The Simulation Background
Playing the Game
Your job as the manager of the practice is to grow the practice into the most profitable practice in the area.

Objectives
Your administrator will describe the specific objectives of your game. These fall into several general categories, including:

1. **Maximize profit**
   You should maximize the “bottom line” profit. Over the course of the game, winning teams will have a high cumulative profit from the practice as shown on the Profit and Loss Statement. This shows the results of your management techniques in the strategic and day-to-day operations of the practice.

2. **Accumulate wealth**
   Successful teams accumulate wealth over the course of the game. The Balance Sheet shows your net worth as you build assets and pay off debt.

3. **Act legally, ethically, and fairly**
   As a small business owner, you have an obligation, at a minimum, to act legally in all of your business dealings. As a professional, you also have the expectation that you will treat people fairly (patients, staff, suppliers, etc.), and to be a good and responsible citizen of the community. Society has granted us a monopoly to practice dentistry. In return, society expects that we will be more than simple business owners, and will work to bring the advantages of modern dental care to all of its citizens.

4. **Service the debt in a timely manner**
   Your banker expects you to take good care of the money she has loaned you. That includes making timely payments and maintaining a prudent cash position so that you can pay your regular bills without having to borrow additional money. Often these objectives appear to be in conflict. How can you maximize profit if you take time from the practice to help indigent patients? How can you maximize your wealth accumulation if you provide a retirement plan for your employees? The key is to take a long-range view of the practice. Establish a philosophy, goals and strategies that support that philosophy, and then work to ensure that you fulfill those goals.

How to Make Decisions
Use the printout from the previous quarter as a starting point for the upcoming quarter. Analyze your results using ratio analysis as provided in the Financial Analysis section of this manual. The last chapter of this manual gives you a series of Quarterly Planning Forms. Use one to plan your decisions for each quarter. Look at last quarter’s strategies. Did they accomplish the desired result? What are you planning for the upcoming quarter?

Your practice will enter decisions via the web. Point your browser to www.dentalsimulations.com, log on and enter your decisions for the quarter. You only need to enter one set of decisions for the team. Any team member can enter those decisions for the team. Any team member can change decisions until the game administrator computes results. All team members will receive an e-mail notification when decisions have been entered or changed.

How to Get Reports
Your game administrator will post results of your decisions to your team’s area of the web site. When you log onto the site, the various reports appear on the left side of your team’s page, in PDF format. Either view them on the web, or download and print them from your computer. There are three general groups of documents.

1. **Event Documents** are documents that all members of all teams can view. They contain
information that is not specifically directed at your team. Event documents include the beginning values for the game, the starting position (Quarter #0) for all teams, tax values, and rankings, if your administrator sends them to you.

2. **Team Quarterly Reports** contain the printouts for each quarter for your team. All members of your team can see these printouts, but only members of your team can see your printouts, just as you cannot see any other teams’ printouts.

3. **Team Analysis Reports** contain reports that your Game Administrator sends you. These include the Financial Analysis Report, if you have purchased it, a Comparative Income Statement, and other analysis reports.

**Duties of Team Members**

There are many duties in a dental practice, even your simulated practice. If you are practicing in a team, you have the good fortune of being able to spread these chores among the members. You need to decide how to do that. Should you assign responsibility on a rotating basis? Should people draw lots to decide who does which function? Alternatively, should one person do all the work, supported by the other members?

You can assign duties based on the tasks to be done. The general areas you should be sure to assign are:

1. Routine record keeping (a large duty)
2. Ratio Analysis (can be significant)
3. Tax preparation (done once per year)
4. Reports to the banker (very important)
5. Decision making
6. Environmental analysis

You might assign duties based on management of the functional areas served. These include:

1. Operational management
2. Staff management
3. Marketing management
4. Financial management

Each quarter, you will make certain decisions regarding these functional areas. You might assign members of your team one or more of these areas to record and analyze in detail. You might rotate the duties, assign them to different members or you might use another method of assignment.

**Decision Making Process**

As a group, you will need to decide how to make decisions. You may vote on important issues, decide by consensus, or use other methods, short of physical violence. One member of the group may have a background, interest or expertise in a particular business area and take full authority in this area. You may assign other members other areas of responsibility. As the simulation progresses, you may find that roles and responsibilities change as members’ abilities and interests develop. We give several factors below which affect decision making.

**Decision Making Biases**

Decision makers are usually not objective in the ways that they gather and process information. Many people either over- or under-weigh their own and others’ abilities. An honest appraisal of strengths and weaknesses is obviously important. Some people act impulsively, without adequately weighing all of the alternatives. Others may appear incapable of making a decision because of a cautious and deliberate style of decision making. Despite the style of the individual, you should identify and eliminate several common decision biases from the process.

1. **Selective perception**
   We remember things and events that are louder, larger, more colorful or better looking. Some people refuse to fly on commercial airlines. They remember the one crash instead of the millions of successful flights. We base most excellent decisions on a series of small, apparently boring facts.
2. **Representativeness**  
We often stereotype people or events and assume that the one person or event represents the whole world of possibilities. Just because your uncle’s dental practice displays certain characteristics does not mean that all dental practices will behave similarly.

3. **Self-confirming recall**  
We remember the information or instances that confirm or support our favored opinion. A form of this bias is evident in the “Monday morning quarterback” who remembers the coach’s failed play calls, but forgets when a controversial play call was successful.

4. **The gambler’s fallacy**  
Often your emotions rule even when your intellect denies a certain outcome. If a person flips a coin four times and heads appears each time, many gamblers believe that the odds are in favor of a tail appearing on the next flip. In fact, the odds are still 50-50 that either a head or a tail will appear on the next flip. The notion that these separate events are somehow related is a gambler’s fallacy.

**Risk and Uncertainty**
All decisions involve some degree of uncertainty; otherwise, there would not be a need for a decision. Uncertainty exists when the decision maker does not have all of the information wanted for making a decision, even though the information that they do have may be of high quality. The decision maker may not fully understand the problem, know all possible options, or know with complete confidence the outcome of a decision. Along with uncertainty comes a certain amount of risk. Risk infers that, besides the possible gain from making a “good” decision, there is a possible downside or potential loss if you choose a “bad” course of action. Risk exists anytime there is less than a 100% chance of success and is inherent in all significant decisions. Your job as a decision maker is to assess the risks involved with each alternative, to learn the potential loss if the unfavorable outcome happens, and then to decide if the likelihood of the possible gain outweighs the potential loss.

**Rationality**
Despite these problems, you should try to make decisions rationally. That is to say, you should gather all information, explore alternatives and make the decision that will lead to the best possible outcome. You seldom realize this ideal state. More often, because of the limitations described, you make a potential compromise in an outcome. You may want to maximize the outcome in a particular area, realizing that there may be negative consequences in another area. Conversely, you may choose to minimize the negative consequences of a particular action, realizing that you won’t have a maximum outcome in another area. Rather than maximizing or minimizing, many decisions require that you satisfy, or choose an option that seems good enough, given the constraints. You may not have adequate time to investigate all of the options or background information. The decision may not be important enough to spend more energy on it, or your personal schedule may not allow you to take the time needed to come to a better decision. Often you try to optimize your decision, understanding that to improve one area of operation, you will make sacrifices in other areas. This balancing act, then, becomes the central issue in managerial decision making. The more you understand the scope and implications of these collateral sacrifices, the more you can make an optimum decision, given all of the limiting factors.

**Group Decision Making**
Your practice may involve a group making decisions rather than an individual. The essence of group decision making is the old adage that “two heads are better than one.” Is this assumption valid? The answer is “it depends.” If enough time is available for developing the decision making process in the group, then groups generally make better decisions that individuals. However, a group may be inferior to the best individual in the group. The reasons become apparent when you try to maximize the advantages of group decisions, and minimize the disadvantages.

**Advantages of Group Decisions**
1. **Larger pool of information**  
If you don’t have all of the facts or background knowledge required for a particular decision, maybe someone else in your group does. Likewise, the next decision may find that you hold the critical information element.
2. More perspectives and approaches
Different people bring a different set of experiences, priorities and approaches to problem solving. By considering different viewpoints, you should come to a higher quality decision.

3. Discussion of consequences and potential outcomes
Group discussion often leads to intellectual stimulation. As you learn from others and defend your positions, you develop new alternatives and approaches that the individual often can’t generate.

4. Members gain understanding of the problem
As members defend their initial alternative or decision, the entire group begins to understand the problem better. As you hear arguments for both sides of an issue, you begin to understand relationships and potential outcomes at a much higher level than the individual decision maker does.

Disadvantages of Group Decisions
1. One person dominates
Sometimes, one person may dominate the group decision process. When this happens, the decision will be of no higher quality than if the individual acted alone. In fact, the dominant person may not have had the correct information or interpretation. This leads to a worse decision than the entire group would have made. Even if that person leads to a good decision, everyone else feels that participating in the group was a waste of time, and so, often do not “buy into” the decision.

2. Satisfying
Many people do not like meeting in groups and do what they can to end the meeting. This may involve subtle methods of criticizing members who want to continue discussions, or may involve turning the work group into a social gathering. The result is the same – you leave alternatives unexplored and potentially make a lower quality decision.

3. Groupthink
Pressure to come to an agreement may lead to a problem known as “groupthink.” In groupthink, members don’t object or discuss problems for fear of harming positive group interactions. These groups then tend to become overconfident, self-satisfied, and don’t adequately assess the risks associated with their actions.

4. Goal Displacement
The goal of the group should be to come up with the best possible solution or decision. Argument is a healthy way to resolve differing viewpoints. However, during this process, two or more members may lose sight of the original goal. The new goal becomes to win the argument, save your face and defeat the other person’s idea. The real goal of the group becomes displaced and the group does not solve the problem effectively.

The Steps in Decision Making
An ideal decision making process moves through the following six stages. However, the process is not a simple linear progression. As the process unfolds, you move back and forth between the stages, refining assumptions and reevaluating facts and decisions.

1. Identifying and Diagnosing the Problem
The first step is to recognize that a problem exists. This recognition may be the result of a change from past performance (the way things were) or the lack of a desired state (the way things ought to be). Once you identify the problem, you should make a diagnosis about what caused the problem. A more accurate diagnosis leads to an easier solution. It may be relatively easy to see that patient visits are down this quarter over last quarter. The more difficult step is to diagnose why they are down so that you can develop appropriate alternatives.
2. **Generating Alternative Solutions**  
Alternatives may have already been proven by someone else, or they may be new approaches to a problem. The ready-made solutions are more common since they are much easier than custom tailored solutions. However, if the common “off the rack” solution fails to solve the problem, you need to do a more detailed identification and diagnosis, so that you can develop alternatives that are more creative.

3. **Evaluating the Alternatives**  
This stage answers the question, “which of my alternatives appears to be the best?” A fundamental issue here is to predict accurately the consequences, or outcomes, of each alternative. Here you might develop computer spreadsheets or other mathematical models of the scenario. This allows testing alternatives and generating contingency plans, in case the decision does not work as planned.

4. **Making the Choice**  
Eventually, you must make the choice. Although you choose from among your alternatives, the choice is rarely clear-cut. You may decide to maximize, optimize, or use other methods of rational decision making given above.

5. **Implementing the Decision**  
Once you make the decision, the process is still not complete. You must now implement the decision. In this simulation, the implementation process is simple -- just place the appropriate response in the appropriate space on the Decision Form. In real life, implementation takes on a life of its own. You must involve staff in the process through leadership, education and training to gain the commitment of the people involved. You may need to change policy and procedure manuals, borrow money to purchase additional resources, meet with accountants and other advisors, and assign responsibilities for various parts of the decision.

6. **Monitoring the Results**  
Finally, after you make and implement the decision, you should monitor it to determine if the decision was a good one. Some decisions are easy to monitor. They may have simple numbers attached to their results. Other decisions may be more difficult to assess and monitor. For example, patient or staff attitudinal changes, while valid results, are much more difficult to judge. Monitoring is important whether the decision is positive or negative. If response says that the decision is working, then you should continue or even do more of what you changed. If, however, monitoring shows that the decision is not working, you need to go back to the diagnosis stage to detect the cause of the problem so that you can take corrective steps.

**Hints for Participants**  
Most participants want more information before making decisions. Nevertheless, people must frequently make decisions in the "real world" with inadequate or imperfect information, under time constraints that may lead to less than optimal results. This simulation is no different! Several keys that winning teams consistently show in this type of game are:

1. Don't "play the computer"! Don't try to "psych out" the computer program or the author. Make your decisions based on how you think dental practices behave in the real world based upon the variables given. There are business "laws" (such as supply and demand) to which any business responds. Think of these as the basis for your decisions.

2. Keep excellent records. You will often refer to past decisions or outcomes to make new decisions. Try to note why you made a decision and what you expected as the outcome. In that way, you can more accurately judge if your decision process was successful.

3. Try finding relationships between the variables and the outcomes. Some may seem general rather than specific, but that still makes them very useful in your decision process.
4. If you are participating as a group, work as a team. Assign certain tasks to individuals in the team so that you do not duplicate efforts or miss important factors.

5. Don't be afraid to try something new. You will not learn if you do not experiment.

6. Read this manual carefully. Closely looking at the appropriate section will answer most questions that you have.

7. Use the program’s web site. There is a wealth of information in the student section of the web site (www.dentalsimulations.com). This can help you understand how to manage both this game and real a dental practice. Use the Discussion forum section of the web site. Other players may have insights that will help you to improve your practice.

8. The program may refer you to a section of the text book “Business Basics for Dentists” to understand a problem or issue. Read those sections of the book.