what's happening

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DIAGNOSIS RELATED GROUPS

A major revolution in health care in America began October 1, 1983, when Medicare started paying for hospital care under a Prospective Payment System based on Diagnosis Related Groups. As the federal health insurance program for the elderly and disabled, Medicare pays the hospital bills of nearly 30 million Americans each year. The change from reimbursement based on costs to payment of a pre-determined amount based on diagnosis will have an unparalleled impact on hospitals in this country. This special issue of **What's Happening** *presents a discussion of the mechanics of the system and what it means to patients, hospitals, and physicians.*

MMC is ready and able to deal with DRGs

"The new federal regulations on payment to hospitals for Medicare patients are based on averages," says MMC Executive Vice President and Treasurer Donald McDowell. "In a system based on averages," he notes, "a large hospital with a lot of Medicare cases has an advantage, because the laws of averages work better with large numbers. We should do well -- or at least not do poorly -- under the new system."

McDowell says hospital administrators and others across the country are busy either voicing or allaying fears that the new Medicare prospective pricing system will have devastating effects on the quality of care offered, the financial viability and ultimately the survival of hospitals, and the job security of hospital workers.

The furor is all about a prospective pricing system based on Diagnosis Related Groups (DRGs), which took effect October 1, 1983. Basically, under the DRG system, the hospital will be paid at a fixed, non-negotiable, predetermined rate for each Medicare patient it discharges. Each case will be classified in one of 467 DRGs, determined by combining admitting diagnosis, surgical procedures, complications, co-existing conditions, and other factors. The groupings are of medically similar conditions, and of conditions requiring approximately equal consumption of resources.

While not a cause for panic, the DRG system will have more impact -- and more universal impact -- than any change in health care financing since the inception of Medicare in 1965. Everyone is deeply involved in the change to DRGs: patients, physicians, nurses, medical records technicians, accountants, administrators -- all of us to one degree or another.

Following is a brief, layman's overview of a very complex system:

- the DRG system only applies to Medicare inpatients, of which MMC serves about 7,100 annually (34% of our patient population).
- payment for these cases was formerly based on a reimbursement of the hospital's reported "allowable" costs of providing care. Those costs were calculated on Medicare's terms, and generally fell short of meeting the hospital's real costs.
- the payment for each Medicare patient discharged will now be based on the DRG, with each DRG "worth" a predetermined price. The price is developed by adjusting the average base year costs for discharges within a DRG.
- other factors are figured into each hospital's rate, including allowances for capital requirements and direct and indirect educational costs.
- the payment is for all components of care -- room, board, nursing care, drugs, tests, surgical procedures, etc.
- within four years, the system calls for every hospital everywhere in the country to be paid the same amount for the same DRG, regardless of regional differences in the cost of providing care.

"The other thing about a system based on averages," McDowell points out, "is that when you're above average you have an advantage. Since MMC and her people are far above average, we should find our adjustment manageable. It will be different and difficult, but do-able."

The art of reducing all ills to 467 groups

There may be only 467 Diagnosis Related Groups in the new Medicare payment system, but that doesn't mean there are only 467 ways a Medicare patient can get sick. According to the definitive source on the matter, there are 10,000 possible diagnosis classifications and 7,000 surgical and medical procedure classifications known to medicine. This source -- the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)* -- is the basis of the DRG system.

The 10,000 diagnosis codes of the ICD-9-CM are broken down by the DRG system into 23 Major Diagnostic Categories (MDCs). This is done primarily on the basis of organ system, such as "Diseases and Disorders of the Hepatobiliary System and Pancreas." The MDC groupings, and the Diagnosis Related Groups contained within them, are supposed to be "medically meaningful." That is, they are similar medically, require similar treatment, and consume approximately equal amounts of hospital resources.

The DRG for a given case is determined at or immediately following discharge. It is first assigned to one of the 23 MDCs, according to the physician's determination of the Principal Diagnosis, defined as "that condition which, after study, is determined to be the reason for admission to the hospital."

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This is not necessarily the admitting diagnosis, or the most serious of a patient's problems, but the one which on retrospective analysis caused the admission to the hospital.

Once a case has been assigned to a MDC, it is subjected to a computer program that "splits" it into a DRG using a "yes/no" logic process. The first split is on the basis of surgery: "was a surgical procedure performed?" Further splits are based on the presence or absence of:

Substantial Comorbidity, a pre-existing condition that will, because of its presence with a specific principal diagnosis, cause an increase in length of stay of at least one day in 75% of the cases.

Substantial Complication, a condition that arises during the hospital stay that prolongs the length of stay by at least one day in approximately 75% of the cases.

Age over 70, treated as a comorbidity in most cases.

The result of the computerized splitting process is the designation of the case as falling into one of the 467 Diagnosis Related Groups. Payment is then made to the hospital at a predetermined price for the DRG, on the assumption that all the cases falling into the DRG require about the same consumption of resources.

Quality and cost are partners under DRGs

What does the DRG system mean for the patient? Some have raised the spectre of hospitals cutting down on costs by discharging patients early or eliminating some diagnostic work, and even creating "Medicare wards," with greatly reduced staffing levels and fewer amenities.

At MMC, according to Acting Vice President for Health Affairs Costas T. Lambrew, M.D., the new system will have no effect on patient care. "We're not going to let cost issues overshadow patient care issues," he says. "Any change in government regulation or payment systems is a potential threat to the quality of care, but we expect our patients to see absolutely no difference under the DRG system.

"What DRGs *will* do," Lambrew continues, "is make us look more carefully at the way we practice medicine. We'll need to consider more closely how we care for patients, the tests we order for them, and the length of time we keep them hospitalized. We can compare the way similar patients are handled by different physicians, and compare our overall figures with regional and national norms, looking for legitimate ways to shorten lengths of stay and reduce diagnostic work."

All this is nothing new at MMC, according to Lambrew. "We've always been concerned with getting people in and out of the hospital as quickly as possible," he points out, "for medical reasons and because we've been operating under space limitations for a long time." He points to increasing use of outpatient surgery and shorter stays, and notes that MMC's cost figures compare very favorably with regional and national norms.

The MMC patient may not notice drastic changes due to DRGs, but MMC's medical staff will. "The hospital's financial viability," Lambrew says, "will depend on the physicians not only redoubling their efforts to deliver care as cost-effectively as possible, but on completing patient records and discharge summaries as quickly as possible."

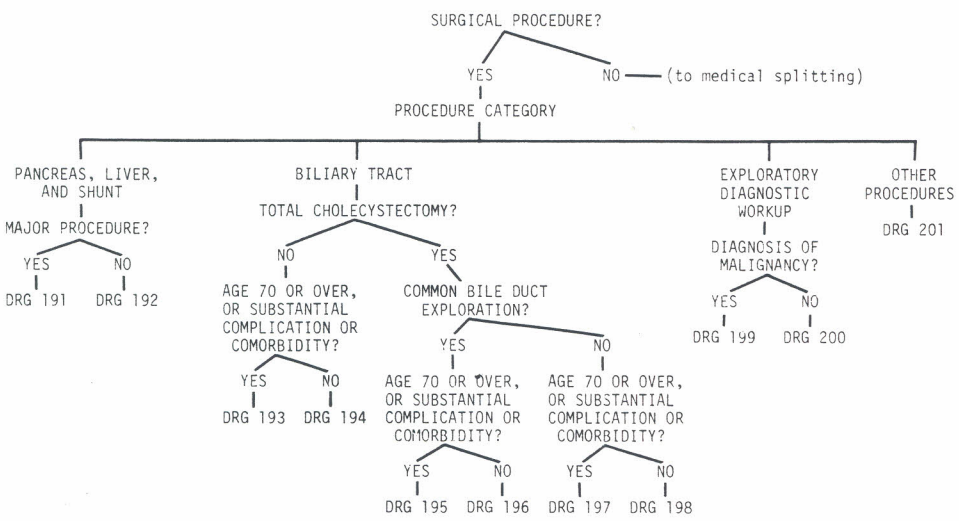
Complete, accurate medical records have always been essential, but under the DRG system they are paramount. Classification into the appropriate DRG, which will bring the appropriate payment to the hospital, will depend on the most complete record possible of all diagnoses, complications, comorbidities, and procedures.

The need for speed is simple: Medicare cannot be billed without complete medical information. Time is money, and the hospital's case flow depends on prompt submission of bills.

MMC's Nursing Department is equally committed to maintaining high quality care while working within the DRG system. Vice President for Nursing Judith Stone, RN, MS, says that like the medical staff, nursing will be taking a closer look at the way it cares for patients, but will not be lowering its standards.

"We'll be subjecting our structure and systems to a great deal of scrutiny," Stone says, "in terms of the mix of staff, the distribution of tasks, and productivity. The actual cost of nursing care will be important, particularly as the acuity of the patient population increases. In the future, we'll need to be concerned with out*put* as well as out*come*."

On the bottom line, Nursing doesn't know what the impact of DRGs and other changes in health care financing will mean, any more than anyone else does. "The only thing we know for sure," Stone says, "is that the quality of care has to come first. We're not going to reduce staffing levels or do anything else that will interfere with the nurses' ability to take proper care of their patients."



Putting a specific case into a DRG

A 72-year old female is admitted with a diagnosis of chronic cholecystitis with stones (inflamed gall bladder with gallstones.) A total cholecystectomy (gall bladder removal) is performed, along with a common bile duct exploration. Pathology confirms the admitting diagnosis.

This case falls into Major Diagnostic Category 7: Diseases and Disorders of the Hepatobiliary System and Pancreas. The shaded bar follows the path the case takes through the splitting process, from "was there a surgical procedure?" to the assignment to DRG 195.

Note that the final split asks only if there was a substantial complication or comorbidity or if the patient was 70 or over. The DRG assignment (and therefore payment) would be the same if there were one complication or several, if there were one comorbidity or a dozen, and if the age were 71 or 91.

The DRG game has a long list of players

The impact of Diagnosis Related Groups at MMC goes far beyond the practice of medicine. After the patient leaves the hospital, the patient's record -- the heart of the entire DRG process -- enters the realm of computers, data abstraction, numbers and codes, and finally money. Once the physician completes the record, this is the general process:

- Medical Records personnel receive the record, track and obtain missing information, and forward the completed record to
- the transcription section of Medical Records, where the transcriptionists transform the physician's notes into a written record and do a *discharge summary*, which then goes to
- the abstracting section of Medical Records. Here, the parts of the record necessary for billing are isolated and entered in the abstract: diagnosis code, according to the *ICD-9-CM*, principal diagnosis, comorbidities, principal procedure, complications, etc. The billing information then goes to
- Patient Accounts, which puts the information into the bill, which is then sent to
- Blue Cross, which is the *fiscal intermediary* for Medicare. Blue Cross does the actual "splitting" of the case into a Diagnosis Related Group, using a computer program called, in DRG jargon, a "Grouper." They then pay the bill, and advise the hospital of the DRG designation.

All this, from physician completion of the record to the production of a bill, has to happen within four days of discharge. And while the entire DRG process happens only in the 7,100 or so Medicare cases MMC handles each year, the Medical Records and Patient Accounts peopie handling the DRG workload are at the same time handling their normal recordkeeping, transcribing, summarizing, abstracting, and billing work.

There are many unseen hands in the DRG process. Data Management personnel, for example, have a major part to play. With Accounting staff, also major players in the game, they were busy in August trying to analyze what impact the as yet unclear DRG regulations would have on MMC. Now that we are operating under the system, this early analysis has proven worth the effort.

Because the final Federal regulations implementing the DRG system weren't out until September 1, Accounting had to build MMC's 1984 budget on estimates. It is felt those estimates were close, but the late regulations were a major headache. Accounting has also had to struggle with changing formulas for wage components and market baskets, and even changing regions used in computations.

Data Management will be using abstract data from Medical Records to determine -- before the bill is submitted -- whether or not a case is in the "outlier" category, costing more than usual and possibly entitling the hospital to a higher payment.

DRG system has some major difficulties

The DRG process is anything but simple, and some have called it deficient in concept and structure. The Principal Diagnosis, for instance, is not necessarily the most severe or the one initially thought to be the reason for admission. A man presenting to the Emergency Department with chest pains may be assigned an admitting diagnosis of Acute Myocardial Infarction (heart attack), for example, but if tests rule out heart attack the actual cause of the chest pains becomes the principal diagnosis.

Similarly, a patient admitted for thrombophlebitis, the development of clots on blood vessel walls, will have a Principal Diagnosis of thrombophlebitis even if an underlying carcinoma is found to be responsible for the development of the clots, and even if the clots precipitate a fatal heart attack while the patient is hospitalized.

Other difficulties with the system:

- Complications and comorbidities may or may not be considered "substantial" under Medicare's rules, and only one of each is considered.
- Similarly, if a patient has several surgical procedures, only the one deemed by Medicare to be the most resource-consuming is counted.
- Length Of Stay in the hospital is not considered -- the same DRG assignment (and therefore payment) is made whether the patient is in the hospital two days or fifteen days (in certain cases unusually long stays are placed in an "outlier" category eligible for a slightly increased reimbursement).
- The number of tests, number of physician visits, intensity of nursing care, etc. are not considered -- the DRG payment is based on the historical average of the amount of those items, not on the amount rendered to a specific patient.
- DRG reimbursement reflects the nature of present medical practice and current technology only, and the system is updated only every four years.
- The system is skewed toward cases involving surgery, because of higher reimbursements for surgical cases.
- The groupings are not always "medically meaningful," as they are claimed to be. For instance, lung cancer patients are all in the same DRG, whether they are hospitalized for a short diagnostic workup, a lengthy chemotherapy treatment, or terminal care.
- The system includes a provision for "budget neutrality," which shields the Medicare program from paying out more under the new system than it would have under the old system. In other words, regardless of any other factors, Medicare can curtail its payments to a hospital if DRG reimbursement would cost the program more.
- The system applies only to inpatients, and does not address physician's fees.

Is there anything good about DRGs?

"If you believe anything that creates problems also creates opportunities," says MMC Vice President for Planning and Public Affairs Donald E. Nicoll, "then you can find some positive things about Diagnosis Related Groups. Groups of diagnoses are grouped data, and this data may be useful down the road."

Hospital planners, Nicoll explains, are always looking for better ways of "measuring" what the hospital does. The enormous amount of data required by the DRG system may provide a better way of classifying the hospital's "products" and measuring the relationship of revenue to patient mix. Planning uses the data to examine such things as utilization and length of stay, and compares local and regional statistics.

"It's too early to tell," Nicoll says, "how useful the data will be or whether or not it's worth the difficulties Diagnosis Related Groups create. But, it would be a shame not to find some benefit in among the problems, and in any event, if you have to live with a system, it's best to understand it."

Can the government control costs better?

Why did Medicare adopt a payment system as complex and unwieldy as Diagnosis Related Groups? The answer lies in the inception of the Medicare program in 1965. Born of the "Great Society," Medicare was to be part of a world in which every person had a basic right to medical care. This was a worthy dream, but the passing years have found that right an increasingly expensive proposition.

In an effort to keep Medicare both effective and solvent, the federal government has tried various methods to keep its cost down. Those methods have included restricting eligibility requirements, increasing co-payments for beneficiaries, adopting fixed cost-per-case reimbursement just last year, and always -- from the start -- reimbursing hospitals at less than the actual cost of providing care.

DRGs, then, are the latest effort to limit the federal government's expenditures for Medicare. Medicare officials and others have cited the "excessive" and "skyrocketing" cost of health care, and promoted DRGs, prospective payment systems in general, and other methods like revenue caps as a means of providing hospitals with "incentives" to control costs.

No one disputes the contention that hospital costs are high, but hospitals have repeatedly bristled at the suggestion that costs are higher than necessary. Speaking for MMC, Executive Vice President and Treasurer Don McDowell says "given the hospital's mission and the environment of the last 15 years, costs at MMC are neither skyrocketing nor excessive, and MMC has been working hard for years to keep costs down, as have other Maine hospitals."

The facts are simple: MMC's operating expenses have compared favorably with both the state and national averages for the past few years and MMC is now seeing a reduction in the annual rate of increase. Likewise, Maine's hospitals on average have done well. In table form:

Increase in Total Operating Expenses (%)

	MMC	Maine	U.S.
1980	*14.8*	*15.2*	*16.4*
1981	*11.9*	*15.1*	*17.9*
1982	*14.8*	*13.7*	*15.8*
1983	*12.0 (est.)*	*12.6 (est)*	*11.5 (est.)*
1984	*7.6 (proj)*	—	—

Note: 1983 and 1984 figures for MMC include increased interest expense on a portion of the new building and renovation project.

The reasons for the favorable "big picture" at MMC are the myriad smaller efforts the hospital has made to control costs. Participation in shared services and group purchasing has netted large savings. Computerized environmental control and installation of efficient plant systems have saved energy costs. Physicians have contributed to reduced Pharmacy costs by review of the products available, and to efforts to decrease hospitalization by greater reliance on outpatient surgery and home care. Individual hospital departments have produced impressive figures in recent years, like Linen Services' 16% increase in productivity due to improved systems. "The jury is still out," McDowell says, "on whether the DRG system can improve on this kind of cost containment effort, or whether it could harm it."

What does the future hold for cost issues?

Even as an imperfect instrument, DRGs are likely to be around for a while, in some form or other. The concept of placing the hospital at risk for the financial as well as medical aspects of the care it provides has great attraction for regulators and the public. Because the system does not adequately provide for capital needs or charity care, however, it may place too great a burden on hospitals -- and on other payors, to whom the costs will be

The Medicare program itself remains at risk, even with DRGs, because prospective payment alone cannot ensure its solvency. It is certain there will be further refinements and restrictions in the DRG system, and new systems aimed at other aspects of the health care cost question, such as demand. There is even speculation in some quarters that the next step may be to place the consumer at financial risk, by allocating a fixed sum to individuals to purchase services.

In the DRG debate, there are echoes of the cost containment debate in Maine last Spring, and in other places before and since. As always, it is clear that changing the way hospital care is paid for, by DRGs or any other means, won't change the number of people who get sick or injured. Neither will it change the demographics of a growing and aging population, nor stop inflation, nor make people take better care of themselves.

"The bottom line," MMC Vice President for Planning and Public Affairs Donald E. Nicoll says, "seems to be that government will continue to make efforts at forcing cost containment, that hospitals will continue to contain costs on their own, and that DRGs are just one more part of what will eventually become one of the major social issues of the near future: in a world of infinite demand for health care and finite resources to pay for it, who pays for care, and who decides who pays how much for whose care?"

"The only rational way to proceed," McDowell believes, is for everyone to first decide that we can't spend our time placing blame for the problem or trying to 'beat the system.' Then, we all -- hospitals, physicians and other health care professionals, patients, insurance carriers, government officials, and regulators -- have to redouble our efforts to work together to control costs while maintaining the high quality of care we've come to expect."

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