Thus, a patient can register with the system and log on from time to time to add entities to the patient's profile. Such entities can be registered with the system and have an assigned role. This role can be used by the system to determine the type of access rights afforded to that entity when added to a profile by a patient. Still, a patient may alter any such roles as may be required.

When an accessing party attempts to access the medical information of a particular patient, the PIN or identifier assigned to the accessing party can be compared with the patient's profile to determine what, if any, access rights have been afforded to that party. The patient's medical information can be provided to the accessing party as determined by the role specified in the patient's profile.

FIG. **1** is a schematic diagram illustrating one embodiment of a system **100** of permitting controlled access to medical records according to one embodiment of the present invention. In the system **100**, a repository or storage server **105** may be established. The repository **105** would include each patient's records and would store them within a data store **110**, such as a data tape storage, hard disk, or the like. The repository **105** would be connected to a network **115** through a secure means, such as an SSL connection, using encryption, or through a VPN. At that point, any of a number of different persons and/or institutions may be granted access to the repository **105** by the patient **150**. These persons and/or institutions may include, but are not limited to, an insurance company **120**, a hospital **125**, a research institution **130**, a pharmacy **135**, a laboratory **140**, a physician **145**, as well as the patient **150** from wherever the patient **150** is located.

As discussed, the authorization to access the repository **105** may be through the use of a card and/or PIN for each of these persons and/or institutions, and some access may be limited in scope to only those records necessary for that particular person and/or institution. As noted, access rights can be specified by one or more roles assigned to each accessor, which may or may not be customized by the owner of the medical information. In addition, in the event of an emergency, an emergency service provider **155**, such as a physician, hospital or emergency medical technician, may be able to override the system to obtain necessary medical information.

The present invention may be realized in hardware, software, or a combination of hardware and software. The present invention may be realized in a centralized fashion in one computer system, or in a distributed fashion where different elements are spread across several interconnected computer systems. Any kind of computer system or other apparatus adapted for carrying out the methods described herein is suited. A typical combination of hardware and software may be a general purpose computer system with a computer program that, when being loaded and executed, controls the computer system such that it carries out the methods described herein.

The present invention also may be embedded in a computer program product, which comprises all the features enabling the implementation of the methods described herein, and which when loaded in a computer system is able to carry out these methods. Computer program in the present context means any expression, in any language, code or notation, of a set of instructions intended to cause a system having an information processing capability to perform a particular function either directly or after either or both of the following: a) conversion to another language, code or notation; b) reproduction in a different material form.

This invention may be embodied in other forms without departing from the spirit or essential attributes thereof. Accordingly, reference should be made to the following claims, rather than to the foregoing specification, as indicating the scope of the invention.

What is claimed is:

1. A computer-implemented method of permitting controlled access to medical information of a patient, the method comprising:

supplying medical information of the patient to a central repository by the patient and any medical providers who have treated the patient;

storing and maintaining the medical information of the patient in the central repository;

accessing the medical information by the patient from an access device using a unique patient identifier and a patient PIN;

controlling by the patient an authorization and a scope of access to the medical information by modifying an access control list within the patient's profile when the patient is connected to the central repository, wherein the access control list lists each authorized user and the assigned role of each authorized user, wherein the scope of access includes which items of medical information are available to an assigned role and how that information will be viewed;

assigning each authorized user with a unique authorized user ID and an authorized user PIN; and

tracking and notifying the patient of an identity of a user who accessed the medical information, information that was accessed by the user, and when the user accessed the information.

2. The method of claim **1**, wherein the access device is controlled using a universally unique identifier.

3. The method of claim **1**, wherein said controlling step is overridden by a registered emergency provider.

4. The method of claim **1**, wherein the patient is compensated for permitting some of the medical information to be available and used by a research institution.

5. The method of claim **1**, wherein during a doctor visit the patient provides access to the medical information for a time period long enough to support the visit at which point the access times out.

6. The method of claim **1**, wherein access to the patient's medical information expires when a physician logs into another room/appointment.

7. A machine-readable storage having stored thereon, a computer program having a plurality of code sections, said code sections executable by a machine for causing the machine to perform the steps of:

supplying medical information of the patient to a central repository by the patient and any medical providers who have treated the patient;

storing and maintaining the medical information of the patient in the central repository;

accessing the medical information by the patient from an access device using a unique patient identifier and a patient PIN;

controlling by the patient an authorization and a scope of access to the medical information by modifying an access control list within the patient's profile when the patient is connected to the central repository, wherein the access control list lists each authorized user and the assigned role of each authorized user, wherein the scope of access includes which items of medical information are available to an assigned role and how that information will be viewed;

assigning each authorized user with a unique authorized user ID and an authorized user PIN; and