMA) as it deliberated the merits of Hillary Clinton's healthcare reform proposals.

Dr. Gruber has recently appeared on NPR and C-Span; was quoted in the Washington Post, Los Angeles Times, The Deal, Healthcare Finance News, Managed Care Executive, Managed Care Outlook, Becker's Hospital Review and Inside Health Policy; and was published in the Journal of Diabetes Science & Technology, Turnaround Management Association Newsletter of Corporate Renewal and American Bankruptcy Institute Journal.

Dr. Gruber is a magna cum laude graduate of a six-year BS-MD program, having earned a bachelor's degree from the Sophie Davis School of Biomedical Education, CCNY in 1981 and a medical degree from the Mt. Sinai School of Medicine in 1983. He also has an MBA from Columbia University and was a Kellogg Foundation National Fellow. Dr. Gruber is currently a Senior Fellow, Healthcare Innovation and Technology Lab (HITLAB) at Columbia Presbyterian. He is a re-elected Trustee to the Teaneck Board of Education.



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