

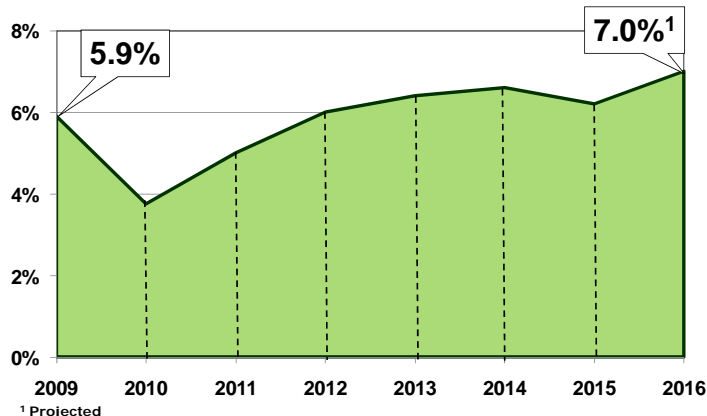


GOING WHERE THE DEALS ARE

Given the high cost of healthcare some companies are encouraging domestic travel for cheaper care. The media has played up the travel to Thailand or India for low cost surgery. However, more employers and insurers are offering financial incentives to encourage workers to consider *domestic* medical travel. Some companies waive deductibles to cover their local travel and hospital costs. Domestic travel for domestic medical tourism appears to be a trend that may be catching on and should be watched carefully.

HOSPITAL COSTS ON THE RISE

Spending on hospital care is projected to rise sharply in each of the next five years. Percentage of change:



Source: National Health Expenditure Projections, 2009-2016; USA Today, 7/7/10
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CONCERN OVER RADIATION EXPOSURE

RADIATION DOSE PER YEAR RISK SCALE

Level	Annual Radiation Dose (mSv)	Lifetime Attributable Risk of Cancer
I	0 < 5 ¹ Trivial	0 to 1/2000
II	5 < 10 ² Minimal	1/2000 to 1/1000
III	10 < 20 ³ Mild	1/1000 to 1/500
IV	20 < 50 ⁴ Moderate	1/500 to 1/200
V	>50 ⁵ Severe	> 1/200

Examples related to level of annual radiation exposure

- ¹ Chest x-ray, coronary calcium score, USA natural dose (3.5mSv)
- ² Diagnostic catheter-based coronary angiography
- ³ CT coronary angiography, PCI, nuclear study
- ⁴ Multiple studies, e.g. nuclear, contrast angiography, CT
- ⁵ Maximum annual dose for laboratory workers, cath lab, etc.

Source: Clin. Cardiol.33.5. 252-253(2010); C Richard Conti: *Where is the Radiation History for the Cardiac Patient?* Published online in Wiley InterScience
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We are gradually becoming aware of the impact of radiation exposure for patients having a number of procedures utilizing ionizing radiation. Experts in radiation exposure make a point that any dose above zero can increase the risk of radiation-induced cancer in the long term; therefore, there is no official threshold. Radiation attributable to the development of cancer after lifetime exposure obviously takes a long time to develop, and there is now more attention being paid to this type of radiation exposure. Indeed CT scanners and other types of radiation emitting procedures are being examined to see if radiation exposure can be minimized. This table shows the risk of cancer related to radiation dose per year as currently understood

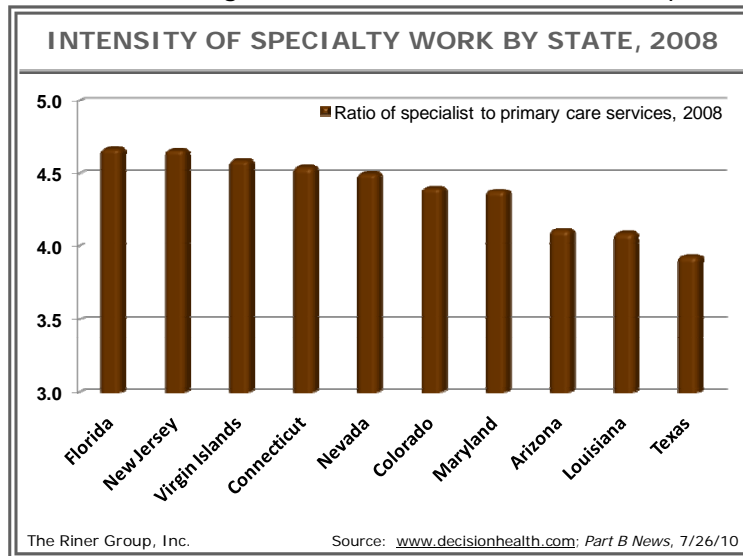
The distribution of total radiation exposure by type of imaging procedure is estimated at 49% for Computerized Tomography (CT); approximately 26% for nuclear studies; 11% for other radiographic procedures; and 14% for fluoroscopy (Archives of Internal Medicine 2009; 169(22): 2078-2086).



PRIMARY CARE MEDICAL HOME? IMPACT ON CARE DELIVERY FOR ACOs? THE ROLE OF SPECIALTY CARE

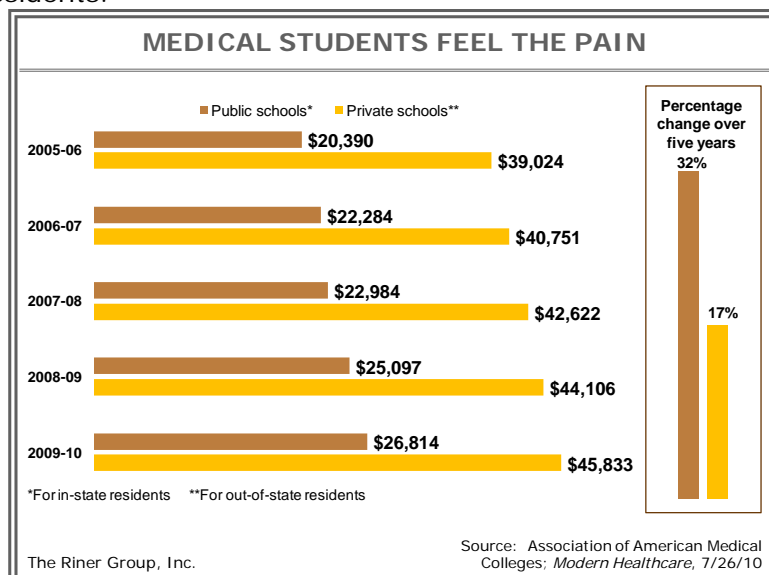
The chart examines the intensity of specialty work by state as measured by the number of services billed by specialists vs. those billed by primary care practices. This figure is represented by the ratios that appear above each bar in the chart. Example: In Nevada, about 4.5 specialty claims are billed for every primary care claim. (“Specialist” was represented in the data by combining all specialties except family practice, general practice and internal medicine.)

Many possible factors could cause a state to have a higher specialty utilization vs. primary care, including demographical factors and overall health of its residents, because physicians are seeing more than just Medicare patients. Nonetheless, these data raise interesting questions, especially as people are beginning to theorize how care will be delivered through medical homes that focus upon or emphasize primary care physician delivery.



DOCTOR SHORTAGE – HIGH DEBT WOES

Median tuition and fees for first year medical students in the U.S. has risen faster at public schools compared with private institutions. The debt level is compounded by physicians seeing a decrease in reimbursement for services rendered, often making the selection of primary care, which has low reimbursement, less appealing for graduating residents.



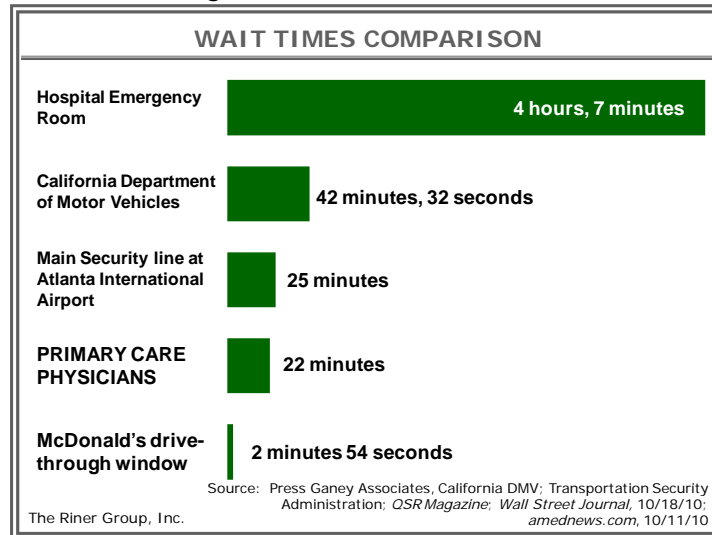


EMERGENCY ROOM WAIT TIMES

All industries are focusing on the service component of their business, no less the healthcare industry. In fact, the emergency room is felt to be the door to the hospital, and as such the service components, such as wait times, etc. are being focused upon.

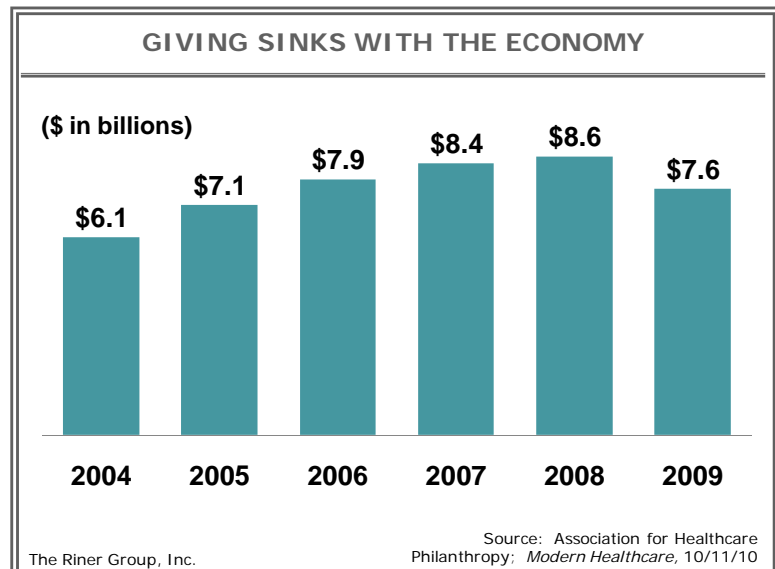
Only 31% of emergency departments achieved the nationally recommended triage time of less than an hour for treatment of more than 90% of patients. Many hospitals are posting ED wait times on billboards and websites. Twitter accounts and mobile apps are also becoming other ways that data on wait times is being displayed. Concern exists that posted wait times will discourage patients from seeking emergency care because they are unaware that life threatening conditions are treated immediately.

The average time patients spend waiting to see a healthcare provider in their office is 22 minutes, and some waits stretch for hours, according to a 2009 survey by Press Ganey Associates, a healthcare consulting company, who surveyed 2.4 million patients in more than 10,000 locations. Orthopedists have the longest waits, at 29 minutes; dermatologists the shortest at 20 minutes. The report also noted that patient satisfaction dropped significantly each 5 minutes of waiting time.



ECONOMY IMPACTS PHILANTHROPY

Many non-profit healthcare facilities depend on charitable contributions. Healthcare charitable donations dropped 11% in 2009, as the recession continued.

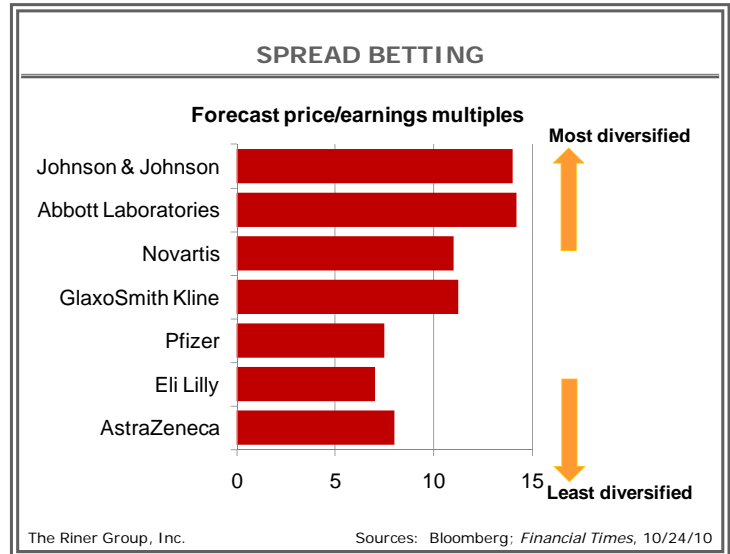
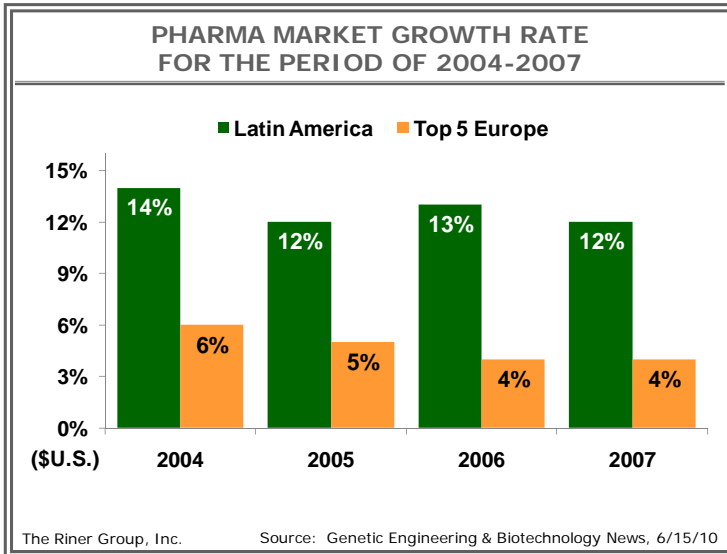




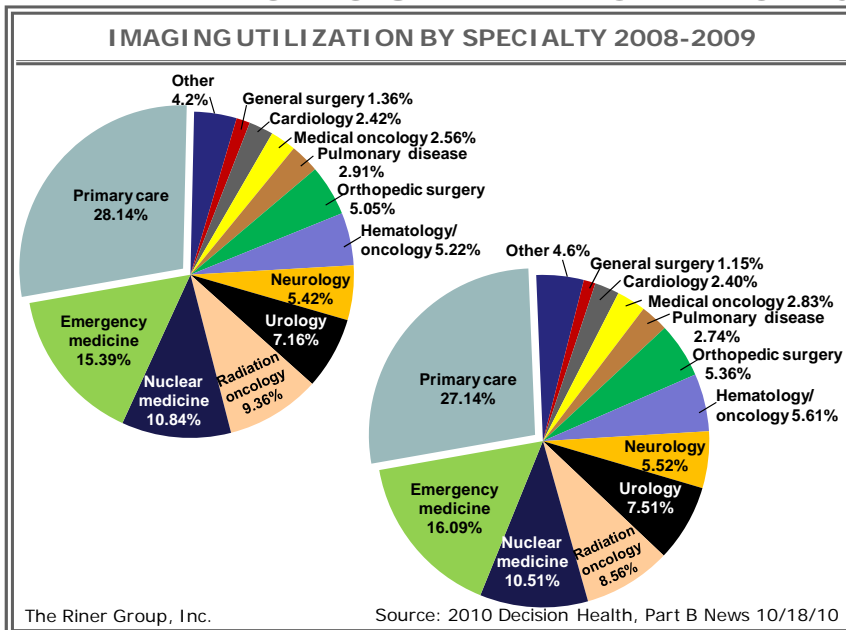
BIG PHARMA STRATEGY

Developing markets have been a source of interest to pharmaceutical companies for decades, and it is not a revelation that the developing markets of Latin America, in particular, have been growing in importance over the years.

Blockbuster medications used to be the major source of revenue for large pharmaceutical companies. These blockbuster drugs helped the industry consistently record some of the market's greatest returns on equity. However, as many blockbuster drugs near the end of their lives due to the loss of patent protection, these companies are now rushing to diversify away from big name drugs. They claim that 21st century drug development is expensive and regulation is far too difficult. The issue is not clear cut. Some skeptics feel that regulators have become less complacent, research less productive, and companies "short term" in their outlook. A recent study by consulting firm, Bain & Company, suggests that the "patent cliff" could cost the industry \$100 billion in sales in the next five years. Many companies have opted to build non-prescription, less regulated businesses. These consumer health products can keep going for many decades. These graphs show the financial trends mentioned and an assessment of each company's diversification.



IMAGING UTILIZATION BY SPECIALTY, 2008-2009



This chart shows how Medicare utilization of top imaging services has shifted by specialty from 2008 to 2009. Each "pie" represents all imaging services billed to Medicare in a given year. The biggest users of imaging services, radiologists and primary care, have seen their utilization rates decline steadily from 2008 to 2009. While radiology data isn't shown in the charts, diagnostic and interventional radiology saw the utilization for these services fall by 1.5%, which makes them the biggest loser, had they been included. Imaging services are an intricate part of the future of medicine. Decreasing reimbursement will fashion key trends.



THE GENETIC PUZZLE

Doctors are facing ever expanding variety of genetic tests that could influence how they care for patients. It is anticipated that at some point it will become a very big part of routine medicine. At the present time there are many variables and unknowns. Family history becomes an extremely important part of history taking, and for the time being can be as important as specific testing. Studies are underway to determine the best practices in using personal genome information in clinical care. Coriell Personalized Medicine Collaborative is halfway toward its goal of enrolling 10,000 people in this study analyzing correlations between genetic testing and disease processes.

All of this interest in genetic testing comes with the fact that scientists are making great strides in analyzing genetic material. Artificial life is being developed in the test tube. On May 20th, in the pages of *Science* Craig Venter and Hamilton Smith and their colleagues announced that they had created a living substance – a bacteria.

All of this activity hinges financially on one thing: the price of synthesizing DNA continues to fall. In a way analogous to Gordon Moore's famous law about improvement of computers, both the price of sequencing DNA and the price of making it have plummeted over the past decade. The former means that the world's data bases are filling up with genes of every part of the tree of life. The latter means those genes can be cut and put together with greater and greater ease.

GENETIC TESTING BY THE NUMBERS

1,956

Number of diseases for which genetic tests are on the market

18

Number of diseases for which the first genetic test became available in the past month

14

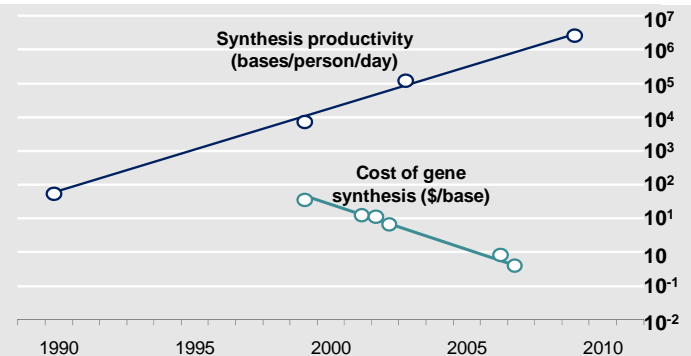
Number of drugs whose label at least mentions genetic testing

Source: Gene Tests database, Sponsored by the University of Washington and PharmGKB, Managed by Stanford University; *USA Today*, 10/25/10

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THERE'S MOORE WHERE THAT CAME FROM

Productivity and cost of commercial DNA synthesis



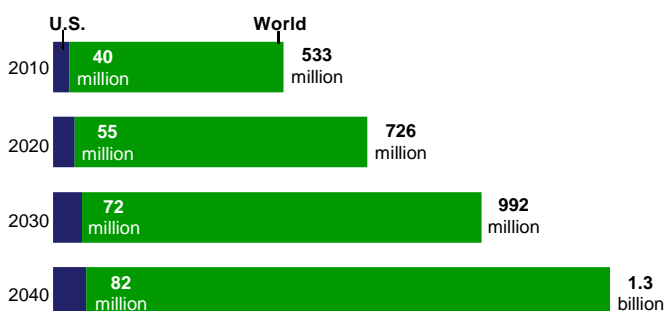
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Source: Robert Carlson, Biodesic; *The Economist*, 5/22/10

THE GRAYING OF THE U.S. AND THE WORLD IN A SNAPSHOT

GOING GRAY

The projected population of people age 65 and older



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Source: U.S. Census; *Wall Street Journal*, 11/13/10

SENIORS IN AMERICA

- 40 million Americans currently age 65 and older
- 1.53 billion Projected number of people world-wide age 65 and older in 2050
- 88.5 million Projected number of Americans age 65 and older in 2050
- 56% Americans age 65 and older who were married in 2009
- 5.8 million Americans currently age 85 and older
- 29% Americans age 65 and older who were widowed in 2009
- 19 million Projected number of Americans age 85 and older in 2050
- 27% Americans age 65 and older who lived alone in 2008
- 105,000 Centenarians currently in the U.S.
- 73 Number of men in the U.S. for every 100 women age 65 and older
- 601,000 Projected number of centenarians in the U.S. in 2050
- 48 Number of men in the U.S. for every 100 women age 85 and older

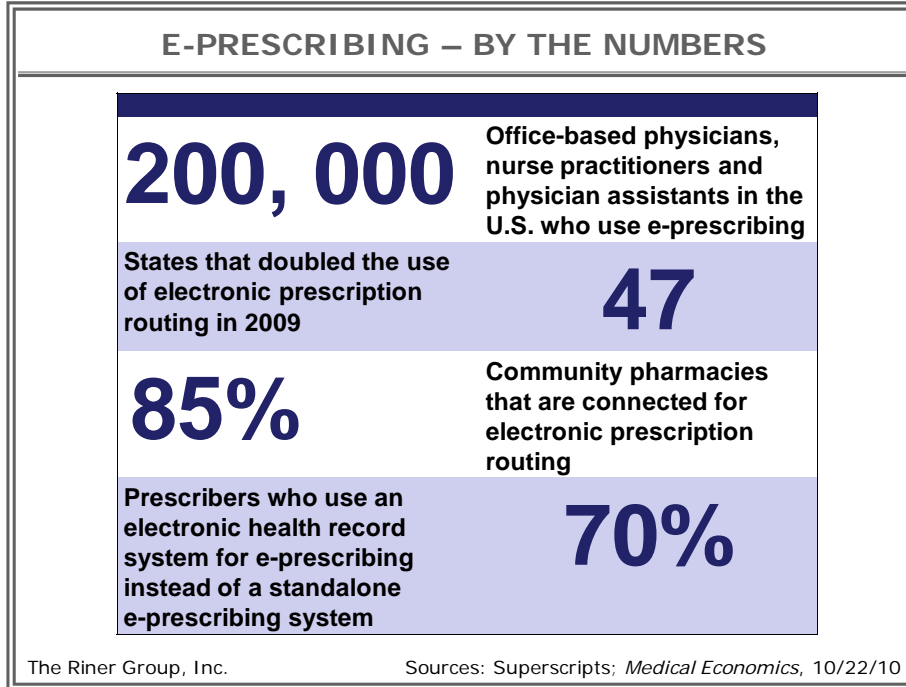
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Source: U.S. Census; *Wall Street Journal*, 11/13/10



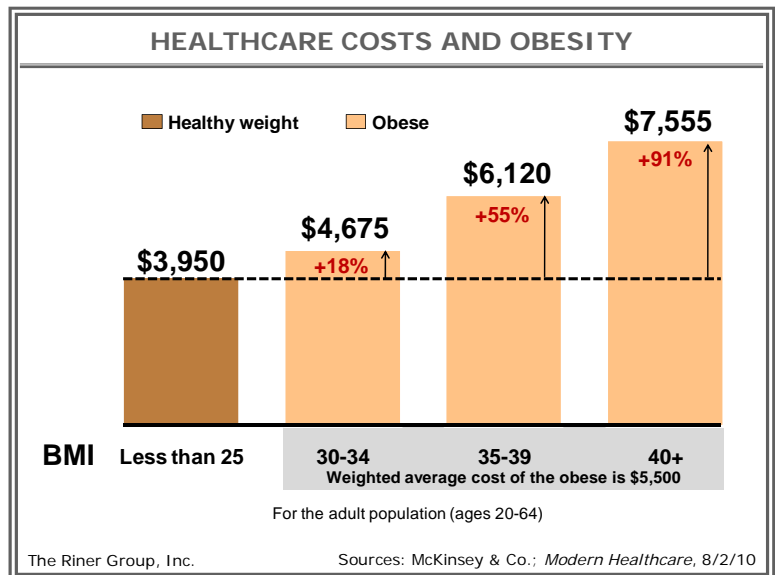
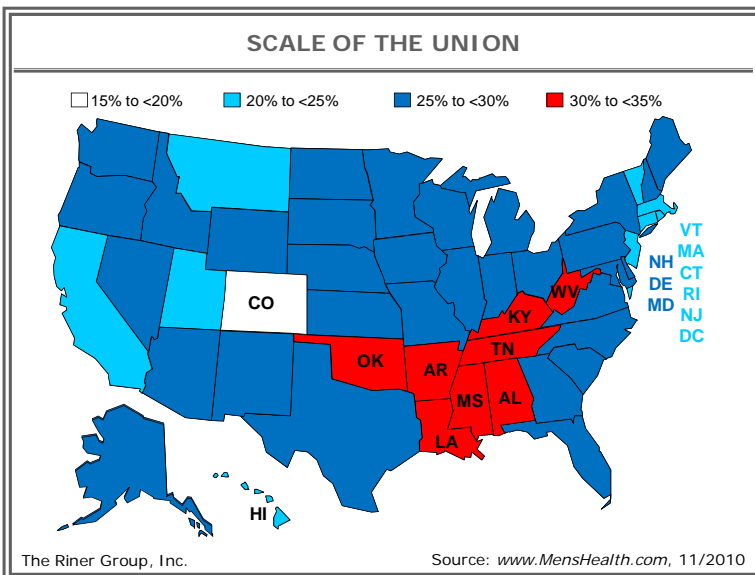
E-PRESCRIBING

Physicians' confidence in their ability to utilize e-prescribing has continuously improved. The table provides recent stats.



THE OBESITY EPIDEMIC

Adult obesity has increased in 28 states, according to a new report from the nonprofit Trust for America's Health. The percentage of increase is outlined. Every point of the body mass index above 30 is correlated with about \$300 in increased healthcare costs per capital annually, based on 2007 data.





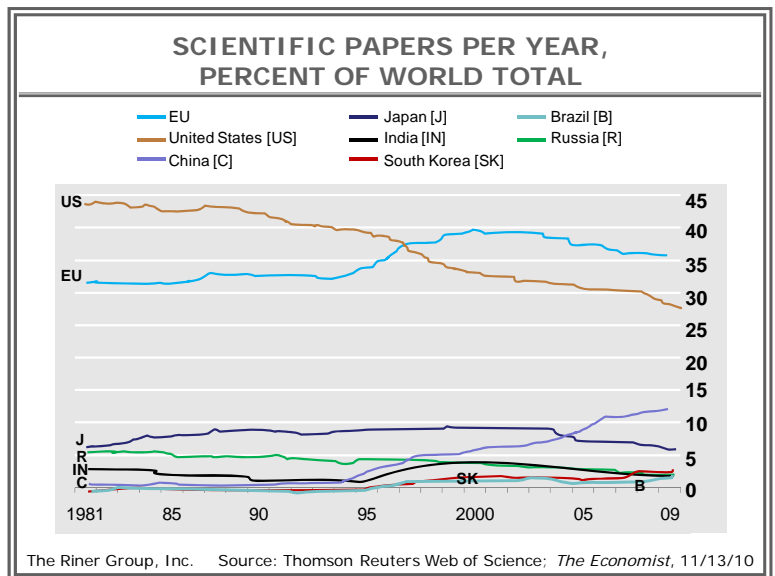
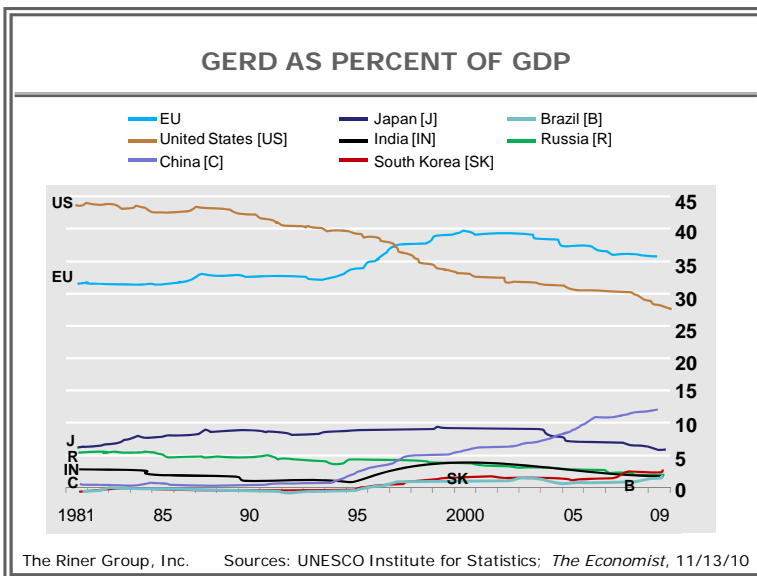
PUBLISH OR PERISH

Twenty years ago North America, Europe and Japan produced almost half the world's science. Of note is the fact, that in 1990 they carried out more than 95% of the world's Research and Development (R&D). By 2007 that figure had fallen to 76%, according to the latest report from the United Nation's Educational Scientific and Cultural Organization (UNESCO).

The picture the report paints is of a waning West and a rising East and South, mirroring the economic shifts going on internationally. Comparisons of the scientific prowess of the countries frequently begin with spending. One measure of this is GERD, gross domestic spending on R&D. Globally, GERD amounted to \$1.15 trillion in 2007 (the last year the UNESCO report measures). That was up 45% compared to 2002. Moreover, in those five years Asia's share of the total rose from 27% to 32%. In 2007 Japan spent 3.4% of it's GDP on R&D, American 2.7%, the European Union (EU) collectively 1.8% and China 1.4% as depicted in the chart.

Looking at financial investment is only one facet of the matter. The other question is how productive is the research? One indicator of productivity or prowess is how much a country's researchers publish. As an individual country, America still leads the world by some distance. Yet America's share of the world's publications, at 28% in 2007, is slipping. In 2002 it was 31%. The EU's collective share also fell, from 40% to 37%. The average American paper was cited 14.3 times between 1998 and 2008, whereas the average Chinese paper was cited only 4.6 times, about the same as papers published in India and less than those published in South Korea.

Between 2002 and 2007 business investment as a proportion of GDP has risen rapidly in China, India, Singapore and South Korea (although India's increase was from a low base). Also of note is the fact that more than 35% of articles in leading journals are now the product of international collaboration. That is up from 25% fifteen years ago.





CEO TURNOVER – AN IMPEDIMENT TO PHYSICIAN/HOSPITAL ALIGNMENT ACTIVITY

Hospital CEO turnover in healthcare in 2009 was tracking at 18% nationwide, up from 14% in 2008. The increase makes it the highest turnover rate since 1999 and only the fourth time the turnover rate has reached this level since tracking began in 1981.

The graph shows CEO turnover rate by state, ranked by highest turnover percentages in 2009 for states with 30 or more hospitals.

This is a disturbing trend. On one hand consolidation is pushing hospitals and medical practices together, and the success of many of the alignment strategies evolving is heavily dependent on the people involved in formulating the agreements. On the other hand high turnover in the corporate suite may signal transient and unstable relationships.

HOSPITAL CEO TURNOVER BY STATES

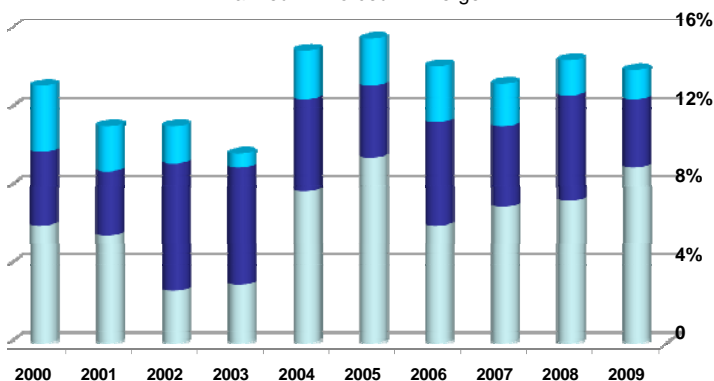
Rank	State	CEO Turnover	Rank	State	CEO Turnover
1	Arkansas	32%	21	Missouri	17%
2	New Mexico	32	22	Texas	17
3	Oregon	31	23	Alabama	15
4	South Carolina	26	24	Florida	15
5	Arizona	25	25	Michigan	15
6	North Dakota	23	26	Oklahoma	15
7	California	22	27	Virginia	15
8	Georgia	20	28	Wisconsin	15
9	Montana	20	29	Kansas	14
10	Nebraska	20	30	Massachusetts	14
11	Ohio	20	31	New Jersey	14
12	Tennessee	20	32	South Dakota	14
13	Washington	20	33	West Virginia	14
14	Minnesota	19	34	Colorado	13
15	Mississippi	19	35	Indiana	13
16	North Carolina	19	36	Iowa	12
17	Pennsylvania	19	37	New York	12
18	Illinois	17	38	Idaho	11
19	Kentucky	17	39	Maryland	11
20	Louisiana	17	40	Maine	10

Note: CEO turnover percentages have been adjusted. Based on a survey of 300 hospitals, the turnover was reduced by 13.04% because of incorrect reporting of retained CEOs and to the appointment of interim or acting CEOs. The overall CEO turnover was 18% nationwide.

Sources: American College of Healthcare Executives, The Riner Group, Inc. Division of Research, 2/19/10 Modern Healthcare, 8/9/10

CEO TURNOVER RATE

2,500 biggest global public companies
 ■ Planned ■ Forced ■ Merger



The Riner Group, Inc.

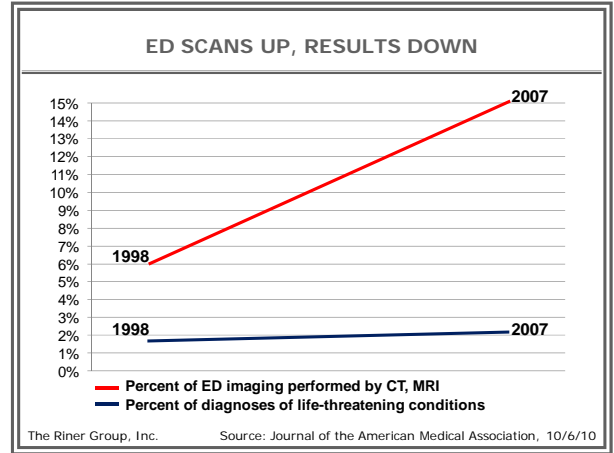
Source: Booz & Company; *The Economist*, 5/22/10

Of note is the fact that in other industries the turnover of leadership has been stable or less frequent. A Booz & Company report showed 14.3% of the world's 2,500 biggest publicly listed companies got new bosses in 2009. This was marginally lower than 2008's turnover rate of 14.4%. The proportion of chief executives forced from office fell to 3.3% last year, it's lowest level since 2003, and down from 5.1% in 2008. The financial sector saw the most bloodletting, with 5.2% of bosses fired and a turnover rate of 17.2%. Between 2008 and last year, the turnover of chief executives fell by 2.4% to 12.4% in North America and rose slightly in Europe to 15.2%. However, Asian companies outside Japan have become increasingly prone to changing CEOs. Turnover was 9.2% in 2007, but rose to 15.3% last year.

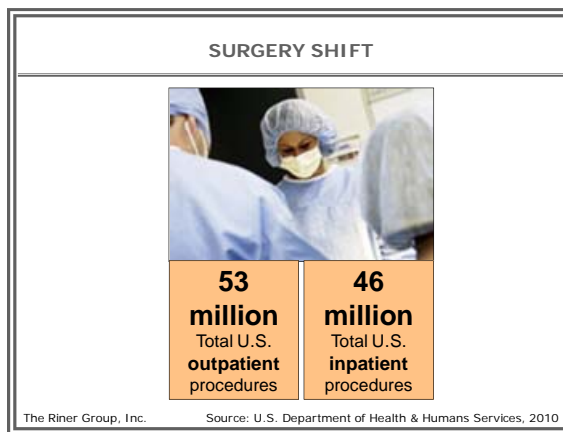


DID YOU KNOW?

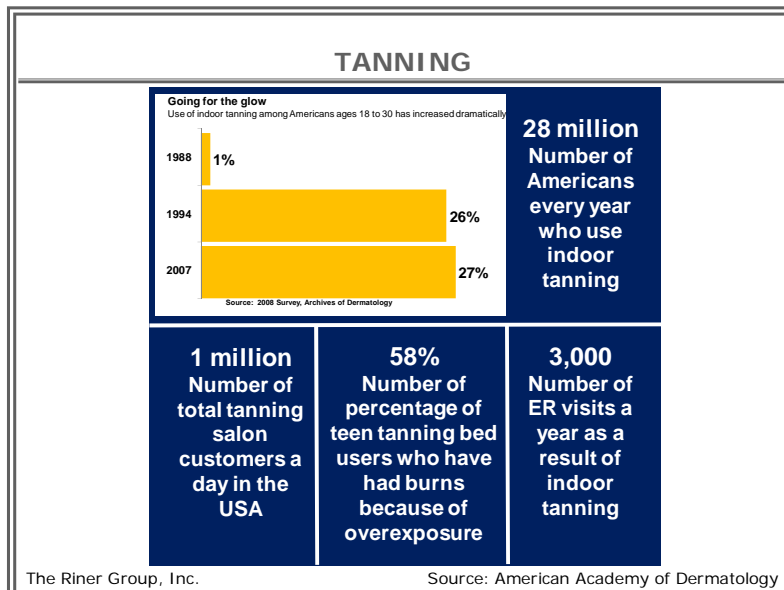
- **CT and MRI Use** in hospital emergency departments has climbed nearly three fold in a decade without apparently producing significant increase in diagnoses of life-threatening conditions. There are obviously numerous reasons for the increase in scanning, not the least of which is the concern over practice and liability issues according to a recent study in the Journal of the American Medical Association.



- **More surgical procedures** are done in an outpatient setting than in inpatient.



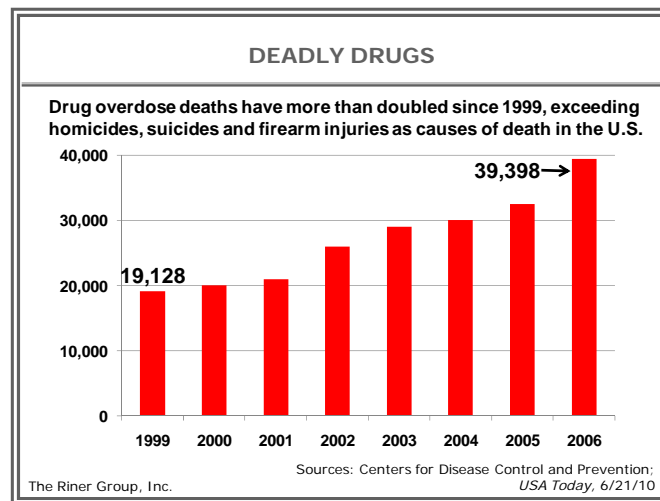
- **The National Institute of Health** estimates that total cancer costs are \$264 billion annually; and of that \$103 billion is direct medical costs. The pharmaceutical industry has a robust pipeline of over 800 new cancer drugs and new indications for existing cancer drugs in development and hopes to participate in the financial upside of cancer therapy.
- **Tanning and Addiction** – In an April study of 229 tanners, published in the Archives of Dermatology, up to 39% met commonly used criteria for addiction. People who met the addiction criteria were far more likely to be anxious or depressed and to use the addictive substances such as drugs and alcohol. UV light currently releases endorphins, helps to relieve pain, and cause a natural “runner’s high” similar to what people feel after rigorous exercise.



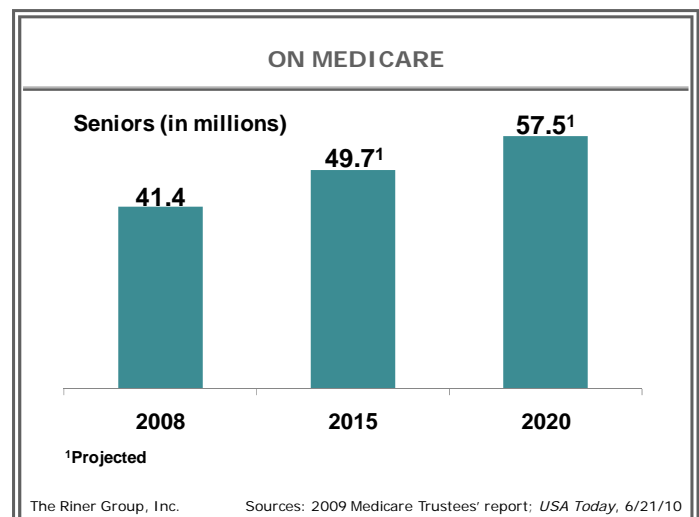


DID YOU KNOW?

- **Telemedicine Programs Exist in all 50 States** with services provided in 35 to 40 subspecialties. More payors are covering telemedicine, which also can help with the physician shortage. Surveys show that consumers are open to more widespread telemedicine use by physicians and health systems.
- **Abuse of Pain Medication** – A recent federal report found that ER visits for misused prescription and over-the-counter drugs are now as common as visits for the use of illegal drugs. In 2008, the misuse of pain relievers – including oxycodone, hydrocodone and methadone – led to about 305,000 ER visits, more than double the number in 2004.



- **Limiting New Medicare Patients** – Decreased reimbursement for Medicare patients has caused many physicians to consider whether they will opt out of the Medicare program. Recent surveys by national and state medical societies have found more doctors limiting Medicare patients, particularly because of decreasing reimbursement. The American Academy of Family Physicians says 13% of respondents didn't participate in Medicare last year, up from 8% in 2008 and 6% in 2004. The American Osteopathic Association says 15% of its members don't participate in Medicare and 19% don't accept new Medicare patients. The American Medical Association says 17% of more than 9,000 doctors surveyed restrict the number of Medicare patients in their practice. Among primary care physicians, the rate is 31%.



The federal health insurance program for seniors paid doctors an average 78% of what private insurers paid in 2008.

- **Office Chaplains** – Chaplain services reflect a growing openness about spirituality in the workplace & an increase in desire among workers to express their faith at work. A 2008 survey by Barna Group (a Ventura California research company) of 1,004 adults showed 74% of Americans say faith is becoming more important in their lives, even though memberships in churches and other religious organizations have been falling off for years. 71% of U.S. adults say they have developed their own slate of religious beliefs, rather than accepting the tenets of a particular faith or religious group.



DID YOU KNOW?

- **Nursing Degrees** – Of the nearly 3.1 million registered nurses in the workforce, more than 1.4 million have obtained a bachelor's nursing degree or higher, according to a report by the Health Resources and Services Administration. Roughly 1.1 million have associate-level degrees, while the remaining 474,000 received their education in hospital-based diploma programs. Only about 20% of those associate degree nurses will go on to earn additional degrees.
- **Physician Shortage** – Nationwide physician shortages are expected to grow to 62,900 in five years and 91,500 by 2020, according to a new Association of American Medical Colleges work force projection. A 15% increase in residency positions would produce an additional 4,000 physicians annually. The physician shortage may be mitigated by greater uses of Nurse Practitioners and Physician Assistants, as well as various forms of technology. This will need to be watched carefully, especially with the shortages in Primary Care and the theoretic restructuring of the healthcare system around Primary Care Medical Homes.
- **A Two Year Study of an On-Line Portal Healthcare Service** found that e-visits made office visits unnecessary in 40% of the cases, while 13% of the patients were asked to schedule a face-to-face appointment. Source: "Pilot Study of Providing Online Care in a Primary Care Setting," *Mayo Clinic Proceedings*, 8/2010.
- **Concierge Medicine** – Fewer than 800 physicians nationwide have retainer-based concierge practices, but the number is growing. Researchers at the National Opinion Research Center at the University of Chicago and Georgetown University identified 756 physicians across the U.S. who have entered into what they termed retainer-based arrangements, commonly called "boutique" or "concierge" medicine. That is up from 146 retainer-based physicians identified in a Government Accountability Office report in 2005. Under these arrangements patients pay a monthly or annually fee to have greater access to a physician through methods such as after-hour or home visits, same-day or next-day appointments, and access to the doctor's cell phone number. Overwhelmingly the doctors using retainer-based practice are in Primary Care, but the research team identified a few specialists who adopted it, including endocrinologists and cardiologists. The study found the majority of physicians are in solo or two-person practices and operate in large metropolitan areas. Researchers identified three practice models.
 - Model One: The retainer fee covers some extra services; the physician continues to bill for separate visits, and some accept insurance. Retainer fees ranged from \$600 to \$4,200 annually.
 - Model Two: Retainer fees cover all the patients' costs, and the physician does not bill insurance or Medicare; most of those doctors have completely dropped out of Medicare. This is less common than Model One, but its popularity is growing. Fees ranged from \$1,500 to \$5,400 annually.
 - Model Three: Physicians offer a retainer as an option in their practice.

Most of the physicians the researchers interviewed enjoyed the transition to a retainer-style practice. Almost all thought they had a lot more time to spend with patients and were uniformly more satisfied than with their previous model of practice.

- **Inadequate Coverage by Surgical Specialists** – Inadequate coverage by surgical specialists is a problem for most U.S. Emergency Room Departments, according to Yale researchers. In a recent paper in *Academic Emergency Medicine*, 74% responded that they experienced inadequate on-call coverage by specialists, with the percentage being lower among teaching hospitals (68%) and geographically highest in the South (81%). Investigators also noted that the "specialists hardest to secure were trauma surgeons, neurosurgeons, plastic surgeons, and hand surgeons."
- **More Than Two-Thirds of U.S. Consumers Seek Medical Advice Via the Internet and Social Media**, according to a new Accenture survey.



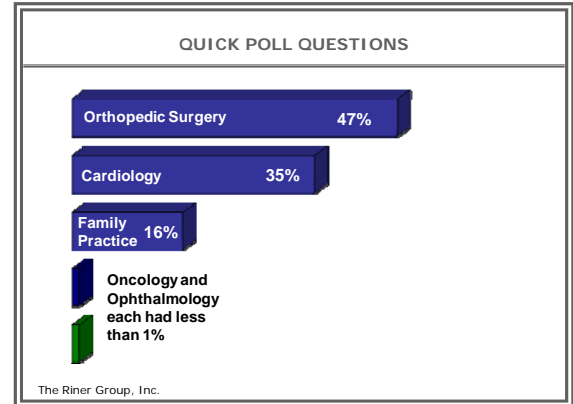
OUR QUICK POLL RESULTS

The following question was recently posted on The Riner Group website.

" Which specialty has the highest average Medicare payment per claim?"

The choices given to select from were:

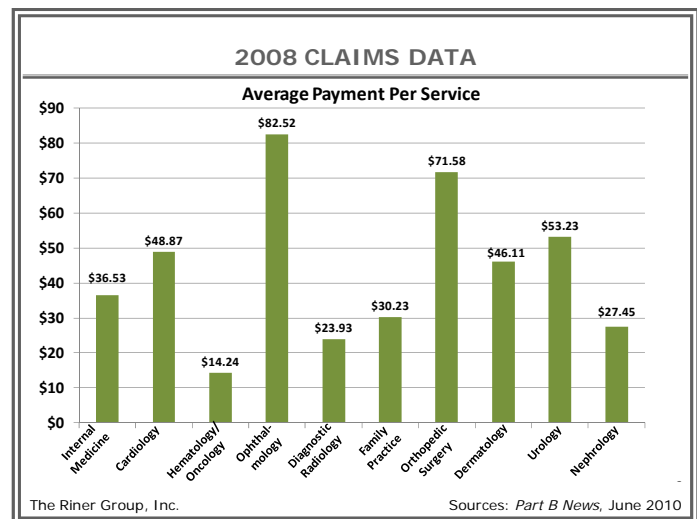
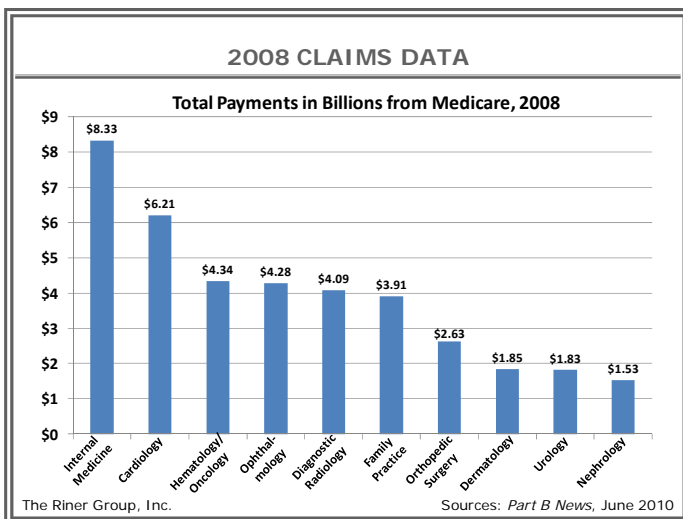
- Cardiology
- Family Practice
- Oncology
- Ophthalmology
- Orthopedic Surgery



Overview: The charts compare the average value of services performed by specialties to their overall Medicare revenue based on 2008 CMS claims data, the latest available. **Note:** The dollar values reflect payments from Medicare only and do not account for patient copays or deductibles. **Note:** average payments per service were calculated by dividing total Medicare revenue by the number of successfully paid services. The 10 specialties were chosen because they had very high annual Medicare utilization in 2008, ranging from 37 million claims billed annually (urology) to nearly 344 million claims (hematology/oncology).

Breakdown: The two specialties that perform the highest-paying services by far are ophthalmology and orthopedic surgery, with average payments of \$82.52 and \$71.58, reflecting major surgeries. However, total revenues for these two specialties hover around the middle of the spectrum due to high denial rates of 13.5% and 11.7%, as well as relatively moderate annual utilization (59.9 million and 41.7 million, respectively). Internal medicine is the clear winner for total revenue despite its average payment of just \$36.53 and a fairly high denial rate of approximately 10%. The determining factor was its high utilization of 253 million services billed in 2008. Hematology/oncology had the highest utilization with 344 million services, but has high denial rate of about 11.5% and low average payment of \$14.24 per service (mostly for inexpensive drug codes such as J0881 and J9263).

Takeaways: Denial rates don't seem to impact overall revenue as much as the value of services provided and the overall volume of services. Dermatology has a denial rate of 6% but ranks low in total payments; ophthalmology saw 13.5% of claims denied, but has more than twice the revenue due mostly to high-value codes.





Mediscene Newsletter

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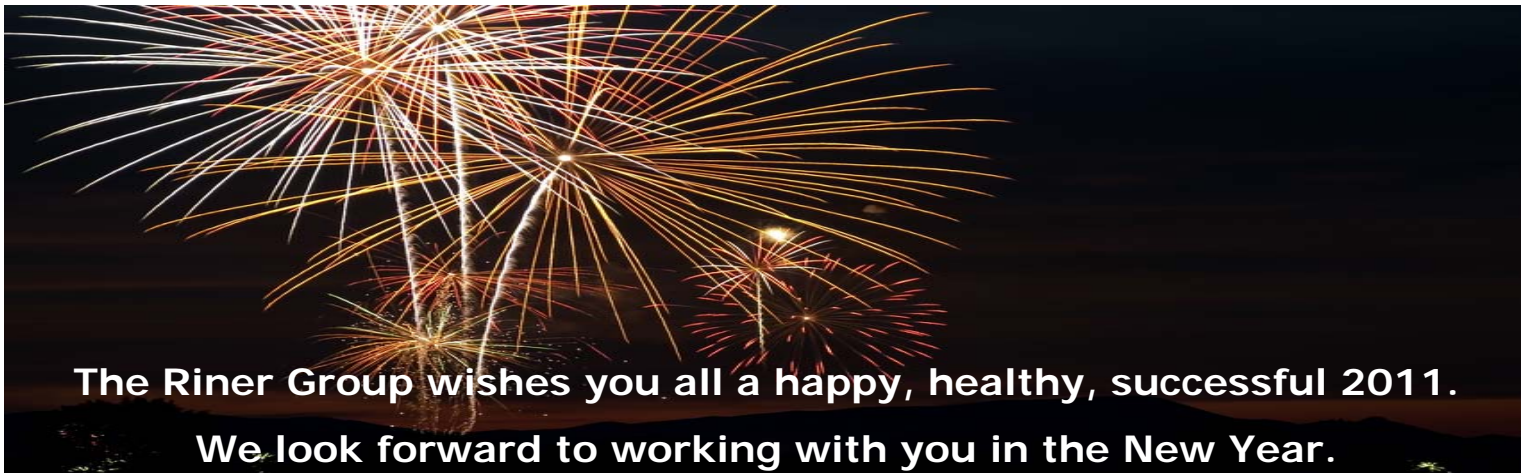
Volume 31 Issue 4

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SPEAKING ENGAGEMENTS

Dr. Riner and his colleagues frequently speak at events across the United States. The topics offer interesting perspectives on healthcare issues for you to share with your colleagues as you strategize for the future of your practices, healthcare organizations or healthcare businesses.

Contact us at 800-965-8485 to discuss a speaking engagements with us on a topic pertinent to your organization.



**The Riner Group wishes you all a happy, healthy, successful 2011.
We look forward to working with you in the New Year.**

OUR FOCUS

With over 30 years of business experience in healthcare, we have worked with physician practices, hospitals, health systems, academic medical centers and healthcare businesses throughout the United States with a focus on strategy, new business development and performance improvement. We specialize in integrating the business and clinical aspects of healthcare delivery.

**Our PRIORITY ... excellence in the business and the science of medicine.
Our SPIRIT ... superb patient care.**