HEALTH AND HEALTH CARE GAMES AND SIMULATIONS
An Evaluation

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INTRODUCTION

Perhaps you are a community health worker who wants to teach a group of low-income mothers about meal planning for their families. Perhaps you are a trainer teaching firemen how to carry out cardiopulmonary resuscitation. Perhaps you are a nursing instructor trying to teach a number of students about planning nursing care for a group of patients—and you don't have unlimited clinical time. Perhaps you are a neurologist trying to teach medical students how to diagnose different types of disorders—and you don't always have patients with the required symptoms available.

In any of these very diverse situations, you may want to include a simulation or game as a part of your teaching strategy. There are materials available to meet the needs of teachers and learners varying from illiterates dealing with basic personal and community health matters to advanced technical/professional students.

At any point where patient safety and patient rights come into conflict with students' needs for practice, or where students must learn how to cope with unusual situations, simulations may help. Simulations often provide opportunities to apply principles in a problem-solving situation, and games provide opportunities for memory recall. Both learning situations are common in education about health and health care at any level.

Availability

So if simulations and games can provide such good learning experiences, where does one find them? There's the snag. There are undoubtedly hundreds of homemade games used by instructors in the health field, but few have made their way into the commercial world. In some ways that's unfortunate because it means that we have to reinvent materials for our own use, and that is time consuming, though locally prepared materials have the advantage that they can be tailored to particular learners.

Selection

The eleven simulations and games we review in this essay were selected from those commercially available to show you the widest possible range of types, audiences, and subject matter (see Table 1). That range makes it difficult to compare any two games, but it may give you some ideas for developing or modifying materials on your own. Each selection is representative of similar materials covering the same or other subjects. There is, for instance, a reasonably large selection of card games in nutrition and related areas. Some of the materials we review are not available as a ready-made package; we have included a few items that are available only in books, but we felt that you could always add your own playing pieces if the ideas were available.

We have *not* included in this essay materials that are chiefly concerned with sanitation or materials focusing on population (rather than family planning, which we have included). The essay on *The End of the Line* in this *Guide* also covers an exercise relevant to health workers.

BASIC CONSIDERATIONS: LEVEL, GROUP SIZE, PLAYING TIME

To an instructor, the real-life constraints of a group's level of experience, its size, and the time available will probably be important considerations. Please bear in mind that the information in Table 2 is only approximate. The way you introduce and follow up material can lengthen or shorten the playing time, and you can make some modifications of reading level to adapt materials for community groups.

Time

You can extend playing time by repeating an exercise (particularly games) for further practice. For example, *Nourish* can be used repeatedly, with fourteen different games drawing on the same deck. Because students can use these cards inde-

Editor's Note. Listings for all the simulations and games discussed in this essay are in the health section, except for *Brookside Manor* and *Everybody Counts!*, which are in the human services section, and *Community Target*, which is in addictions.

Author's Note. Comments regarding *Everybody Counts!* were based on examination of an earlier edition of the game, entitled *Smltd Lrng Xprnc*, and may not apply to the new edition.

TABLE 1 The Eleven Health and Health Care Simulations and Games

Title	Summary Description
Blood Money	Participants role play hemophiliacs and health care workers The simulation uses chips to symbolize money, medical care, and blood—all of which are required to cope with the hemophiliac "attacks."
Brookside Manor	Participants role play residents and staff of a new home for the aged. They must resolve their differences regarding significance of personal belongings, which in turn affect or reflect opportunities for social relationships, privacy, and individual expression.
Clinical Simulations: Selected Problems in Patient Management	A book of twenty patient problems for medical students that uses an answer-disclosing technique: each problem can be used only once.
Community Target: Alcohol Abuse	Participants role play various community members trying to determine the extent of, and find solutions for, an "alcohol problem" in their community
District Nutrition Game	A board game to help participants realize some of the important steps in planning a good community nutrition project
Everybody Counts!	A series of exercises for health care workers to promote affective understanding of the handicapped.
Nourish	Deck of 144 cards, each showing a different food, in suits representing different nutrients. Can be used for 14 different card games to teach food values.
Nursing Crosswords	Word games to give students practice in recalling correct terms and definitions.
Planafam II	A game of chance and strategy for 3-10 players in which a lifetime reproductive cycle is lived out and the consequences of choice assessed.
Psychiatric Nurse-Patient Relationship Game	A structured role-playing situation for 2 players to practice communication skills and analysis of processes
Resusci-Ann	An interactive model that enables individuals to practice cardiopulmonary resuscitation and to have feedback on their efforts

pendently (outside of class time) such repeated use need not involve the whole class nor take up scarce class time.

In the simulations that call for players to assume roles (*Community Target, Blood Money, Brookside Manor*) you may wish to have players retain the same roles in repeated play. In this way they can try alternate strategies and build upon their previous learning. However, this is often difficult to do because it requires the cooperation of all players in limiting the variation in play. A more fruitful use of the time may be to have players reverse their roles (for instance, those who were "residents" become "staff" and vice versa in *Brookside Manor*) so they can experience and compare the constraints imposed by different roles within the same situation, particularly for how this affects their behavior.

In our experience, the more structured the exercise, the less value and the more player resistance there is to repetition. The *Psychiatric Nurse-Patient Relationship Game* generally cannot be repeated for this reason.

Number of Players

The number of players can vary quite considerably. We have generally found it useful to have players work together (even on *Nursing Crosswords*) so they can discuss answers and learn from each other. This is particularly useful for beginning or disadvantaged learners, but it may also be useful at advanced levels, as in the clinical simulations. It is also a good way to deal with unexpectedly large numbers of learners in some community situations and to make scarce materials go further.

In general, you should probably try to work through any simulation the first time with the recommended number of players and introduce variations only as you become familiar with the dynamics of the exercise.

At all costs, avoid having a number of passive "observers." It is useful in complex situations like *Blood Money* to have designated observers who can report back to the group as a whole during the debriefing period. However, they should be given specific guidelines for what to observe, otherwise they may miss key issues and report only on obvious actions of which the players themselves are already aware.

A useful rule of thumb is that if observers constitute more than twenty percent of the number of active participants, you should restructure the exercise by providing additional sets of materials, doubling roles (having two players share one role),

TABLE 2 Basic Considerations

Title	Level	Playing Time	Number of Players
Blood Money	adult; prof	2½ hours or 3 1-hour periods	20-35
Brookside Manor	adult, health prof.; students	2 hours	15-60
Clinical Simulations	med student	variable	1
Community Target	h s ; adult	4 40-minute periods	20-30
District Nutrition Game	adult (low) reading level	20-60 minutes	2-4
Everybody Counts!	parents; teachers institutional staff	variable	5-30
Nourish	jr. high—adult	20 minutes	1-20
Nursing Crosswords	health prof. students	20-60 minutes per puzzle	1
Planafam II	adult; health prof. students	1-2 hours	3-10
Psychiatric Nurse-Patient Relationship Game	mental health prof. students	variable	2
Resusci-Ann	h s —adult	variable	1

or devising other activities for half the group. We cannot repeat too strongly that a large group of passive observers is inimical to the use of simulations and games as a learning method

A related problem that sometimes arises, especially with community groups, is the reluctance of one or more individuals to participate—the "I'll just watch" syndrome. While we don't believe that anyone can, or indeed should, be forced to participate, we do believe that having some people opt out like this may put extra pressure on those who are willing to risk participation. We have generally handled this situation (it doesn't happen often) by asking the nonparticipants to become active observers with a specific task or by giving them another assignment altogether in some other location. Adults are often reluctant to appear "foolish" in front of their peers, and in groups that are not used to learning through simulations and games those who are willing to take the risk need to be supported. The problem, if any, generally disappears in a second experience for the group if handled as we suggest; otherwise you may have more people wanting to opt out in later activities.

ISSUES AND CONTENT

Most games and simulations are chosen because of the subject matter (content) inherent in the material or because of the issues they raise for further discussion. A simulation often involves more than one issue (for example, the *District Nutrition Game* brings together information about nutrition and community organization), and it is the interplay between the issues that provides the driving force for the simulation.

In general, the larger issues must be approached in the debriefing. The content of the simulation itself generally deals with only part of an issue (see Table 3) and while most players can probably make at least some transition to the larger issues without a debriefing, it will be helpful for many to have an issue-related discussion while the content is fresh in their minds. For example, the content of *Brookside Manor* centers around which personal belongings residents may take with them into a group home. The debriefing can develop a more general approach to the issues of safety, social needs, accommodation to group living, attitudes of cleaning staff or unions, the necessity for maintaining family ties, and so forth, so players can generalize from the specific content of *Brookside Manor* to other situations

Similarly, in *Clinical Simulations* the student is required to work through diagnosis and treatment procedures for a specific situation. In the event that the student meets such a situation again, she or he will obviously have information from the simulation to apply; however, even more important will be whether she or he can apply the principles this simulation teaches to other similar but different situations. Again, discussion following the exercise to analyze the situations in terms of the principles involved may be an important part of the learning experience if the students do not (or cannot) do this on their own initiative.

It will be relatively simple for you to take some game formats and vary the subject matter (for example, *Nursing Crosswords*). Others have much less flexibility because the process of playing is part of the content (*Psychiatric Nurse-Patient Relationship Game*). Another section of this *Guide* deals with frame games, which are designed to let you insert your own material. If you have not been able to find a suitable health-related game, you might want to develop one of these for your own purposes.

Substitution in something like the *District Nutrition Game* would require considerable thought, because the relative values of the items substituted should be the same or the dynamics of the game will be altered. For example, if you were to substitute child safety content in the *District Nutrition Game* (which is basically a snakes and ladder format) you should be careful to locate major hazards on the big snakes and minor hazards on the small snakes.

In any card game, the content must lend itself to being sorted into sets (corresponding to suits), perhaps with numerical values. The more closely your deck of cards corresponds to a standard 52-card deck, the more possibilities there are for using your deck to play standard card games. This will eliminate much, though not all of the tedium of learning rules for many people, and it increases the possibility that the games can be used in informal situations such as clinic waiting rooms.

PROCESSES

Sometimes you will want to choose a simulation or game for the experience the process of playing the game gives the participants (*Everybody Counts!* is high on the scale in this respect). In other exercises the process itself is relatively unimportant except as a vehicle for the content. For example, with card decks it is often irrelevant whether participants play snap, rummy, or bridge; the important thing is to provide a vehicle to practice matching items, building sets of like items, or remembering values. The important consideration will be to find a vehicle that has an element of fun for participants and does not require a great deal of time for an explanation of mechanics.

RANGE AND DEPTH

How might these exercises fit into the teaching/learning process? Some are self-contained; that is, participants do not need any specialized knowledge before they start, they learn something during the exercise, and they do not necessarily need to discuss the experience afterward, although further discussion may consolidate or build upon this learning. The *District Nutrition Game* is perhaps the best example of this type.

Other simulations presuppose that a good deal of basic learning has already taken place and that the simulation will provide practice in applying that learning. *Nursing Crosswords* and the *Clinical Simulations* are examples of this type. Generally it is up to the instructor to choose the point at which to introduce such exercises into the students' learning.

Still other simulations are designed to introduce a topic to a relatively unknowledgeable group and to provide a basis for further discussion. It is with this type of simulation that

TABLE 3 Issues and Processes

	Blood Money	*Brookside Manor*	*Clinical Simulations*	*Community Target*	*District Nutrition Game*	*Everybody Counts!*	*Nourish*	*Nursing Crosswords*	*Planafam II*	*Psych Nurse-Patient Relationships Game*	*Resusci-Ann*
Issues											
Alcoholism				P							
Community Organizing				S	P						
Organized Health Care	P								S		
Medical Care Costs	S										
Gerontology		S				S					
Institutions		P			P						
Family Planning									P		
Handicaps	S					P					
Nursing								S		P	
Nutrition							P				
Psychiatry			S							S	
Patients	S	S	S			S				S	
Specific Medical Diagnoses	P		P					P			
First Aid/ Emergency			S								P
Processes											
Recognition					P		P				
Recall			S				P	P		S	S
Role Playing—Empathy	P	P		S	S	P			P	P	
Negotiation	S	S									
Problem Solving	S		P	P							
Analysis									P	P	
Psycho-motor Skill practice						S					P

Key: P = primary importance
S = of secondary importance

further readings, references, and bibliographies will be most useful to the instructor and students. Of course, any instructor can, and probably should, add materials of particular relevance to his or her students, but Table 4 will give you some idea of what the materials already include.

All of the exercises that have no accompanying materials will need to be preceded or followed with considerable material. *Community Target* might be used to introduce a unit on the topic, although it could also be used after some initial presentation of the scope of the problem in the players' own community. *Resusci-Ann* is best used for practice after students have had some introduction to the theory and rationale for the resuscitation procedures. Although the recording models will give students some feedback on their performance, the instructor will generally have to show how to overcome deficiencies. The other three exercises in the left column of Table 4 should only be used after the instructor can assume that students have "learned" the content and need practice in its application. In these cases the instructor should be prepared

TABLE 4 Accompanying Materials

None	Moderate	Extensive
Community Target	*Brookside Manor*: very limited bibliography	*Blood Money*: part of a three-part kit of materials
Clinical Simulations		*District Nutrition Game*: part of a book dealing extensively with the issues
	Planafam II: some suggestions for discussion	*Everybody Counts!*: a detailed workshop manual
Nourish	*Psychiatric Nurse-Patient Relationship Game*: limited bibliography	
Nursing Crosswords		
Resusci-Ann		

to refer students to the appropriate items in their basic material if gaps in their knowledge become apparent.

The items listed in the "moderate" column require some additional user input. In general, their accompanying materials give a good starting point for discussion but need to be supplemented with more up-to-date materials because all deal with areas in which new materials are constantly appearing. The references given are generally appropriate for the suggested audience, if you intend to use the same material for a different audience (for instance, *Planafam II* with a professional group) you may want to choose readings more appropriate to that group.

VALUES

Almost all simulations in the health field have as part of their underlying value system a positive value on good health, perhaps to the exclusion of other values that may be important to some--different allocation of resources, for example. Many simulations and games in the health field do not make their value systems explicit (*Psychiatric Nurse-Patient Relationship*), while others are about value systems in conflict or potential conflict (*Community Target, Brookside Manor*).

An important part of the art of using simulations is helping participants identify their own value systems and those built into the simulation. The positive value of good health that is designed into most health simulations may be specific to North America and the twentieth century. However, it is a basic tenet of our health services. Many games also assume that health services are curative rather than preventative, and health educators, at least, would take exception to this. Your students may remember only the basic values of the exercise, forgetting the details. It is crucial therefore that you are aware of the overt and covert values of an exercise before you use it (for example, what are "good" foods? what is the "proper" behavior?).

As game designers ourselves, we have found that we are often not even aware of many of our built-in or covert values. Even when we are attempting to influence the participants' value system, the structure of the exercise may be counter to the desired behavior. A competetive game design, for example, does not function well as a vehicle for imparting cooperative team-building attitudes for medical staffs, and materials for an in-basket must be selected with care if delegation of responsibility/authority is a goal. While activities such as *Blood Money, District Nutriton Game,* and *Nourish* probably use competition to encourage participation, there is the risk that the content will get overlooked in the "game." Thus, we cannot overstress the value of a thorough briefing and debriefing.

ROLE PLAYING

Participants are required to play roles in some exercises (see Table 3). A role may be outlined in functional terms, that is, a job to be done to which the individual brings his or her own value system. Or a role may have more specific directions about the participant's attitude toward a topic, such as, "You have noted a rise in the consumption of alcohol among the students on your campus this year. You are extremely concerned over this situation and you feel there is an urgent need for an alcohol program in the schools." Individuals who are not experienced in role playing may have more difficulty with this type of role and may require more help from the instructor in thinking through how to act it.

In some instances, role-playing directions require the individual to display specific behaviors (for example, "Again, and throughout the reading lesson, incorrect answers are made fun of, are ridiculed or ignored"). This behavior may be difficult to carry through consistently, particularly if it conflicts with the individual's own value system. It may also provide an escape for that individual or other participants, who can say, "But that's not how it is in real life."

The moderator or instructor may also be required to do some role playing, in fact, the instructions quoted in the last paragraph are for the moderator of *Everybody Counts!* In deciding whether to use a particular simulation you may want to examine whether the roles assigned to the moderator and key participants can be carried off.

A role description needs to be complete enough to provide reasonable direction to the player for the purposes of the exercise. For complex "simulated patients," this might mean a complete patient file, X-rays, medical charts, tests, and so forth, as well as extensive briefing on the correct responses to specific stimuli. For most roles, however, the directions can be quite simple. Our observations suggest that a description of 50 to 150 words provide enough direction for most role-play activities when accompanied by the general game materials (community history, pregame readings). The role descriptions in *Community Target* are good in this regard. They allow players to use their own names, they provide age, sex, and personal information, and they give information relevant to the game complete with specific "facts" for use in the role.

Roles that are too detailed usually do not allow players to develop their own reactions to the situation. Roles that are farcical ("You are Dr. Dogood") or too short are, almost invariably, not functional. They promote excessive experimentation and may destroy the learning value of the exercise.

Sex differences sometimes affect the conduct of an exercise, as does the "role" age. School children and men seem to have considerable difficulty with sex reversal. Very young adults often react with extreme stereotypes if asked to portray elderly people. While the discussion of these difficulties may be fruitful, the role reversals may have damaged the learning possibilities in the role.

If you are planning to use a simulation requiring role playing with an already functioning group (as part of an in-service education program, for example) you may have particular difficulties. The group may not be able to shed real-life roles sufficiently to participate. This is especially true if there is much difference in status (in real life) among participants and if the agency has a rather rigid structure. This is not to say that you should not use role-playing simulations under such circumstances, but only that you should be aware of the hazards.

The role descriptions in the exercises we have discussed here are all generally adequate within the limitations noted above. Graduate nurses who have worked through the *Psychiatric Nurse-Patient Relationship Game* have generally felt that their responses were too limited by the roles, but this problem may not arise with beginning students who have less of their own experience to draw on. Because the role descriptions in both *Community Target* and *Everybody Counts!* require individuals to adopt particular viewpoints, more pregame help may be required from the instructor so individuals are comfortable with their roles and can portray them realistically.

MOTIVATION AND SCORING

Within a simulation or game, what acts as the driving force to keep players participating (and, one hopes, learning)? The motivation may come only from internal satisfaction of taking part in a process (*Community Target*), from persuading others to adopt one's point of view (*Nursing Crosswords*), or from winning points in an artificial scoring system

External scoring systems are generally more crucial in games where the overall goal is to have students practice using new terms. Intrinsic motivation in the form of satisfaction either with one's performance or with learning (even if the actual experience is somewhat uncomfortable) becomes more important if the overall learning goals are related to a gain in empathy. Each exercise we consider in this section has a different mechanism; Table 6 summarizes them.

Chance factors have little place in learning exercises except to indicate events and possibilities not otherwise accounted for within the body of the simulation. Chance plays a relatively large part in two of the games; here the chance factor makes it more likely that participants with less skill and knowledge can "win." This may make it easier to keep those participants who would ordinarily be disadvantaged active in the game and thus still practicing.

MODEL VALIDITY

Does the simulation or game accurately represent the real world? If it doesn't, your students will be learning to cope

TABLE 5 Types of Roles in Role-Play Simulations

Roles	*Blood Money*	*Brookside Manor*	*Community Target*	*Everybody Counts!*	*Planafam II*	*Psychiatric Nurse-Patient Relationship Game*
Players						
• independent roles			X			X
• roles as group Members		X		X	X	
• functions	X	X				
Moderator				X		X

TABLE 6 Scoring and Chance Factors

Title	Scoring	Chance
Blood Money	chips representing money; disability and death indicators	Cards are used to determine events within game, probabilities are based on real-world experience
Brookside Manor	Participants rank order items and attempt to reach agreement	none
Clinical Simulations	No scoring as such; because one can see how many responses were requested, one can determine if student used most efficient line of inquiry and treatment	none
Community Target	Committee decides on issues based on previous discussion	none
District Nutrition Game	Board game; first to reach finish wins	Events totally controlled by chance
Everybody Counts!	None as such. Participants try to complete various tasks while handicapped	none
Nourish	Depends on game chosen	Depends on game chosen
Nursing Crosswords	Completed puzzles can be checked against answers	Minimal. Some words could be completed by guessing
Planafam II	None as such. Players may try to set their own goals for reproductive behavior within game	Playing cards and dominoes are used to determine events, probabilities based on real-world experience
Nurse-Patient Relationship Game	Progress sheets completed for each round indicate participants' achievement against total possible	none
Resusci-Ann	Recording tape show students' performance rated against requirements for effective resuscitation	none

with some nonexistent situation As far as we and our colleagues have been able to judge, all of the information presented in these simulations is accurate—as far as it goes. That's an important qualification.

Most of the materials will go out of date quickly. *Planafam II*, for example, is already somewhat behind the times in that it is based on probabilities from the 1960s.

Most of the materials are culture bound. Though this is perhaps most obvious when we look at something from outside our own culture (like the *District Nutrition Game*), it applies equally to other materials. *Blood Money*, for example, will require extensive revision if it is to be used to best advantage in areas where medical insurance systems and blood banks operate on a different basis from the model used for this game.

All simulations and games are simplifications, and some options are omitted. Such limitations do not mean that these materials are "bad," only that, as with all teaching aids, they must be previewed before use and adapted to the instructor's and learners' particular needs.

MATERIALS, COST, AND DURABILITY

Some exercises come complete with all the pieces, you simply need to open the box and start. Others require that you duplicate materials and obtain playing pieces. The amount of preparation is generally balanced by the cost. Table 7 summarizes the cost and materials required, with comments on general durability.

You will find that all materials will last much longer if paper items are prepared on good-quality paper, and on standard size sheets. Heavily used materials should be printed or typed on card stock or laminated. You should keep all materials together, preferably in standard size boxes or envelopes that are suitable for storage on your shelf and small enough to carry from place to place for use. Paste a checklist of contents and auxiliary materials inside the lid of the box and refer to it before taking the exercise out for play. With exercises that require many copies of printed papers we often retain *only* a master copy and duplicate the required sets when needed (subject of course to copyright restrictions).

DEBRIEFING

Debriefing is that important part of the learning experience that follows completion of the exercise While some of the games described in this essay can be used independently by students without any planned debriefing, their learning value may increase with some discussion of the issues. For example,

TABLE 7 Materials and Cost

Title	Cost	Materials Required	Comments
Blood Money	n/c	playing cards, poker chips, name tags, coding dots, pencils, pads, 80-90 pages duplicated	Soft cover manual opens flat for easy duplication, good print quality
Brookside Manor	$5 00	group ID cards, newsprint and felt pens duplicate worksheets if more than 30 players or for repeat runs	Kit contains manual and players' worksheets
Clinical Simulations	$23.50	one book per person and special disclosing pen	Book is soft cover. Once answers are revealed case cannot be reused
Community Target	$6.00	30 role cards to duplicate, name tags	Manual is soft cover Originals for roles rather faint
District Nutrition Game	$10 00 for book	dice or spinning top, game board, playing pieces	Soft cover book contains directions for construction and play
Everybody Counts!	$10-$15	Extensive list of required equipment including casts, wheelchairs, plastic letters, swim goggles, cassette, tapes, flashcards, overhead transparencies	New edition has not been examined
Nourish	$9.00	one deck of cards per group	Cards are good quality; main problem may be loss of some over time
Nursing Crosswords	$5.95	one copy of puzzle per participant (copyrighted materials cannot be photocopied without permission)	Book is soft cover, print is good quality
Planafam II	$ 65 microfiche, $3.29 hard copy	large sheets of cardboard, 3 sets dominoes, 2 decks of cards, marking pens	"Hard copy" is xerox
Psychiatric Nurse-Patient Relationship Game	$15 95	Kit comes complete in burlap bag "Progress sheet" required for each player	Painted oilcloth game board tends to peel. Printed materials rather flimsy, small print
Resusci-Ann	$1,025.25 (full price-recording), recording paper $3.10 each	Recording tape, alcohol swabs to clean mouthpiece required for each use	Seems to stand up well with repeated use

players who have used the *Nourish* cards may well benefit from discussing the principles of nutrition, local dietary patterns, and so on. As Table 4 indicates several exercises have no accompanying materials or suggestions for debriefing. The instructor must prepare his or her own discussion guide for these

Several of the simulations *require* debriefing so participants are not left with unresolved issues or erroneous impressions. *Community Target, Brookside Manor, Planafam II, Psychiatric Nurse-Patient Relationship Game, Blood Money,* and *Everybody Counts!* all fall into this category, but only the latter two include adequate debriefing guidelines. All the other exercises appear to assume that an experienced instructor will be available to guide the debriefing. This assumption is not bad in itself, but simulations, like films or any other teaching method, need to be used as a part of an overall learning strategy if the most effective learning is to take place.

CONCLUSION

There are relatively few commercially available simulations in the health and health care field. Those that are available cover a wide range of topics and are aimed at very different levels of players. This makes comparison difficult, but Table 8 attempts to summarize the major strengths and limitations of each exercise we have reviewed.

Simulations can be a very useful teaching/learning strategy in the health field. We hope that much more development will take place in this area before the next edition of the *Guide* is prepared.

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Prentice-Hall
Englewood Cliffs, New Jersey 07632

TABLE 8 Strengths and Limitations

Title	Strengths	Limitations
Blood Money	• provides rich experience for debriefing • can be used with wide range of lay adult to professional players simultaneously • good accompanying materials	• very complex • oriented to U.S. health care delivery system • requires considerable advance preparation
Brookside Manor	• uses deceptively simple framework to get at several vital issues	• best if very skilled facilitator available to lead debriefing
Clinical Simulations	• format relatively inexpensive	• can be used only once • very specific audience
Community Target	• deals with important social issue • suitable for use within classroom constraints	• requires knowledgeable leader • oriented to California situation
District Nutrition Game	• easily adapted to local conditions • minimal literacy required	• high chance factor
Everybody Counts!	• good suggestions for empathy exercises for a variety of handicapping conditions	• directions to leader may be too negative
Nourish	• format appeals to many • cards durable and attractive	• can be played without necessarily learning principles and facts
Nursing Crosswords	• format appeals to many • good range of topics	• not reusable • can be worked through rote without much learning
Planafam II	• deals with important social issue in realistic fashion	• requires fair amount of initial preparation • needs updating to incorporate recent advances in fertility control
Psychiatric Nurse-Patient Relationship Game	• can provide independent student practice	• thought by many players to be too mechanistic
Resusci-Ann	• only safe way of giving students appropriate practice and feedback	• expensive, single-purpose teaching tool

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David A. Sleet

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San Diego, California 92182

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Reston, Virginia 22091

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Camille Freed Pfiefer and Mary Shaw Smith

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Belmont, California 94002

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Sheryll Dempsey

Trainex Press
P.O. Box 116
Garden Grove, California 92642

Planafam II: A Game for Population Education
Katherine Finseth

ERIC Document ED 064 228
ERIC
855 Broadway
Boulder, Colorado 80302

The Psychiatric Nurse-Patient Relationship Game
Carolyn Chambers Clark

P.O. Box 132
Sloatsburg, New York 10974

Resusci-Ann
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