



## Did the Institute of Medicine Report on Medical Errors Build a Safer Health System?

Five years after a groundbreaking Institute of Medicine report focused attention on medical errors in hospitals, a survey conducted this fall by the Henry J. Kaiser Family Foundation, the U.S. Agency for Healthcare Research and Quality (AHRQ) and the Harvard School of Public Health showed that Americans do not believe that the nation's quality of care has improved. Two in five people say the quality of healthcare has gotten worse in the past five years, while one in five say the quality of care has gotten better and nearly two in five say it has stayed the same.

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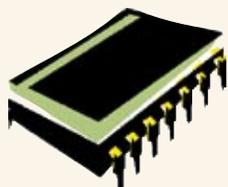
## Pricing for Network Discounts: Outlier Provisions

To clarify the issues around the proper calculation of network discounts, American Re HealthCare will illustrate a sampling of these issues in this and subsequent newsletters. In this issue, we review one of the most critical components of many insurance pricing methodologies, the network discount factor. Unfortunately, it is also one of the most confusing and misunderstood components. [\[see page 5\]](#)

## Rising Healthcare Costs Start Early in Life

The debate over allocation of healthcare resources in the United States is one that has been politically sensitive, yet of extreme relevance for the loss ratio of insurers of excess claims. Given the degree of resources allocated toward patients who are sickest, many have asked whether these resources are being applied toward futile care. We review some of the issues surrounding such decisions in the neonatal intensive care unit, present illustrative data, consider contributions from cultural attitudes, and site tools available to assist in these difficult choices.

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The FDA approved a micro-chip for implantation into a patient's arm that can speed vital medical history information to doctors or hospitals. Critics warn that this could also open new ways to imperil the confidentiality of medical records.



■ A new law in California mandates that hospitals open up their "Chargemasters" so consumers may see how much a hospital charges for each of its goods and services. One recent review found that the prices for a single pill of acetaminophen (aka Tylenol) ranged from 12¢ to \$9, and a standard panel of metabolic blood tests ranged from \$97 to \$1,733.

■ Although still a controversial topic, the Cleveland Clinic became the first institution to receive approval for face transplants last month.

## News Briefs



■ American Re HealthCare is proud to have been a major sponsor of the 2004 fall conferences for America's Health Insurance Plans (AHIP) and the Disease Management Association of America (DMAA).

■ American Re HealthCare has signed a multi-year agreement to license DxCG RiskSmart™ to help fulfill the needs of various clients.

■ Claudia Scott has joined American Re HealthCare as Vice President of Marketing to improve our ability to communicate the full complement of our available services to our clients.

# Did the Institute of Medicine Report on Medical Errors Build a Safer Health System?

Nearly half (48%) of the 2,012 U.S. residents who participated in the recent Kaiser survey said they are concerned about the safety of the medical care that they and their families receive. In addition, more than half (55%) say they are dissatisfied with the quality of healthcare in this country – up from 44% who reported the same in a survey conducted four years ago. The survey also finds that people with chronic health conditions are considerably more likely than other consumers to express concerns about their quality of care and report having personal experiences with medical errors.

These perceptions exist despite the efforts by hospitals, doctors, health plans and purchasers to reduce medical errors and improve the quality of care in the wake of the November, 1999 Institute of Medicine (IOM) report, “To Err is Human: Building a Safer Health System.”

The report warned Americans that lax and sometimes nonexistent safety practices were causing widespread medical errors in doctors’ offices, pharmacies, intensive care units, and operating rooms throughout the country. The report was the most closely followed health policy story of that year and among the most widely read in the institute’s history. It cited that between 44,000 and 98,000 Americans die each year because of preventable medical mistakes ranging from operating on a wrong limb to spreading infection with dirty hands.

The report concluded that hospital-based medical errors are the eighth leading cause of death in the United States, claiming more lives than AIDS, automobile accidents or breast cancer, and that the primary cause was problems with the health system itself rather than the performance of individual doctors, nurses, and other providers. The recent Kaiser survey shows that the challenge is not just to improve patient safety, but to convince the public that real progress is being made.



Although the numbers are less than many had hoped they would be, 19% have used comparative quality information about health plans, hospitals, or other providers to make decisions about their care – up from 12% in 2000. 14% of consumers say they have used quality information to choose health plans, 8% to choose hospitals and 6% to choose doctors.

Consumers generally say that data about medical errors, numbers of malpractice cases and professional experience is most likely to be useful at assessing quality of care. For example, 70% say that information about medical errors or mistakes would tell them “a lot” about the quality of care in a hospital.

Consumers are nearly as likely to say that information on how many times a hospital has performed a particular test or surgery (65%) and information on how many patients die after having surgery (57%) tells them “a lot.” Fewer, but still about half, say that how patients rate the quality of care of a hospital (52%) or the number of patients who do not get standard recommended treatments (47%) tells them “a lot” about quality.



When looking for information on quality of care, people are most likely to say they would ask their doctor, nurse or other health professional (65% said they were very likely to do this), or ask their friends and family (65%). Fewer would

go online (37%), contact someone at their health plan (36%), contact a state agency (18%) or refer to a section of a newspaper or magazine (16%). 36% of people age 65 and older say they would be very likely to contact the Medicare program.

The survey also suggests significant numbers of Americans say they have taken precautions to reduce the risks of experiencing a medical error when seeking treatment. For example, the Kaiser survey found that:

- 69% say they have checked the medication that a pharmacist gave them with the prescription that their doctor wrote and 48% say they have brought a list of all of their medications, including non-prescription drugs, to a medical appointment.
- 69% say they have called to check on the results of medical tests.
- 66% say they have talked to a surgeon about the details of surgery, such as exactly what the surgeon will do, how long it will take, and the recovery process.
- 43% say they have brought a friend or relative with them to ask questions and help them understand what the doctor was telling them.
- 37% say they have consulted their doctor about the hospital that they use.

In “Making Health Care Safer,” AHRQ recommends similar precautions ([www.ahrq.gov/clinic/ptsafety](http://www.ahrq.gov/clinic/ptsafety)) to enable patients and their families to reduce their risk of experiencing medical errors. In addition, AHRQ worked with the Centers for Medicare & Medicaid Services and other federal partners to develop a resource, “Five Steps to Safer Health Care” that provides advice to help patients protect their interests.



In an interview published by the Washington Post, Lucian L. Leape, MD, a professor of health policy at Harvard and a member of the 1999 IOM report committee, says that little progress has been made on several of the report’s key recommendations, including finding a way to change existing hospital cultures that discourage medical error reporting and promote team training where

doctors, nurses, and others learn to work efficiently as a unit. He also points to a lack of research money. Robert M. Wachter, MD, another member of the 1999 IOM committee, told a conference commemorating the report that evidence suggesting that doctors’ attitudes about patient safety, or that safety itself has improved, are “not striking.” Change for physicians would require both reporting of errors that they fear might lead to lawsuits and collaboration that would mean they may have to relinquish their current level of autonomy and control.

One survey found that five times as many surgeons than pilots said that their decisions should never be questioned. This means that doctors may also be resisting recommendations to promote team-style training where doctors, nurses, and other personnel learn to work more like a unit to reduce medical errors. The potential for success of a team approach in medicine is routinely compared to the airline industry model, where the principles of Six Sigma operational management are credited with providing checks and balances that helped to dramatically reduce cockpit mistakes. While team training is done in isolated health systems and hospitals, it is not widespread.

Advocates for medical error reduction complain that lawmakers and healthcare organizations have felt little pressure to change, despite the initial outcry about medical error injuries and deaths in 1999. Perhaps doctors, policymakers, and hospitals have been slow to respond because of a lack of public outcry or supportive incentives from payers? This may be no different from other western-world health systems other than the fact that our government has dedicated the resources to expose the issue.

The “Five Steps to Safer Health Care” (at [www.ahrq.gov/consumer/5steps.htm](http://www.ahrq.gov/consumer/5steps.htm)) provides useful tips to help patients better ensure that they receive quality care. This resource provides a public service that your clients may suggest to their policyholders. The next breakthrough in managed care may take a form that better aligns PPOs toward high-volume centers that achieve the best clinical outcomes and use appropriate patient safety practices and initiatives. Perhaps patients could be steered toward these centers of excellence much as we use co-pays to steer pharmaceutical usage today? ■

# *Rising Healthcare Costs Start Early in Life*

Neonatal Intensive Care Unit (NICU) practice varies considerably, particularly between the US and Europe. One study of these differences compared the outcomes and the survival rates for infants born in New Jersey and the Netherlands. This study found the following:

- The overall survival rate for neonates in NJ was 46%; the Netherlands was 22%.
- No infants of less than 24 weeks survived in the Netherlands and few 25 or 26 week infants were placed on ventilators.
- NJ physicians placed 95% of their infants on assisted ventilation; the Netherlands rate was only 64%.
- However, the number of children (per 100 live births) with major and disabling handicaps was ten times higher in NJ.
- New Jersey had 24.1 additional survivors per 100 live births, with 7.2 additional cases of disabling cerebral palsy per 100 live births compared to the Netherlands. Based upon other literature, at least an equivalent and probably a greater number of cases with mental retardation would be expected than those with cerebral palsy.



In addition, Harvard Perinatologists published data on their study of 23 week gestation infants in 2001. They report 33% survival but they did not discuss handicaps. They concluded that 23 week infants should receive full resuscitation and intensive care and were critical of perinatologists because 87% of survey respondents in 2002 “underestimated the survival potential of infants born at 23 to 24 weeks”. Finally, the American Academy of Pediatrics now recommends at least 15 minutes of full resuscitation for children that are born without a clinically demonstrable heart beat. In addition, the World Health Organization now sets the minimal weight and age for viability at 500 grams and 22 weeks, respectively.

Dr. Takahashi of Nihon University in Tokyo recently wrote a moving article entitled “Why do we help a micropremie to live?” He describes the human emotion and cultural perspectives that provide impetus for aggressive efforts to help these fragile infants to survive. For example, Japanese tradition holds a child to be a blessing and a treasure. From this perspective, an acceptable limit on the outcome permitting survival does not exist.

Legal issues seem to be more threatening in the United States. American medicine has a greater tendency to push the limits and see what can be accomplished. Academic advancement is dependent on producing novel ideas. Neonatologists and hospitals consider the NICU to be a major revenue stream, particularly concerning patients that are in for long and complicated courses of care. Nevertheless, as with Japanese culture, Americans find it very difficult to do less than “everything” for an infant, and most parents insist that “everything” be done.

Experience allows physicians to develop an acute sense of when a maximal application of technology to keep an infant alive is likely to strike a family and their infant with tremendous pain and suffering, futile survival or quality outcomes, and catastrophic financial consequences. However, nobody wants to own the risk of being wrong in making such predictions.

When parents are adamant about providing the most aggressive treatment, the physician must apply maximal efforts and resources; however, many parents seek or are amenable to guidance from the neonatologist. In these instances a family may rely upon the physician's sense for realistic assessment of both the baby's potential for meaningful survival and the infant's cumulative discomfort over the course of any proposed treatment. This places the enormous ethical and moral responsibility for decision-making upon the attending physician who has an additional obligation to encourage input from other hospital professionals, who may be a step back from the issues.

The interests of the child are of moral concern for all of us in this era of conflicting views and pressures. For

this support, American Re HealthCare and many of our clients have relied upon the professional consulting staff at CareAssist to make a difference. Such organizations provide an educated perspective and a commitment to appropriate care that is far enough removed while at the same time dedicated to advocate the best care for babies and their families. They can both encourage parents to obtain all available input and can bring up the "best interest" issues with the attending physicians. This approach upholds the basic belief that the baby is the patient and deserves our primary focus. Such organizations can also provide the benefit of clinical peer review and collaboration with the treating team as well as education, active participation and coordination with their families. ■



## Pricing for Network Discounts: Outlier Provisions

A major concern in pricing for network discounts is the variations found in outlier provisions in hospital contracts. An outlier is a provision within the network contract that describes special terms for the payment of exceptionally large claims. Outliers are commonly used by networks to secure a higher rate of reimbursement for more complex cases. These contracts may offer good savings for routine, lower-cost cases, but they may also make up for lost revenue with higher reimbursement rates on claims exceeding the outlier. While several variations exist, the following are the most common:

### First Dollar Outlier

When charges exceed a predetermined level, the reimbursement for the entire claim reverts to a fixed percentage which applies from the first dollar upward.

For example, consider a claim of \$60,000 with a first dollar outlier at \$50,000 and outlier reimbursement set at 80%. This claim would be paid at \$48,000 (80% of the \$60,000), regardless of the contracted percentage payable for claims under the \$50,000 outlier.

### Excess Outlier

When charges exceed a predetermined level, the reimbursement changes for just the charges in excess of the outlier to a pre-determined, fixed outlier reimbursement percentage. The claim amount under the outlier is still reimbursed at the contracted limit (per diem, DRG, or a lower percentage). For example, consider a claim of \$60,000 with an excess outlier at \$50,000.

This claim would be paid at 80% for the excess amount of \$10,000 (\$8,000) but the initial \$50,000 would be paid at the network contracted rate.

To understand the effects of various outlier provisions, we can review an example, loosely based on networks that we have recently analyzed. We compare hypothetical hospital contracts as follows:

Table 1 Contracts	Claims Paid at	Outlier Type	Threshold (\$X)	Outlier Payment (Y%)
A	85% of charges	N/A	N/A	N/A
B	\$1,000 per day	First Dollar	\$50,000	92% of charges
C	\$2,500 per day	Excess	\$50,000	92% of charges
D	\$4,500 per day	No Outlier	N/A	N/A

For the purposes of this discussion, we have performed an analysis of five hypothetical claims from hospital admissions as shown in table 2 below:

Table 2 Admit#	Billed Charges	Admit Days	Contractual Reimbursement			
			A	B	C	D
1	\$12,000	4	\$10,200	\$4,000	\$10,000	\$18,000
2	\$20,000	5	\$17,000	\$5,000	\$12,500	\$22,500
3	\$40,000	8	\$34,000	\$8,000	\$20,000	\$36,000
4	\$60,000	10	\$51,000	\$55,200	\$34,200	\$45,000
5	\$150,000	20	\$127,500	\$138,000	\$142,000	\$90,000
<b>Total</b>	<b>\$282,000</b>	<b>47</b>	<b>\$239,700</b>	<b>\$210,200</b>	<b>\$218,700</b>	<b>\$211,500</b>

When looking at this data in context of specific stop loss deductibles, some claims generate enough contract savings such that they will no longer meet the specific deductible, even if their billed charges initially did. By adding together the excess layers for claim amounts that meet the deductible, the following financial results and percent savings against billed charges are derived. Table 3 below summarizes the total reimbursements that result from applying the information from the hospital contracts in the first table above to the hospital admits shown in the second table above, using specific stop loss deductibles of \$25,000 and \$100,000.

Table 3 Totals	Billed Charges	A	B	C	D
Overall	\$282,000	\$239,700	\$210,200	\$218,700	\$211,500
XS \$25,000	\$175,000	\$137,500	\$143,200	\$126,200	\$96,000
XS \$100,000	\$50,000	\$27,500	\$38,000	\$42,000	\$0
% Savings Off Billed Charges					
Overall	100%	15%	25.5%	22.4%	25.9%
XS \$25,000	100%	21.4%	18.2%	27.9%	45.1%
XS \$100,000	100%	45.0%	24.9%	16.0%	100%

Our analyses revealed several patterns and insights:

- Generally, contracts that do not have outlier provisions can result in significant discounts on stop loss coverage. Those discounts tend to increase significantly as the stop loss deductible increases
- The existence of outlier provisions makes comparison of overall discounts far less meaningful in pricing stop loss. For example, Contract A compares unfavorably at an overall level, but is easily the second best contract at \$100,000.
- Comparison of stop loss business with significantly different deductibles is not meaningful when there are outlier provisions in place. For example, Contract C looks great at \$25,000, but is the worst contract at \$100,000.
- An “excess” outlier can generate significantly different results than a first dollar outlier. In particular, an excess outlier is generally more favorable to the payer than a first dollar outlier for lower stop loss deductibles, but it loses its advantage progressively as the stop loss deductible increases and more of the claim resides in the outlier range.

Future newsletters will continue to explore the theme of how network discount analyses are impacted by various factors. Some of these factors include charge differentials across providers, pricing manual assumptions, network contract influence upon loss trend, the nature of available network discount data, as well as medical specialty and claim layer. ■



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## Questions/ Comments

We welcome questions and comments on our newsletters and the topics covered.

*To make comments, please contact the editor, [Mark G. Schippits, MD.](mailto:Mark.G.Schippits@AmericanRe.com)*

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