

## A New Consumer Education Tool

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GAMES appear to supply many necessary aspects for learning. They provide motivation derived from the social environment and a setting in which to organize and use new material and to guess or use intuitive judgment. Principally, however, games force players to make decisions.

In playing games, skills are developed and used in social interaction with others. Berne states, "Significant social intercourse most commonly takes the form of games" (1). Abt describes the self-directed learning which games provide as occurring in three separate steps (2).

Dr. Cashman Assistant Surgeon General, is acting director of the Community Health Service, Health Services and Mental Health Administration, Public Health Service. Miss Galiher is special assistant for education and training in the Resource Development Division. She conducted a demonstration of Medigame and distributed this paper at the 96th annual meeting of the American Public Health Association in Detroit, Mich., November 13, 1968. 1. Learning the facts around which the game is played.

2. Learning the process of variable changes over time as simulated in a game.

3. Learning of the relative cost and benefit, risk and potential reward of alternative strategies of decision making. These three levels of game learning appear to occur simultaneously.

Games have been used with good results by the military. More recently, games have been discovered by business; a series of computerbased and didactic games was demonstrated at a recent seminar of the American Management Association. The National Aeronautics and Space Administration has developed "GREMEX," an engineering management exercise in which simulation techniques are employed to provide experiences in project management. A recent addition to simulation is "Urban War," a land use game.

Educational games have been found to be of value at a time when the education system is being asked to prove itself able to meet the strains of social change (2). Gaming appears to offer promise as an effective learning instru-

ment in areas such as health planning, health management, and health programing, as well as in educating consumers about health services.

A game called "Medigame" has been devised to simulate experience and practice in using the benefits of Medicare. The Social Security Amendments of 1965 brought into being a health insurance program and a medical insurance program which few beneficiaries understood at the outset. Many potential beneficiaries previously had never had any form of health insurance.

Decision making is an important ingredient of the game. In addition to using Medicare benefits, Medigame players also make decisions regarding certain other types of health behavior patterns which are of value in maintaining health.

Medigame was originally an idea of Miss Galiher. It was developed under a contract between the Division of Medical Care Administration, Public Health Service, and the Society of Health Educators. Mrs. Lyn Trowbridge, department of social relations, Johns Hopkins University, was a consultant to the society on this project. In trials of the game, potential Medicare beneficiaries played at senior citizens' centers, and changes were incorporated as a result of these tests and tests with other groups.

Medigame is a board game played with from two to six people (see frontispiece). Before actual play starts, players are issued a Medicare card and \$400 in play money. Players select a marker for play purposes and are given an opportunity to decide whether they wish to purchase supplementary health insurance.

Each turn consists of selecting a play card, reading it aloud, and making some decision regarding the information it contains. Many decisions impinge on the use of money for health or health-related purposes. Reading of the play card is followed by throwing the dice and moving each player's marker along a path. The circuit of a path on the board involves some stops which are open but others which require drawing cards from piles with labels such as "hospital," "doctor," or "chance."

In the use of these cards, which are each also read aloud, players experience the benefits of Medicare, such as physicians' services, hospitalization, extended care, and home health services. Players learn which services Medicare does and does not cover, and they must spend their money for uncovered or partially covered services as well as learn the value of supplementary health insurance. In addition, players decide whether or not to spend their play money for cards representing physical examinations, improved diets, or activities of various kinds. As the game unfolds, players discover the wisdom of the various decisions they make.

Winning the game involves the accumulation of points through (a) finishing the circuit of a path, (b) the point value of money held at the conclusion of the game, and (c) the point value of cards purchased representing health insurance, good diet, physical examinations, and social and physical activities. The player with the most points wins. Usually he is not the one who finishes first.

The idea of Medigame is to anticipate future probabilities as a Medicare beneficiary with more skill and luck than any other player. The game requires the players' active participation in dealing with these three factors which simulate possible models for predicting and planning the future.

1. The known yet continuously changing probability of events which affect their health status.

2. The possible influence on these events through health care, Medicare, and purchase of supplementary health insurance.

3. Chance or fate.

No knowledge of Medicare is necessary to begin playing the game. The benefits of Medicare are learned through strategy and moves in the game. Many players begin Medigame with the idea of finishing first, but frequently they change and vary their strategy in decisions hinging on health behavior.

Medigame gives participants a pleasure that listening to a lecture, reading a pamphlet, or watching a film cannot. It is an outlet for the exchange of information already held and a means for testing new information gained in the course of play. It provokes discussion and disagreement, the kind of social interaction in which learning is meaningful.

Medigame seems to provide a stimulus to seek information. Members of gaming groups were belatedly motivated to read the Social Security booklet on Medicare which they had received through the mail some time before. One player said, "The green book made a lot more sense after playing the game." A member of a game group who had lost his Medicare booklet visited the Social Security Office to obtain another copy. Players reported other informationseeking activities.

Medigame also seems to be one way of adding relevance to information about Medicare. Relevance is an important part of learning, but learning in anticipation of some future need is difficult for most people. According to Coleman, many students lose interest because "of the disparity between their present environment and the world for which they are being prepared. In other words, education is relevant not to their present needs but to their needs several years in the future" (3). In one practice session, several players indicated that they didn't need to know about Medicare until they became ill. A few minutes later they were arguing over what Medicare covers and what it does not! A study by Mancke revealed that users of Medicare had more knowledge of their benefits than nonusers, although both had been receivers of similar educational efforts (4).

In the course of testing its usefulness, an important addition was made to the game. Obviously, it was difficult and undesirable to quiz beneficiaries about their knowledge of Medicare after they had played the game. The following questions were inserted in the game to test acquisition of information. What benefits does Medicare provide? What services are provided as a part of home health service benefits? Who pays the first \$40 under hospital insurance and the first \$50 under medical insurance? Can people stay in the hospital after the doctor says they are ready to be discharged (utilization review)?

In further tests of the game, observers directed by a research psychologist, Dr. Gloria Kamenske, of the Division of Medical Care Administration, Public Health Service, watched groups of Medicare players. The groups were composed of persons from rural and urban areas and those with middle and low incomes. Observers reported all players' conversations that were pertinent to Medicare. The test questions previously mentioned were used as part of this evaluation. Dr. Kamenske's report indicated that "in the play of the game there is a gain in health information and that it constantly stimulates players of the game to discuss Medicare and, more importantly, to ask questions about it. Between game sessions, participants reported seeking more information on Medicare."

A limited edition of the game is being manufactured, and the distribution is now being planned. It is expected that the game will be available to senior citizens' groups, preretirement groups in industry, and other groups to whom information about Medicare is of particular interest. The game has been revised to reflect recent changes in Social Security legislation and to add information about the provisions of Medicare that, according to reports of local Social Security offices, beneficiaries least understand.

The game will be evaluated further. Dr. Kamenske has prepared an additional evaluation tool, and it will be used at senior citizens' centers, by health educators in several areas who will use the game as a technique of education, and by others.

While the game has been tested as an educational experience, it has not been tested as a program tool. Professionals are accustomed to using pamphlets, films, and even comic books, but no one has ever programed a game as an educational tool. Therefore the limited distribution being planned is aimed at discovering how this tool can best be used through affiliated groups of the Social Security Administration, Administration on Aging, and the Public Health Service. Information as to its availability in the future can be obtained from each of these agencies or from Miss Galiher.

## REFERENCES

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- (4) Mancke, R. B.: A study of the understanding of the provisions of health insurance for the aged (Medicare) in a New England community. Thesis for master of public health degree. University of Massachusetts, Amherst.