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Chief Medical Officers' Perceptions of Disease Management Programs

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ABSTRACT

The purpose of this article is to examine chief medical officers' (CMOs) perception of disease management programs. Five open-ended questions, each addressing a major issue in the development of disease management programs, were given to 31 CMOs who attended a series of invitation-only conferences on disease management in the fall of 1999. Qualitative data analysis was conducted using the transcripts on each of the issues. Overall, the CMOs viewed the emergence of capitated disease management programs positively. They considered the population of a program to be the contractual patients and/or those at risk for the target disease. On the issue of quality and cost, they preferred an optimal balance between the two. They saw the Internet as an opportunity for the education of patients as well as providers. However, they were concerned about patient confidentiality and further widening of the gap between those who have the financial means to access healthcare and those who do not. In spite of concerns expressed about the current generation of disease management programs, the CMOs held an optimistic view of the future of these programs. To become better accepted, disease management programs must address the issues of confidentiality and quality of care.

ACCOMPANYING THE HISTORICAL CHANGE from an "industrial model of medicine" to an "information model" is the emergence of disease management (DM).[1] DM is a mechanism to coordinate medical resources for patients across the entire healthcare delivery system.[2] The main features of DM include a comprehensive focus on a particular disease, population-oriented health and medical care, emphasis on evidence-based medicine and demonstrated best practices, mechanisms to connect treatment and information across care settings, cost containment, and outcome assessment.[3] DM emphasizes preventive care for all members of a plan. Primarily, DM is integrated into the healthcare system by educating patients and providers. As DM evolves, the Internet is being used more frequently as a means of patient and provider education.[3] The chief medical officer (CMO), a role just now being defined, often acts as the advocate and portal for DM to managed care organizations, hospitals, and healthcare systems.

Presently, in the United States there are two main provider organization reimbursement methods: full-risk sharing (capitation [CP]) and

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fragmental contractual payment (fee for service [FFS]). CP refers to a specific amount of money that is received for a set of services.[4] FFS, on the other hand, refers to monies received for every service provided. The percentage of health maintenance organizations using CP and FFS reimbursement for primary care and specialty care physicians has risen drastically from 1993 to 1998.[5] CP has not grown as quickly for hospitals and systems because assuming full risk for patients increases the chance of economic loss.[6] Widespread concern among both payers and providers about the risks of the CP approach raises doubts about its long-term feasibility.

Other issues of major concern are quality and cost of care. Historically, DM programs were initiated to provide quality care that is cost effective.[3,7,8] However, some DM programs have focused only on reduced costs and have not improved care.[9] This raises concern about the real purpose of DM programs.[7]

DM obviously poses many challenges for providers and organizations, and particularly for decision makers. For instance, how to define a DM population remains problematic. As more DM programs arise for various disease states, defining the target population becomes even more difficult. To be cost effective, a program must be targeted to the appropriate members. Other issues that plague decision makers involve information technology and patient privacy.

These are important and urgent questions facing the current generation of DM programs. We presented these questions to a group of CMOs in the United States. Through both formal and interactive sessions, common themes emerged from their responses to each question. The purpose of this article is to examine how CMOs' perceptions can shed light on the further evolution of DM.

METHODS

Participants

The study was conducted at the Second National Conference of the Society of Chief Medical Officers (Solution Series Workshop) during the fall of 1999. Forty-one attending CMOs served as participants in the study. The conferences were held in three locations: San Francisco, Chicago, and Washington, DC. The respective numbers of CMOs in each location were 15, 18, and 8. The participants represented a broad array of health systems, hospitals, physician organizations, and health plans.

Instrument

Questions directly relevant to the development and implementation of DM programs were initially developed based on informal discussion and literature review. Three physicians from Thomas Jefferson University Hospital, CareWise Inc., and Evanston Northwestern Healthcare reviewed the questions for the importance of the issues. A survey consisted of five open-ended questions relating to comparisons between reimbursement types, definition of the program population, role of non-physician leadership, information access, and confidentiality. The questions were presented to the participants during an interactive discussion session at each conference location. These five questions were:

1. What is the impact of full risk sharing (capitation—CP) versus fragmented contractual payment (fee for service—FFS) on disease management?
2. What is the best definition of a population in disease management?
3. How do the non-physician leadership and the drive for a positive Return on Investment (ROI) affect the development and implementation of disease management programs?
4. What do you see as the impact of the Internet and unfettered access to health information on disease management programs and the role of the physician?
5. What are some of the concerns regarding patient confidentiality that will affect disease management programs?

Procedure, data collection, and analysis

Each participant was asked to write their answers to these five questions presented to them

during a discussion session. There was no time limit on the completion of the questions. Each participant worked independently while answering the questions.

Qualitative analysis[10] was performed to group the data into major categories. The procedure consisted of three steps. In the first step, two of the authors reviewed the detailed transcripts, and themes were derived from the responses to each question. In the second step, reviewers analyzed the themes, and a general theme from each question was extracted. This theme is then illustrated in detail, using direct quotations. In the third step, story-like summary responses for each question were developed. The final results were based on these themes and summarized in a descriptive format.

RESULTS

The themes derived for each question were compared across the three locations. Because similar themes were derived at each location, the results are reported combining the data from the three locations. The findings are presented in the same sequence they were asked.

1. What is the impact of full risk sharing (capitation—CP) versus fragmented contractual payment (fee for service—FFS) on disease management?

An overwhelming majority of the CMOs felt that CP is superior to FFS in terms of DM. CP is a "a much greater driver for implementation of disease management programs" and it "aligns the incentives in a way that would facilitate development of DM."

Specifically, the advantages cited by the CMOs favoring CP consist of management, incentives, and ownership, as noted below:

> "FFS may cause unintended conflicts."
>
> "CP is more likely to induce physician cooperation through alignment of financial incentives."
>
> "FFS seems doomed to fail [because] the physicians have no ownership."

Although the CMOs agreed that CP might have a potentially higher risk than FFS, the risk taken by CP was seen positively:

> "The greater the risk, the greater the incentive to have effective disease mangement programs."
>
> "Full risk increases the success of implementation."

2. What is the best definition of a population in DM?

Although the definitions of a population in DM varied among the CMOs, most tended to define it based on two components: the disease state and the financially contracted membership. In reference to disease state, the CMOs described the DM population as:

> "A distinct group who have a defined and recognized cluster of symptoms or a disease."
>
> "Those with the disease and those who have potential to develop the disease."
>
> "The population of present and future persons at risk of illness."

In reference to the financially contracted membership, the CMOs described the DM population as:

> "The entire enrolled membership."
>
> ". . . the risk population financially contracted . . ."
>
> "Contractual population with a disease state, diagnosed or at risk for disease state."

3. How do the non-physician leadership and the drive for a positive Return on Investment (ROI) affect the development and implementation of disease management programs?

The reactions to the non-physicians' leadership role in DM were mixed. However, most CMOs commented that non-physician leadership was seen hand in hand with a focus on positive ROI.

To support the need for non-physician leadership, some CMOs agreed that a positive ROI "drives everything" and is "the bottom line." Similar viewpoints were expressed, such as:

"No margin, no mission . . ."

"It will eliminate ineffective programs . . ."

On the other hand, a majority of the CMOs said that DM programs run by non-physician leaders would become like business enterprises where the bottom line was the key driving force. Therefore, CMOs feared that the optimal balance between cost and quality in such DM programs would not be achievable. According to some CMOs, "Non-physician leadership focuses on short-term returns whereas DM return is long-term." The CMOs also perceived that there might be a bias toward selecting certain types of diseases for management if cost becomes the highest priority. If achieving a positive ROI becomes the sole criterion for implementation of a DM program, there could be unfortunate consequences. Thus, some CMOs responded rather negatively:

"Non-physician decision makers and the demand for an ROI may inhibit the development and implementation of the program."

"There would be a bias for selecting diseases . . . as opposed to a pure medical/public health model of what the population needs."

4. What do you see as the impact of the Internet and unfettered access to health information on disease management programs and the role of the physician?

Almost all of the CMOs perceived that the influence of the Internet on healthcare is inevitable and positive. Most remarkable is the enormous volume of information that can be accessed by patients. "It is revolutionary," summarized one CMO, representing the general feeling of the participants in reaction to the new reality of patient and consumer empowerment. The Internet has become a "driving force" in this information age. Other respondents replied:

"The Internet will increase patients' power with full information."

"Patients will become more assertive, educated and key decision-makers."

Thus, the CMOs remarked about a gradual change in the physicians' role. Physicians are facing patients armed with large amounts of information about disease, healthcare, and other issues for which physicians may not be prepared. Consequently, the physicians' role in this new environment should be making sure that the patient is obtaining quality information:

"Physicians will play a large role in providing accurate evidence based information on the Internet."

"Physicians have to help patients sift through the information, and assume more responsibility for the management of their disease."

"Physicians will become knowledge brokers rather than just service providers. If not, they will be pushed to the periphery."

In the view of these CMOs, the information age has also widened the gap between those who have the financial means to access healthcare and those who do not. Only a small percentage of American households have Internet access, which is directly related to income and is unevenly distributed across racial and ethnic groups.[11,12] This greatly biases the distribution of healthcare information. The CMOs expressed great concern over this issue.

"The sickest members of our society are probably on the whole 'later adapters.'"

"Medicaid population is not likely to use the Internet."

5. What are some of the concerns regarding patient confidentiality that will affect disease management programs?

Great concern was expressed over the confidentialty of patients' information through the process of DM. Universally, the CMOs replied that "there is no confidentiality" in DM programs, at least not as defined by the traditional standard of the one-on-one doctor–patient relationship. To integrate the different aspects of care in DM, patients' information that was previously shared only with their own doctors will now be shared with others. The questions raised among our respondents were, "Who owns the data?", "Will there be legislative oversight?", "Who can access it?", "under what circumstances?", and "for what purpose?"

In spite of these concerns, most CMOs suggested that patient confidentiality is not an issue of DM per se; rather, it is an issue of implementation:

> "Patients and physicians will buy into the program if somehow names could be blinded."

> "This will depend on implementation. Systems that permit option and presence [promoting the] physician and patient relationship will succeed in complying with confidentiality required.

SUMMARY AND CONCLUSION

This survey, though limited in scope, represents a good cross-section of the nation's decision makers from health systems, hospitals, and health plans. Similarities among the participants in three locations support the generality of the findings. Answers to several DM-related questions confirmed literature findings that there will be greater utilization and influence of DM in healthcare organizations within the next 3 years.[6] Specifically, CMOs felt that capitated reimbursement will create the most successful DM programs because risk will be shared. In general, CMOs supported a well-defined DM population, balancing cost and quality, integration of technology, and increased action to protect patient confidentiality.

Perhaps the most difficult and challenging task facing healthcare providers is finding an optimal balance between short-term DM program expenditures and outcome improvement and long-term cost reductions generated.[8] The CMOs understand that positive ROI is essential for the DM programs of the future. Many DM programs, especially those run by managed care organizations, are forced to focus on diseases and interventions that yield a rapid ROI. Outcome improvement may become a secondary issue. This could cause the basic objectives of DM (i.e., disease prevention and health promotion) to be neglected.[13,14] The CMOs feel strongly about creating a balance between cost and outcome improvements. They do not want to have a "failed" program because of low quality.

Many segments in healthcare already benefit from the advance of technology. Perhaps the most noticeable gain is by the patients who, with an unprecedented access to information, demand services they have read about on the Internet. The CMOs, although welcoming the information age, indicated that providers need to prepare for changes in the dissemination of healthcare information. A system that was once "provider-oriented" healthcare is quickly becoming "consumer-focused."

Almost inevitably, the advancement of technology raises many issues. Among them is the security of confidential healthcare information. This issue becomes more apparent within an integrated effort, such as a DM progrom, where sharing of information facilitates data collection, disease prevention, and health promotion. All of these aspects are deemed crucial for a DM program to succeed. To this extent, our respondents agreed and noted that privacy issues can be overcome without jeopardizing the fundamentals of the program.

The CMOs also expressed concerns about social responsibility. They envisioned a wider and further disparity that may occur between the economic stratum because of the advancement of technology and resulting access of information. This implies that healthcare providers have some obligations to narrow these gaps and help those who may not have the resources needed to access information.

The study results indicate that CMOs hold a positive view of current developments in DM. They welcome capitated reimbursement and the impact of the information age. The confi-

dence expressed by this national sample of decision makers suggests that despite the presence of recognized barriers, DM has a secure role in the future.

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