

EVALUATION OF PRESCRIBED DEVICES OR SERVICES

BACKGROUND

[0001] Often, those who wear spectacles or contact lens visit a doctor to measure their eyesight so they can receive a prescription for a pair of spectacles or contact lenses. The prescription is given to the patient, who orders the spectacles or contact lenses through a supplier. In many cases, the doctor and the supplier are different entities that do not have a formal relationship. The supplier may be an online retailer or a business operating out of rented space in a supermarket, mall, business office, or another location. When the supplier receives the prescription, the supplier may provide appropriate spectacles or contact lenses that meet the prescription with either spectacles or contact lenses that are already in their inventory or the supplier may order the spectacles or contact lenses from a manufacturer. Often, communications between the doctor and the supplier and/or the manufacturer is limited, but the user is more likely to communicate with the doctor than with the supplier and the manufacturer.

[0002] Further, patients may visit a doctor for many other reasons outside of eye care. For example, a patient may seek treatment from a doctor for physical as well as mental ailments. Often, a doctor may devise or prescribe a specific treatment plan for a patient to follow, or seek to monitor a patient's physical or mental wellbeing based on their reported symptoms. However, a patient may go an extended period of time between doctor visits. As a result, important information such as how the treatment plan is working for the patient, side effects of the treatment plan, whether the patient is following the treatment plan, and whether any adjustments should be made to the treatment plan is only received intermittently by the doctor. In some cases where a patient may regularly report information to a doctor outside of an in-person visit, the patient may still not receive timely updates or other information from their doctor based on the reported information.

[0003] One type of system for interacting with a doctor is disclosed in U.S. Patent Publication No. 2015/0127359 issued to Nikki Iravani. In this reference, a system to host an interaction platform for users comprises a network and a host computer. The host computer is connected to the network, and the host computer provides a healthcare management platform for one or more users to interact for the purpose of the users interfacing management. The users are comprised of at least one healthcare provider user, at least one

patient user, a mobile application interface module for the patient user to access the healthcare management platform, a dashboard interface module for the healthcare provider user to access the healthcare management platform, and an appointment module allowing the patient user to request an appointment with the healthcare provider user via the mobile application interface module. The appointment module further allows the healthcare provider to respond to the appointment request via the dashboard interface module. In one embodiment, the healthcare management platform is further comprised of a messaging module wherein the messaging module allows the patient user to communicate to the healthcare provider user and allows for the healthcare provider user to communicate to the patient user. This publication is herein incorporated by reference for all that it discloses.

SUMMARY

[0004] In one embodiment, a method may include matching a user profile with a prescribed optical device, matching the prescribed optical device with a plurality of members of a distribution system of the prescribed optical device, requesting information about the prescribed optical device through a user interface, receiving information in response to requesting the information, and sending feedback based on the received information to one of the members of the distribution system.

[0005] In one embodiment, an apparatus may include means for matching a user profile with a prescribed optical device, means for matching the prescribed optical device with a plurality of members of a distribution system of the prescribed optical device, means for requesting information about the prescribed optical device through a user interface, means for receiving information in response to requesting the information, and means for sending feedback based on the received information to one of the members of the distribution system.

[0006] In one embodiment, an apparatus may include a processor, memory in electronic communication with the processor, and instructions stored in the memory. The instructions may be operable to cause the processor to match a user profile with a prescribed optical device, match the prescribed optical device with a plurality of members of a distribution system of the prescribed optical device, request information about the prescribed optical device through a user interface, receive information in response to requesting the information, and send feedback based on the received information to one of the members of the distribution system.

[0007] In one embodiment, a non-transitory computer-readable medium may include instructions operable to cause a processor to match a user profile with a prescribed optical

device, match the prescribed optical device with a plurality of members of a distribution system of the prescribed optical device, request information about the prescribed optical device through a user interface, receive information in response to requesting the information, and send feedback based on the received information to one of the members of the distribution system.

[0008] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, at least one of the members of the distribution system may be a prescriber of the prescribed optical device.

[0009] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, at least one of the members of the distribution system may be a supplier of the prescribed optical device.

[0010] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, at least one of the members of the distribution system may be a manufacturer of the prescribed optical device.

[0011] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the prescribed optical device may be a contact lens.

[0012] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the prescribed optical device may be spectacles.

[0013] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the information includes an eye comfort level.

[0014] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the information includes an eye dryness level.

[0015] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the information includes an aspect about inserting the prescribed optical device to a user's eye.

[0016] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for awarding a benefit to the user in response to sending the requested information.

[0017] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the benefit includes a discount on future purchases of prescribed optical devices.

[0018] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for

linking a user responding to the requested information to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information.

[0019] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for linking the user to the member in real time.

[0020] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions where linking includes opening a text communication channel with the member of the distribution system.

[0021] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the feedback includes processed information based on the received information.

[0022] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the processed information includes a frequency of unsatisfactory ratings.

[0023] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the processed information includes associating the received information with a material of the prescribed optical device.

[0024] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the processed information includes associating the received information with a manufacturing date of the prescribed optical device.

[0025] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the processed information includes associating the received information with a location of the user using the prescribed optical device.

[0026] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the processed information includes associating the received information with at least one aspect of the weather in the area of the user using the prescribed optical device.

[0027] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the processed information includes associating the received information with a batch group identifier of the prescribed optical device.

[0028] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the processed information includes associating the received information with at least one aspect of the manufacturing of the prescribed optical device.

[0029] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the processed information includes associating the received information with the prescriber of the prescribed optical device.

[0030] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for linking includes presenting an option to schedule an appointment with a member of the distribution system.

[0031] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the feedback includes the received information in an unprocessed format.

[0032] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for sending the received information to a server. Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for generating the feedback at the server.

[0033] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for requesting information includes requesting information daily.

[0034] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for aggregating the received data.

[0035] Some examples of the method, apparatus, and non-transitory computer-readable medium described above may further include processes, features, means, or instructions for providing instructions on a use of the prescribed optical device.

[0036] In some examples of the method, apparatus, and non-transitory computer-readable medium described above, the prescribed optical device may be a contact lens.

[0037] In one embodiment, a method may include matching a user profile with a prescribed optical device, matching the prescribed optical device with a plurality of members of a distribution system of the prescribed optical device, requesting comfort information about the prescribed optical device, receiving the comfort information in response to requesting the comfort information, sending the received comfort information to a server, processing the received comfort information at the server, sending feedback based on the received comfort information to one of the members of the distribution system, and linking a

user responding to the requested comfort information to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information.

[0038] In one embodiment, an apparatus may include means for matching a user profile with a prescribed optical device, means for matching the prescribed optical device with a plurality of members of a distribution system of the prescribed optical device, means for requesting comfort information about the prescribed optical device, means for receiving the comfort information in response to requesting the comfort information, means for sending the received comfort information to a server, means for processing the received comfort information at the server, means for sending feedback based on the received comfort information to one of the members of the distribution system, and means for linking a user responding to the requested comfort information to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information.

[0039] In one embodiment, an apparatus may include a processor, memory in electronic communication with the processor, and instructions stored in the memory. The instructions may be operable to cause the processor to match a user profile with a prescribed optical device, match the prescribed optical device with a plurality of members of a distribution system of the prescribed optical device, request comfort information about the prescribed optical device, receive the comfort information in response to requesting the comfort information, send the received comfort information to a server, process the received comfort information at the server, send feedback based on the received comfort information to one of the members of the distribution system, and link a user responding to the requested comfort information to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information.

[0040] In one embodiment, a non-transitory computer-readable medium may include instructions operable to cause a processor to match a user profile with a prescribed optical device, match the prescribed optical device with a plurality of members of a distribution system of the prescribed optical device, request comfort information about the prescribed optical device, receive the comfort information in response to requesting the comfort information, send the received comfort information to a server, process the received comfort information at the server, send feedback based on the received comfort information to one of the members of the distribution system, and link a user responding to the requested comfort information to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information.

[0041] In one embodiment, a method may include receiving real time comfort information about prescribed optical devices matched to a manufacturer, analyzing the comfort information by aggregating a total number of unsatisfactory ratings contained in the comfort information, categorizing types of the unsatisfactory ratings, and recommending a change to a manufacturing process in response to reaching a predetermined threshold of the unsatisfactory ratings.

[0042] In one embodiment, an apparatus may include a processor, memory in electronic communication with the processor, and instructions stored in the memory. The instructions may be operable to cause the processor to receive real time comfort information about prescribed optical devices matched to a manufacturer, analyze the comfort information by aggregating a total number of unsatisfactory ratings contained in the comfort information, categorize types of the unsatisfactory ratings, and recommend a change to a manufacturing process in response to reaching a predetermined threshold of the unsatisfactory ratings.

[0043] In one aspect, a system for tracking the comfort level of a contact lens may include a first mobile device in communication with a remote location associated with a first user, a second mobile device in communication with the remote location associated with a second user, a feedback manager that categories responses from the first user and the second user into separate categories, at least one of the categories being a negative category, an aggregator that identifies common characteristics among the responses categorized within the negative category when a percentage of responses are categorized into the negative category, and an recommender that recommends an action based on the common characteristics within the negative category.

[0044] Some examples of the method and apparatus described above may further include processes, features, means, or instructions for recommending the change includes temporarily stopping a portion of the manufacturing process.

[0045] Some examples of the method and apparatus described above may further include processes, features, means, or instructions for recommending the change includes a material change to a material included in a batch of the prescribed optical devices.

[0046] Some examples of the method and apparatus described above may further include processes, features, means, or instructions for recommending the change includes a geometry change to a geometry included in a batch of the prescribed optical devices.

[0047] Some examples of the method and apparatus described above may further include processes, features, means, or instructions for recommending the change includes a shelf life change to a shelf life included in a batch of the prescribed optical devices.

[0048] In one embodiment, method and apparatus for evaluating a prescribed product or service includes matching a user profile with a prescribed product or service, receiving information from the user and generating an automated feedback response based on the received information.

[0049] Some examples of the method and apparatus described above may further include providing the received information and the automated feedback response to a doctor or other medical professional, and sending feedback based at least in part on a response from the doctor or other medical professional through the user interface.

[0050] Some examples of the method and apparatus described above may further include analyzing biomarker information.

[0051] Some examples of the method and apparatus described above may further include requesting information from a user through a user interface.

[0052] Some examples of the method and apparatus described above may further include displaying an avatar of the doctor via the user interface.

[0053] Some examples of the method and apparatus described above may further include the avatar delivering the feedback to the user.

[0054] Some examples of the method and apparatus described above may further include generating an automated feedback response includes inputting facts into an artificial intelligence system.

BRIEF DESCRIPTION OF THE DRAWINGS

[0055] FIG. 1 depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.

[0056] FIG. 2 depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.

[0057] FIG. 3 depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.

[0058] FIG. 4 depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.

[0059] FIG. 5 depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.

[0060] FIG. 6 depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.

- [0061] FIG. 7 depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0062] FIG. 8 depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0063] FIG. 9A depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0064] FIG. 9B depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0065] FIG. 9C depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0066] FIG. 9D depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0067] FIG. 9E depicts an example of a device for evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0068] FIG. 10 depicts an example of a device for providing information and evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0069] FIG. 11 depicts an example of a device for providing information and evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0070] FIG. 12 depicts an example of a device for providing information and evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0071] FIG. 13 depicts an example of a device for providing information and evaluating a prescribed device or service in accordance with aspects of the present disclosure.
- [0072] FIG. 14 depicts an example of a block diagram of an evaluation system in accordance with aspects of the present disclosure.
- [0073] FIG. 15 depicts an example of a block diagram of an evaluation system in accordance with aspects of the present disclosure.
- [0074] FIG. 16 depicts an example of a block diagram of an evaluation system in accordance with aspects of the present disclosure.
- [0075] FIG. 17 depicts an example of a method of evaluating a prescribed device in accordance with aspects of the present disclosure.
- [0076] FIG. 18 depicts an example of a method of evaluating a prescribed device in accordance with aspects of the present disclosure.
- [0077] FIG. 19 depicts an example of a method of evaluating a prescribed device in accordance with aspects of the present disclosure.

[0078] FIG. 20 depicts an example of a method of evaluating a prescribed device in accordance with aspects of the present disclosure.

[0079] FIG. 21 depicts an example of a system of evaluating prescribed products or services in accordance with the present disclosure.

[0080] FIG. 22 depicts a block diagram illustrating an example system that may be used in accordance with the present disclosure.

DETAILED DESCRIPTION

[0081] The principles described in the present disclosure include systems, methods, and devices for improving communication between a patient and a treating doctor. Additionally, the present exemplary systems and methods improve communication between the patient using prescribed medications, optical devices, such as contact lenses or spectacles, or other devices, and members of a distribution system for distributing the prescribed devices. The members of the distribution system may include a prescriber, such as an ophthalmologist, an optometrist, an optician, a medical doctor, a therapist, another type of licensed medical professional, or combinations thereof. Also, the suppliers and the manufacturers may be members of the prescribed devices' distribution system.

[0082] The principles disclosed herein also include systems, methods, and devices for improving communication between the patient receiving treatment or monitoring for one or more mental or physical conditions, such as Alzheimer's disease, depression, and anxiety, and one or more members of a medical team for treating the mental or physical condition. The members of the medical team may include a prescriber, such as a doctor, therapist, a nurse, a medical assistant, another type of medical professional, or combinations thereof. The medical team may also include members of a distribution system for distributing medications, devices, or combinations thereof. The members of the distributions system may include suppliers, manufacturers, or distributors, of medication or devices, or combinations thereof.

[0083] The principles disclosed herein may include ways to gain feedback from the users of the prescribed products or services, such as optical devices, medications, other devices, services, and treatment plans, open real-time communication links between the member of the distribution system, medical team, and the user, set up appointments between the distribution system members, medical team members, and the user, and result in improvement between the prescriptions or treatment plans to the user and/or improvements to the prescribed medications, optical devices, or other devices. For example, the feedback

facilitated through the principles described in the present disclosure may include the analysis of data that was unknown to the medical team, manufacturer, or suppliers in the past. This information can be used to make recommendations for changes in the materials, geometries, shelf life, aqueous solutions, packaging, instructions, dosages, configurations, and other aspects of the spectacles, contact lenses, medications, other devices, and treatment plans.

[0084] The principles disclosed herein may also include devices and methods for enhancing engagement, data collection, and communication between a user and the user's doctor or medical professional. For example, the devices described herein may lead to increased user engagement with a prescribed product or service, which may in turn result in enhanced user compliance with a doctor's instructions. In turn, the ability of the devices and methods described herein to facilitate communication between a doctor and user even outside of in-person visits or phone call, thus resulting in increased user satisfaction and an increased ability for the doctor to monitor the health and compliance of the user. The principles disclosed herein also allow a doctor to interact with more users than they might otherwise be able to if restricted only to in-person visits from patients, thereby allowing a doctor to expand their practice.

[0085] In one aspect of the principles described in the present disclosure, mobile devices are used in an unconventional manner to provide inputs that drive improvements to medications, devices, services, treatment plans, or optical devices such as contact lenses. In some embodiments, this information may be supplemented by automatically collected data, for example via one or more sensors. In one particular example, a mobile device obtains comfort level information from multiple users, aggregates that data when certain predetermined thresholds of negative responses are obtained, and provides an input used in improving the contact lens. In some cases, a certain percentage of negative responses out of a pre-identified population trigger a grouping/matching process that identifies issues for a contact lens manufacturer to solve.

[0086] In another example, a mobile device obtains information from a patient, such as a happiness level, a pain level, a level of cognition, physiological information, and combinations thereof. The obtained information may be provided to a medical team or other party who can use the information to monitor the efficacy or adjust the details of a particular medication, device, service, or treatment plan which may be subscribed to the patient. In some cases, information from multiple users may be aggregated and may be used in improving a particular medication, device, service, or treatment plan used by multiple users.

[0087] In some embodiments, a mobile device may be used to provide information to a patient relating to their mental or physical health, personal history, medication, device, service, treatment plan, or combinations thereof. In some cases, the information provided to a patient may be monitored, determined, or otherwise controlled by a member of a medical team, such as a doctor. For instance, the mobile device may provide a patient having Alzheimer's disease with information related to their location, health status, instructions for a treatment plan, the date, or any other relevant information as determined by a member of the medical team.

[0088] In some embodiments, one or more sensors may be used to automatically collect information from a user relating to their mental or physical health, personal history, medication, device, service, treatment plan, or combinations thereof. For example, in some cases a contact lens including one or more sensors may collect biological information from a user's tear fluid. In some cases, the collected information may be provided to a doctor for analysis and monitoring. Any feedback or responses from the doctor may then be provided to the user by a device as described herein.

[0089] FIG. 1 depicts an example of a device 100 that includes a user interface 101. The device 100 may be any appropriate type of device, such as a mobile device, a computing device, a smart phone, an electronic tablet, a laptop, a desktop, a digital device, networked device, another type of device, or combinations there. The user interface 101 may be any appropriate type of user interface. In some examples, the user interface is a touch screen. In other examples, the user interface includes buttons, knobs, dials, levers, switches, scroll bars, scroll balls, mouse pads, gesture recognition cameras, microphones, other types of user interface mechanisms, or combinations thereof.

[0090] In this example, the user interface 101 presents multiple fields to the user for creating a user profile. In this case, the user profile may be created by entering in at least one of the different types of information into the different fields presented. In this example, the fields include a name field 102, a gender field 104, a date of birth field 106, an email field 108, a phone number field 110, an address field 112, a nationality field 114, and a password field 116. While this example has been presented with specific types of fields, other examples may include more or fewer fields than those presented in the example of FIG. 1. Further, in some embodiments, one or more information fields may be automatically filled in, for example using patient information already on file with a medical provider, such as a doctor. In some embodiments, the user interface 101 may present the pre-formed user profile to the user for confirmation of the information provided therein.

[0091] The different fields of the user profile may assist the manufacturers, suppliers, and doctors by providing more patient feedback than would otherwise be available, especially in cases where information that the doctor has, such as nationality, age, sensitive medical information, and gender may not be known to the manufacturer, or may be protected personal health information. Often issues affecting a person's experience with contact lenses, spectacles, medications, devices, services, or treatment plans are more common in certain nationalities, certain age groups, certain areas of residence, other types of user characteristics, or combinations thereof.

[0092] The user profile can be matched to the user's doctor and the prescribed products or services used by the user. This can be done by inputting information regarding the user's doctor into the profile. In some cases, the user is also matched to his or her supplier. The information can also be collected through inputting the information into the phone. Over time, the user may switch providers and/or doctors. In those circumstances, the user may update the information in the profile. In other examples, this information may be updated through another appropriate way. For example, when a user purchases a set of contact lens, the supplier may cause the information to be pushed to the user's profile. In some embodiments, when a user switches doctors, or begins seeing a doctor for the first time, the doctor or another member of the medical team may update the user's profile or cause information to be pushed to the user's profile. Thus, the supplier may have a copy of the prescription, the doctor who issued the prescription, the time that the order was made, and so forth. This may be performed when the user is at one of the supplier's locations of business. In other examples, the purchase of the spectacles, contact lenses, medications, services, or other devices may occur through the user's profile.

[0093] In some cases, the supplier and/or the manufacturer may identify each of the prescribed products that are sent to the user. For example, each contact lens package, medication package, or other device package may be identified with an identification number or another type of identifier that may be recorded to the user's profile.

[0094] FIG. 2 depicts an example of the user interface of the device 200 presenting fields for authentication before permitting a user from accessing the user profile. In this example, the device presents an email field 202 and a password field 204. While this example has been depicted with specific credentials to authenticate the user before granting access, any appropriate type of credentials may be used in other examples.

[0095] FIG. 3 depicts an example of a device 300 presenting product or service category fields. In this example, the product or service category fields may include a contact lens field

302, a shades field 304, and a spectacles field 306. In some embodiments, a device 300 may present product or service category fields including on or more classes or types of medication, or one or more classes or types of devices, such as mobility devices, medical devices, other types of devices, or one or more types of services or treatment plans or combinations thereof. The user may select the appropriate field to narrow down his or her search for a prescribed product or service to be ordered by the user. In some cases, the user may have a single product or service associated with his or her profile. In other examples, the user may have multiple products or services associated with the user profile. While this example has been depicted with specific product or service categories, any appropriate type of product or service categories may be used in other examples.

[0096] FIG. 4 depicts an example of a device 400 presenting product or service type fields. In this example, the product or service type fields may include a contact lens type 1 field 402, a contact lens type 2 field 404, and a contact lens type 3 field 406. In some other embodiments, the product or service type fields may include multiple medication type fields, multiple device fields, or multiple service or treatment plan fields. The user may select the appropriate field to narrow down his or her search for a specific product or service purchased by the user or a specific plan to be followed by the user. In some cases, the product or service type fields represent only those products or services that have been purchased by the user. In other examples, the product or service type fields include more product or service types than those purchased by the user. In those situations where the product or service type fields correspond to those products or services that have not been purchased by the user, the user may gain access to general information about those product or service types. In those cases where the product or service type category corresponds to the products or services actually purchased by the user, the user may gain access to information like purchase dates, shipping dates, expiration dates, or other information that is specific to the types of the products or services actually purchased by the user. While this example has been depicted with specific product or service types, any appropriate type of product or service may be presented in other examples.

[0097] FIG. 5 depicts an example of a device 500 that presents information accessible through the user profile about the type of product or service purchased, subscribed to or followed by the user or the types of products or services that have not necessarily been purchased by the user. In this case, the device 500 is presenting a product or service details field 502, a storage instructions field 504, and an insertion instructions field 506. The user may access these fields to read brochures, read user manuals, read user instructions, watch

informational videos, or have access to other types of information about the presented products or services. In some embodiments, the device 500 may display additional information related to a product, medication, or plan that has been or may be purchased or followed by the user.

[0098] FIG. 6 depicts an example of requesting information about the purchased products, services, or plans through device 600. In some examples, these questions may be accessed when the user accesses his user profile. In other examples, these questions may be presented to the user automatically based on the time of day or other types of triggers. For example, a request for how the contact lenses feel may be asked at predetermined times throughout the day. In other examples, questions about the user's experience with a certain product, service, or plan may be presented, for example, questions about the user's experience inserting the contact lens may be asked at a time shortly after the user is expected to insert his or her contact lenses. In some cases, requests for information may be received in the evenings where information about the user's experience throughout the day may be requested at a single time of the day. In some cases, the user may have the option to select when some or all of the information is requested. In some cases, the questions presented to the user may be written by, selected by, or otherwise determined by the user's prescribing physician or another such medical professional. In this way, the user's doctor may be able to solicit specific information from the user about their experience in order to more fully inform any evaluation or modifications to a product, service, or plan used by the user.

[0099] The request may be presented with multiple options for responding. In this case, the user may press a touch screen button that most appropriately reflects the user's experience. In this example, the user is presented a "very easy" button 602, an "easy" button 604, a "just OK" button 606, a "difficult" button 608, and a "very difficult" button 610. In other examples, more or fewer buttons may be presented to the user. In some cases, different type of moods, experiences, emotions, or other feelings may be described on the response buttons. In one example, the buttons may be depicted with an image of faces that reflect different types of user experiences. In other examples, word and images are presented together on the button. Further, the response mechanism may include another type of mechanism to communicate the user's answers. For example, the device may present the user with an open text field to describe his or her experience. In another example, the user may have an option to audibly speak his or her responses, or record a video message. In yet another embodiment, the user may be asked to rate his or her experience with a numeral value. In short, the examples described herein may not be limited to any particular type of

presentation and/or responding mechanism. In some cases, a doctor, licensed medical professional a member of the medical team, or combinations thereof may determine the particular type of presentation and/or responding mechanism.

[0100] FIG. 7 depicts an example of a device 700 presenting an example of a summary of different types of questions requested from the user. In this example, the types of information requested may include a handling of the lenses field 702, an hours wearing the lenses field 704, a comfort level after dinner field 706, a distance vision field 708, a reading vision field 710, another type of field, or combinations thereof.

[0101] In some cases, the device 700 requests information from the user on a daily basis. In some examples, the same type of information is requested every day. In some examples, the same type of information may be requested one or more times per day. In other examples, different types of questions are presented on different days or at different times on the same day. Asking different questions over a spread of time, such as days, hours, or weeks may allow a doctor, licensed medical professional, member of the medical team, or combinations thereof to get more information requested without overburdening the user with information requests each day and still allowing the device to gather information at a useful sampling rate. Additionally, consistent contact with the user by the system establishes a sense of relationship between the user and the doctor, licensed medical professional, member of the medical team, or combinations thereof.

[0102] Additionally, the device 700 may present the responses received from the user. In this example, the response field 712 indicates that the user had a difficult time handling the contact lenses, response field 714 indicates that the user wore the contact lenses for 15 hours on a given day, response field 716 indicates that the user's wearing experience was comfortable after dinner, response field 718 indicates that the user's distance vision was good, and response field 720 indicates that the user's reading vision was good.

[0103] In some examples, the summary represents the responses that the user provided on a particular day. In some cases, the particular day is the same day that the responses were received. In some embodiments, the user may have an option of selecting a previous day to review the responses. The summary may represent an average or an aggregated amount of responses.

[0104] In some embodiments, a summary may be automatically generated from data collected from the user and may be presented to the user for review, confirmation, or other purposes. In some cases the device 700 may be connected to one or more sensors that automatically collected data from the user and relay the data to the device 700. For example,

in some cases a user's contact lens may include one or more sensors to collect user data, such as physiological data, a duration for which the contact lens is worn, other data, or combinations thereof. The data collected by the one or more sensors may be transmitted or otherwise provided to the device 700, for example via a wireless network. Data collected by the one or more sensors may be automatically provided to the device 700, for example after a predetermined duration or after a predetermined condition is met. In some examples, a sensor, either in the contact lens or in a contact lens case, may detect a change in a biomarkers of a user which may trigger communication between the device 700 and a doctor or other medical professional. In some cases, when a predetermined condition is met, the user may be prompted with one or more questions related to their physical or mental health, as described herein. For example, in some cases a sensor may detect a change in a biomarker, which when compared to biomarker databases, may be associated with inflammation in the eye. The device 700 may then be triggered to prompt the user with questions relating to possible causes of the inflammation which may then be provided to a doctor along with the biomarker data.

[0105] In some embodiments, the user may be presented with a summary of the collected data on device 700 before, during, or after the data may be provided to the user's doctor, licensed medical professional a member of the medical team, or combinations thereof. In some cases, however, the data may be provided to the user's doctor, licensed medical professional, member of the medical team, or combinations thereof without being presented to the user.

[0106] FIG. 8 depicts an example of a device 800 presenting a message to the user when the device determines that the user has included at least one unfavorable or undesirable rating in the provided information. The unfavorable ratings may include a level of discomfort, a level of pain, a level of a negative feeling, emotion, or sensation, physiological information such as dry eyes, difficulty using or following a product or service, such as difficulty inserting contact lenses, other unsatisfactory issues, or combinations thereof. In some cases, the threshold responding to an unfavorable rating is the inclusion of a single unsatisfactory rating. In other cases, additional unsatisfactory ratings are included before reaching that threshold. The user may be given an option to set the threshold level before the user's profile is causes the device 800 to respond to the unsatisfactory user responses. In some cases, a user's doctor, licensed medical professional, member of the medical team, or combinations thereof may determine the threshold level.

[0107] In this case, a message 802 is generated in response to reaching the threshold. The message 802 asks the user if the user would like to set up an appointment with his or her doctor to discuss the issue. Below the message 802, a text box is opened in which a message is automatically provided for the user. In some cases, the automatically generated message may be a starting point for the user. In this case, the text box's automate message requests an appointment with the doctor. If the user decides that the user wants to send the automated message 804, the user may press the send button 806. In other cases, if the user does not want to send what was automatically generated to the doctor, the user can type a new message or modify the generated message.

[0108] In other cases, the device 800 may respond by generating a different type of message to be sent to another member of the distribution system. Examples of other possible automatically generated text messages may include, but are not limited to, sending messages to the manufacturer indicating a flaw in a particular batch of contact lenses, sending a message to the supplier indicating that a group of contact lenses went bad before the expiration date, a message indicating that the user would like to try a new type of contact lens, another type of message, or combinations thereof.

[0109] In some embodiments, the device 800 may respond with a message generated by the user's doctor, licensed medical professional, member of the medical team, or combinations thereof instead of or in addition to an automatically generated message. For example, in some cases a doctor, licensed medical professional, member of the medical team, or combinations thereof may review user information, such as automatically collected data, or responses from the user, and provide a message to the user in response. In some cases, the message or information from the user's doctor, licensed medical professional, member of the medical team, or combinations thereof may be selected from one or more predetermined responses, or may be custom generated by the doctor, licensed medical professional, member of the medical team, or combinations thereof. In this way the user may receive personalized feedback from their doctor, licensed medical professional, member of the medical team, or combinations thereof, for example with adjustments to the user's treatment plan or revised instructions regarding a device or service. Thus, the device 800 may facilitate engagement between the user and the medical team outside of scheduled visits, and may even reduce the need for in-person visits between the user and the medical team.

[0110] FIG. 9A depicts an example of a device 900 that checks the availability of the user's doctor. The user can use his user profile to check when his doctor is available for another visit. The user may request a visit, and the device 900 may provide options for when

the doctor is available. If one of the proposed appointments is suitable to the user, the user may select to book the appointment.

[0111] In the example of FIG. 9A, the device populates the number of fields based on the doctors availability. In this example, the device 900 presents an address field 902, a date field 904, a time field 906, and a reason field 908. Additionally, the device may present a book button 910 for the user to select if the appointment is suitable. In some cases, the user may input into at least one of the fields information about when the user is available and select the send button. In response, the device may be caused to search the doctor's calendar and retrieve at least one opening that fits the user's preferred availability, if any. If no times are available with the limitations imposed by the user's preferences, the device may indicate that the user should provide different options. Alternatively or additionally, the device 900 may indicate the preferred times were unavailable, but offer some times that are available. While the examples above have depicted specific communications between a user and another party, any appropriate type of communication may be exchanged, for example the device 900 may be used to schedule telephone calls, video conferences, and the like between the user and the doctor.

[0112] In one example, the user may have the option of communicating directly with his or her doctor through the device. In some examples, the user may select a button, icon, or another type of input device to enter into a program to interact with the doctor and/or a representative of the doctor. In some cases, the user may be interacting directly with an individual. In other examples, the user is interacting with a program that presents itself as a doctor. In some cases, the presented doctor may include a photo of a doctor, such as the user's doctor or another individual, or an avatar representing the doctor or another individual. In some cases, the avatar may be an animated avatar and may move in response to or accordance with a message provided by the doctor or other individual. For example, in some cases the avatar may appear as an animated drawing or digital depiction of a doctor and the avatar may include a mouth which moves in accordance with the message provided by the doctor. In those situations where the device presents itself as a doctor, the device may receive input from a remote source about which questions to ask the user. The questions and the user's responses may be sent to the user's doctors or to another appropriate party.

[0113] FIG. 9B depicts an example of a device 920 presenting a question through the device's display 922. The device 920 may present at least one question to the user to encourage the user to be in compliance with how to use his or her products, services, or plans. For example, the device 920 may present one or more questions to the user to encourage the

user to be in compliance with a preferred method of using his or her contact lenses or other types of products. For example, a daily disposable contact lens may be constructed to be worn by a user for a period less than 24 hours, but a user may try to wear the contact lens longer. With the questions presented to the user through the device, the user may be encouraged to wear the contact lens for just the appropriate time period. For example, the device may ask the user how long he or she wore the contact lens during the day. In some cases, the device may present the questions to the user through the device in a text message. In some examples, the message is presented to the user through a speech bubble 924 that appears to be generated by the photo 926 of the user's doctor or other individual. In yet other examples, the questions may be presented to the user through speakers in the device through an audible message.

[0114] In some cases, the device may also present pre-generated options 928, 929 for the user to select, such as a "less than four hours" option, a "four hours" option, a "more than four hours" option, an option with another time period, a "did not wear the contact lens" option, another type of option, or combinations thereof. In other examples, the user may type in the amount of time that the contact lens was worn. In other examples, the device may have a microphone into which the user can answer the question through a spoken sound.

[0115] In response to the user's selected option or other type of response, the device may give the user feedback. The feedback may include a confirmation that the user used the device, medication, or service in an appropriate manner, for an appropriate duration, or otherwise in accordance with the desired manner of use. For example, the feedback may include confirmation that the user wore the contact lens for the appropriate amount of time. The feedback may encourage the user to continue with the same course of action or to perform a different action in the future. For example, to wear the contact lens for a different time period in the future. In yet another example, the feedback may merely thank the user for providing a response.

[0116] In response to answering the question, the user may send a command through the device's interface to move on to another question or task. In other examples, the device may automatically present the user with another question or move on to another task.

[0117] FIG. 9C depicts an example of a device 930 presenting a question to the user about how his or her experience was that day using a product or service or following a plan. For example, the question may related to how the user's experience was that day in wearing the contact lens, handling the contact lens, and/or inserting the contact lens. In some cases, the device 930 may present icons 932, 934, 936 that represent a good experience, an okay

experience, a bad experience, another type of experience, or combinations thereof. The user may select the icon that he or she feels best describes his or her experience. In other examples, the user may be provided with a free text field that he or she can describe the experience, or the user may speak the experience into a microphone of the device, or record a video message related to their experience.

[0118] In those examples with an icon, the device may present an appropriate response. In those cases, where the user selects an icon 932 representing a good experience, the device 930 may congratulate the user or provide another type of positive feedback. In those cases where the user indicates that the experience was bad or just okay, the device may ask additional questions to determine what caused the experience to be less than optimal. In some cases, the device may provide suggestions for improving the user's experience. In some cases, the provided suggestions may be automatically generated or may be selected or otherwise provide by a doctor or other person.

[0119] The device may also present questions that relate to specific times during the day. For example, the device may present a question about the user's experience after breakfast, during the morning, after lunch, during the afternoon, after dinner, just before going to bed, during another time during the day, or combinations thereof. In some cases where the user is required to take a medication or perform an action at a specific time during the day the device may present questions at or after that specific time. In this example, the user may respond by selecting an appropriate icon, selecting a button, speaking a verbal command, interacting with another input mechanism, or combinations thereof.

[0120] In addition to asking general questions about the user's experience, the device may also or alternatively ask specific questions related to the user's experience or compliance. For example, in addition to asking about the user's comfort level with contact lenses, the device may also ask about how the user's vision was that day. In some embodiments, for example where a user is directed to take a medication, the device may ask about specific side effects or other physiological data, such as whether the user experienced a specific symptom or side effect and the extent to which they experienced the symptom or side effect. When asking about the user's experience, the device may ask about just a single aspect or multiple aspects of the user's experience. For example, when asking about the user's vision, the device may ask about the user's clarity, distance vision, near vision, light sensitivity, acuity, peripheral vision, central vision, right eye, left eye, depth perception, eye dryness, contrast sensitivity, night vision, field of view, distance accommodation, color

acuity, tearing, eye pain, glare, double vision, reading vision, driving vision, other visual aspects, or combinations thereof.

[0121] FIG. 9D depicts an example of a device 940 presenting a question about the user's experience, such as the user's visual experience. In the illustrated example, the device 940 displays images of what the user may likely to have seen. In this example, the display presents multiple images 942, 944, 946 that range from a clear image with crisp lines to an image with very blurry lines. The user may select the image that best fits his experience for that day. In other examples, the images may present the way the user saw that day based on other visual aspects.

[0122] The questions presented to the user through the device may be part of periodic tests. In some cases, a doctor may instruct the user to take the test on a periodic basis, such as a daily basis, a multi-day basis, a weekly basis, a monthly basis, a multi-hour basis, another basis based on another time period, or when a certain condition occurs, or combinations thereof. The responses to the test may be sent to the doctor or other medical professional. In some cases, the results of the test may be sent to another party, such as the manufacturer or a distributor. While the results of the test may be intended for the doctor to help the user's experience or condition in real time, a manufacturer or distributor may also have access to the user's responses. Aggregating the responses from multiple users may help the manufacturer or distributors make changes to a contact lens or other type of product or service. For example, the manufacturer may recognize that a significant portion of its clients experience a particular type of issue during a particular time of day. The changes may be made based on these observations. The distributor may recognize that certain product brands provide users with a better experience. As a result, the distributor may provide reviews about the brands that it offers. In some cases, the distributor may drop brands that perform poorly.

[0123] FIG. 9E depicts an example of a device 950 presenting in the display a summary 952 of the answers to the user's questions. In some embodiments, the summary 952 may be a summary of data automatically collected from the user, for example by one or more sensors. In some situations, the user may be given an option to change his or her answers or to correct any automatically collected data. In some examples, the device may offer instructional videos, literature, links to websites, or offer other forms of information based on the user's feedback.

[0124] The summary 952 may include a line graph 954, a pie chart, a bar graph, another type of graph, another type of chart, another type of visual summary, or combinations thereof. The summary may include such charts or graphs for each question asked, each type of data

collected, or group multiple types of responses or data together. In some cases, the user may see the summary as desired by selecting an “overview” button 956 or another type of icon. To return to the current set of questions, the user may select a “current” button 958 or another type of icon.

[0125] FIG. 10 depicts an example of a device 1000 presenting in the display a summary 1002 of information to be provided to a user to update the user on their mental health, physical health, or other relevant information. In some embodiments, the summary 1002 may provide information to the user related to the upcoming use of a product, service, or plan during the future. For example, the summary 1002 may inform the user that they must perform a certain action, such as taking a medication, at specific times during the day.

[0126] In some other embodiments, the summary 1002 may remind or refresh the user about information that may have previously been provided or known to the user. For example, in some cases a user may have Alzheimer’s disease which may cause the user to forget a wide range of information, including the user’s location, name, age, family members, etc. Thus, in some embodiments the summary 1002 may remind the user of basic important information, such as their name, location, age, familial relationships, schedule for the day, other information, or combinations thereof.

[0127] The summary 1002 may be provided to the user at a specified time of day, for example at a specified time each morning. In some cases, the summary 1002 may be provided to the user at multiple times during the day as determined, for example, by a doctor. In some cases, the summary 1002 may be provided to the user when a specified condition is satisfied, such as when a user first turns on the device, when the user performs a desired action, some other condition, or combinations thereof.

[0128] The device 1000 may also provide the user with a prompt 1004 to allow the user to indicate when the user is done with the summary 1002. In some cases, the prompt 1004 may be a simple input, such as requiring the user to select that they are done. However, in some other cases the prompt 1004 may include one or more questions for the user, for example based on the information provided in the summary 1002. In some cases, the prompt 1004 may require the user to correctly answer one or more questions relating to the summary 1002. For example, where a user may have Alzheimer’s disease, the prompt 1004 may ask the user to repeat some or all of the information provided in the summary 1002 to confirm retention of the information. In some cases, the user’s responses to the prompt 1004 may be provided to the doctor, for example to compare with previous responses and to monitor a user’s level of retention or cognition.

[0129] In some embodiments, the device 1000 may monitor the user's behavior and/or location, for example via location tracking technology such as global positioning system (GPS) technology or the like. In some cases, the device 1000 may transmit or otherwise provide the user's location to a third party such as a doctor, medical professional, or other person, such as a family member. In some cases the user's location may be continuously provided to a third party, but in some other cases the user's location may only be provided to a third party when the user's leaves a designated area. For example, the device 1000 may only provide the user's location to a third party when the user is more than a specified distance from the user's residence. In cases where the user has Alzheimer's disease, dementia, or another similar condition, the ability to monitor the user's location may allow third parties to monitor the location of the user for the user's safety and intervene if the user moves to an unsafe or undesirable location.

[0130] FIG. 11 depicts an example of a device 1100 requesting information relating to the user's mental or physical health. In some examples, these questions may be accessed when the user accesses their user profile. In other examples, these questions may be presented to the user automatically based on the time of day or other types of triggers. For example, a request for a user's level of anxiety may be asked at predetermined times throughout the day. In some cases, requests for information may be received in the evenings where information about the user's health throughout the day may be requested at a single time of the day. In some cases, the user may have the option to select when some or all of the information is requested. In some cases, the questions presented to the user may be written by, selected by, or otherwise determined by the user's prescribing physician or another such medical professional. In this way, the user's doctor may be able to solicit specific information from the user about their experience in order to more fully inform any evaluation or modifications to a product, service, or plan used by the user.

[0131] The requests may be presented with multiple options for responding. In this case, the user may press a touch screen button that most appropriately reflects the user's experience. In this example, the user is presented a "very anxious" button 1102, an "anxious" button 1104, a "not very anxious" button 1106, and a "not anxious" button 1108. In other examples, more or fewer buttons may be presented to the user. In some cases, different type of moods, experiences, emotions, or other feelings may be described on the response buttons. In one example, the buttons may be depicted with an image of faces that reflect different types of user experiences. In other examples, word and images are presented together on the button. Further, the response mechanism may include another type of mechanism to

communicate the user's answers. For example, the device may present the user with an open text field to describe his or her experience. In another example, the user may have an option to audibly speak his or her responses, or record a video message. In yet another embodiment, the user may be asked to rate his or her experience with a numeral value. In short, the examples described herein may not be limited to any particular type of presentation and/or responding mechanism. In some cases, a doctor, licensed medical professional a member of the medical team, or combinations thereof may determine the particular type of presentation and/or responding mechanism.

[0132] FIG. 12 depicts an example of a device 1200 presenting an example of a summary of different types of questions requested from the user. In this example, the types of information requested may include a happiness field 1202, a level of anxiety field 1204, a level of drowsiness field 1206, a time spent exercising field 1208, another type of field, or combinations thereof.

[0133] In some cases, the device 1200 requests information from the user on a daily basis. In some examples, the same type of information is requested every day. In some examples, the same type of information may be requested one or more times per day. In other examples, different types of questions are presented on different days or at different times on the same day. Asking different questions over a spread of time, such as days, hours, or weeks may allow a doctor, licensed medical professional, member of the medical team, or combinations thereof to get more information requested without overburdening the user with information requests each day and still allowing the device to gather information at a useful sampling rate.

[0134] Additionally, the device 1200 may present the responses received from the user. In this example, the response field 1212 indicates that the user had a moderate level of happiness, response field 1214 indicates that the user has a low level of anxiety, response field 1216 indicates that the user had a low level of drowsiness, and response field 1218 indicates that the user spent 1 hour exercising. In some examples, the summary represents the responses that the user provided on a particular day. In some cases, the particular day is the same day that the responses were received. In some embodiments, the user may have an option of selecting a previous day to review the responses. The summary may represent an average or an aggregated amount of responses.

[0135] In some embodiments, a summary may be automatically generated from data collected from the user and may be presented to the user for review, confirmation, or other purposes. In some cases the device 1200 may be connected to one or more sensors that

automatically collected data from the user and relay the data to the device 1200. For example, in some cases a user's contact lens may include one or more sensors to collect user data, such as physiological data, other data, or combinations thereof. The data collected by the one or more sensors may be transmitted or otherwise provided to the device 1200, for example via a wireless network. Data collected by the one or more sensors may be automatically provided to the device 1200, for example after a predetermined duration or after a predetermined condition is met. The user may then be presented with a summary of the collected data on device 1200 before, during, or after the data may be provided to the user's doctor, licensed medical professional a member of the medical team, or combinations thereof. In some cases, however, the data may be provided to the user's doctor, licensed medical professional, member of the medical team, or combinations thereof without being presented to the user.

[0136] FIG. 13 depicts an example of a device 1300 presenting information from a doctor, licensed medical professional, member of the medical team, or combinations thereof to the user by the device's display 1302. The device 1300 may present information from the doctor or another person to the user in response to information provided by the user, such as a user's responses to specific questions as described herein. The information 1304 provided to the user may be revised instructions regarding a product or service that the user is prescribed, further information concerning the product or service, instructions or revisions to a treatment plan for the user, or the like. In this particular example, the information 1304 provided by the doctor to the user is a modification to the dosage of a medications the user has been prescribed. In some examples, the information 1304 provided by the doctor may be selected from a preset list of responses, or may be written or otherwise decided by the doctor. In some cases, the information 1304 may include an audio and/or video message. In some examples, the information 1304 may include a video recording of the doctor. However, in some other examples the information 1304 may include, for example, an animated avatar of the doctor providing an audio message to the user. The audio message to the user may be generated from a pre-recorded set of responses, may be generated by a processor evaluating a set of inputs or data points collected by the system, or via another system or method.

[0137] The devices described herein, for example with respect to FIGS. 1-13, serve to enhance communication between the user and a doctor, licensed medical professional, member of the medical team, or combinations thereof outside of scheduled visits between the user and the doctor. While a user may have an in-person visit with a doctor only infrequently, the doctor may nevertheless monitor the user's use of prescribed products or services, or a user's adherence to a treatment plan. The doctor may also make adjustments to the

instructions provided to the user or to the user's treatment plan and may effectively and reliably communicate these adjustment or additional instructions via the devices described herein, without the need to schedule an in-person visit or phone call. Further, the personalized and interactive nature of the devices described herein, for example the use of an avatar to relay information to the user, may provide for enhanced user engagement, trust, and complete openness with the device and prescribed product, service, or treatment plan, thereby ensuring compliance of the user.

[0138] It is expressly contemplated that any of the embodiments and devices described herein may be freely combined with one another to satisfy the particular needs of a user and/or doctor in relation to the evaluation and monitoring of one or more prescribed products, services, and treatment plans. For example, the embodiment depicted in FIG. 2 may be combined with the embodiment depicted in FIGS. 3, 6, 10, or any other embodiment.

[0139] FIG. 14 presents an example of a back-end interface 1400 presenting feedback from a number of different users. This information may be available to all members of the distribution system or just selected members of the distribution system. In some cases, this data may be collected from the devices used by the user, and sent to at least one member of the distribution system. In some cases, the information is sent to a central database, and the members of the distribution system have access to the information.

[0140] In some cases, the information is raw information that has not been processed. In other examples, the information has been at least partially processed by the device used directly by the user, a server from which the device sent the information, a database manager, a remote device, a networked device, another type of device, or combinations thereof. The processed information may be aggregated information, averaged information, interpolated information, extrapolated information, categorized information, other types of information, or combinations thereof.

[0141] In this example, the results may be searchable by a date manager 1402. The date manager 1402 may include an option to input a range of dates to narrow the search results. Additionally, the types of questions 1404 that were requested of the user may also be presented in the display. The back-end interface 1400 may also present the number of responses 1406 that received from different users with the questions 1404.

[0142] In addition to the number of responses 1406, the user may have the option to drill down to a more detailed review of the responses from each user. In the depicted example, a table 1408 may present the types of responses in rows and user characteristics in columns. In

this example, the columns may represent gender characteristics, age characteristics, nationality characteristics, other types of characteristics, or combinations thereof.

[0143] The members of the distribution system may review the information provided by the users through the back-end interface 1400. Based on this feedback, the members of the distribution system may choose to make changes to their individual processes or may respond to the information provided by one or more users. For example, a manufacturer may decide to use a different type of geometry in a contact lens, or a different type of material in a contact lens, or make some other changes to how the contact lens is manufactured. In addition to the information being available for members of the distribution system to analyze, algorithms and other processes may automatically scan and analyze the feedback from users. This analysis may include aggregating the information received from each of the users and identifying which of the responses are to be considered unsatisfactory ratings or other negative types of results. Each of the unsatisfactory ratings may be categorized into different types of ratings. For example, negative ratings that relate to dry eyes may be categorized into one group, and responses that deal with poor insertion of the contact lens into a user's eyes may be categorized into another group. When at least one of the categorized groups reaches a threshold, it may trigger a further analysis. Each of the different categories may have a different threshold number before such a response is triggered, or the number of threshold responses may be uniform through the different categories.

[0144] In one example when the threshold number is reached, a processor may cause the number of total responses to be compared to the unsatisfactory responses to determine the percentage of responses that are unsatisfactory within that category. In those cases where the unsatisfactory responses are a significant percentage of the total number of responses within that category, a message may be sent to a member of the distribution system to alert them of the high percentage of unsatisfactory ratings. In other cases, a message and another type of response may be generated automatically. For example, a response may include shutting down a portion of a manufacturing process, stopping all shipments of a particular type of product, recommending that a product be recalled, other responses, or combinations thereof.

[0145] A further level of analysis may include grouping the number of unsatisfactory responses with user characteristics. For example, the unsatisfactory ratings may be disproportionately higher among people of a certain gender, of a certain age, of a certain nationality, another common characteristic, or combinations thereof. By grouping the user characteristics, the root cause of the unsatisfactory results may be easier to identify.

[0146] Another layer of analysis may include looking at the characteristics of the products or services associated with the unsatisfactory ratings. For example a high percentage of contact lenses with a particular type of material may be associated with unsatisfactory ratings. In that type of situation, the system may recommend to the manufacturer to change the type of material. Conversely, if a particular type of contact lens material results in a high percentage of favorable responses from users, the system may recommend to the manufacturer or other member of the distribution system to incorporate that type of material in more future contact lenses. In another example, the geometry or shape of the contact lenses may also be analyzed in relation to the unsatisfactory responses to determine whether the lens' geometry is a contributing cause for some of the unsatisfactory responses.

[0147] In other situations, the unsatisfactory responses may be associated with factors that are not related to the manufacturing process. For example, if a lot of unsatisfactory responses are clustered around a particular date from a number of different users in the same geographic area, the system may look up the weather that was associated with that area for that particular day, the types of events that were going on that day, the type of holidays celebrated in that area that day, or look at other factors that may have affected user's contact lens wearing experience.

[0148] FIG. 15 shows a diagram of a system 1500 including a device 1505 that supports evaluating the user's experience with prescribed products or services in accordance with aspects of the present disclosure. Device 1505 may be an example of the device as described above, e.g., with reference to FIGS. 1-14. Device 1505 may include components for bi-directional voice and data communications including components for transmitting and receiving communications, including processor 1515, I/O controller 1520, and memory 1525. These components may be in electronic communication via one or more busses (e.g., bus 1510). Memory 1525 may also include profile matcher 1530, member matcher 1535, requester 1540, and feedback manager 1550.

[0149] Processor 1515 may include an intelligent hardware device, (e.g., a general-purpose processor, a digital signal processor (DSP), a central processing unit (CPU), a microcontroller, an application-specific integrated circuit (ASIC), a field-programmable gate array (FPGA), a programmable logic device, a discrete gate or transistor logic component, a discrete hardware component, or any combination thereof). In some cases, processor 5115 may be configured to operate a memory array using a memory controller. In other cases, a memory controller may be integrated into processor 1515. Processor 1515 may be configured

to execute computer-readable instructions stored in a memory to perform various functions (e.g., functions or tasks supporting the evaluation of prescribed products or services).

[0150] I/O controller 1520 may manage input and output signals for device 1505. I/O controller 1520 may also manage peripherals not integrated into device 1505. In some cases, I/O controller 1520 may represent a physical connection or port to an external peripheral. In some cases, I/O controller 1520 may utilize an operating system such as iOS®, ANDROID®, MS-DOS®, MS-WINDOWS®, OS/2®, UNIX®, LINUX®, or another known operating system. In other cases, I/O controller 1520 may represent or interact with a modem, a keyboard, a mouse, a touchscreen, or a similar device. In some cases, I/O controller 1520 may be implemented as part of a processor. In some cases, a user may interact with device 1505 via I/O controller 1520 or via hardware components controlled by I/O controller 1520. The I/O controller 1520 may be in communication with any appropriate input 1590 and any appropriate output 1595.

[0151] Memory 1525 may include random access memory (RAM) and read only memory (ROM). The memory 1525 may store computer-readable, computer-executable software including instructions that, when executed, cause the processor to perform various functions described herein. In some cases, the memory 1525 may contain, among other things, a basic input/output system (BIOS) which may control basic hardware and/or software operation such as the interaction with peripheral components or devices.

[0152] The profile matcher 1530 represents programmed instructions that cause the processor 1515 to match a user profile with a prescribed product or service. In some examples, the profile matcher 1530 can identify the prescribed products or services that are purchased by the user with the user's profile. This may be accomplished by scanning a database of purchases to find at least some of the user's information with a purchase of a particular product or service. In some cases, the identification number of the product is associated with the profile so that the manufacturing, shipping, and other details about the product are known to the user profile.

[0153] Member matcher 1535 represents programmed instructions that cause the processor 1515 to match the prescribed optical device with a set of members of a distribution system of the prescribed optical device. This information may identify who are is the prescriber (e.g. the doctor) of the prescribed product or service, the supplier, and/or the manufacturer. Knowing at least one member of the distribution system allows the user profile to communicate with the distribution system. This may result in improved communication with the manufacturers and thereby resulting in providing the manufacturers with information

for improving their products. This may also result in enabling the user profile to open a real time communication channel with the user's doctor for events like requesting a new appointment, modifying instructions to the user, or responding to negative user responses.

[0154] Requester 1540 may request information about the prescribed product or service through a user interface. Requesting information may include requesting information on a daily basis. In some cases, the requested information is related to the user's comfort when using the prescribed product or service.

[0155] Feedback manager 1550 may send feedback to one of the members of the distribution system based on the received information. In some cases, the feedback includes the received information in an unprocessed format. In alternative cases, the information is processed before being sent. The processing may occur on the device 1505, or the information may be sent to another device for processing before being sent to a member of the distribution system.

[0156] In some cases, the processed information may include a total number/frequency of unsatisfactory ratings, a percent of the total number of responses that are unsatisfactory, another factor, or combinations thereof. In some cases, the processed information includes associating the received information with a material of the prescribed optical device. In some cases, the processed information includes associating the received information with a manufacturing date of the prescribed optical device. In some cases, the feedback includes processed information based on the received information. In some cases, the processed information includes associating the received information with at least one aspect of the weather in the area of the user using the prescribed product or service. In some cases, the processed information includes associating the received information with a batch group identifier of the prescribed optical device. In some cases, the processed information includes associating the received information with at least one aspect of manufacturing the prescribed product or service. In some cases, the processed information includes associating the received information with the prescriber of the prescribed product or service. In some cases, the processed information includes associating the received information with a location of the user using the prescribed optical device.

[0157] The classification of an unsatisfactory rating may be predetermined. In those cases where the requested information is coupled with a predefined set of responses, each of the predefined responses may be categorized as a satisfactory response or an unsatisfactory response. In such situations, the selection of several different predefined responses may be classified as an unsatisfactory rating. Thus, selecting any of those predefined responses may

each result in incrementing the unsatisfactory results number. In some cases, multiple predefined responses are associated with unsatisfactory results, but different predefined responses are associated with varying unsatisfactory values. For example, a selection of a predefined response of “difficult” may result in incrementing the unsatisfactory rating number at a slower rate than selecting a predefined response of “very difficult.”

[0158] FIG. 16 shows a diagram of a system 1600 including a device 1605 that supports evaluating the user’s experience with prescribed products or services in accordance with aspects of the present disclosure. Device 1605 may include components for bi-directional voice and data communications including components for transmitting and receiving communications, including processor 1615, I/O controller 1620, and memory 1625. These components may be in electronic communication via one or more busses (e.g., bus 1610). Memory 1625 may also include profile matcher 1630, member matcher 1635, requester 1640, feedback manager 1650, linking manager 1660, and benefit manager 1680.

[0159] Linking manager 1660 may link a user responding to the requested information to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information. In some cases, the linking manager 1660 may link the user to the member in real time. Linking may include opening a text communication channel with the member, presenting an option to schedule an appointment with the member, linking the user to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information, or combinations thereof.

[0160] Benefit manager 1680 may award a benefit to the user in response to sending the requested information, creating a profile, providing a level of detailed information about the user’s experience, another type of interaction between the user and the user’s profile, or combinations thereof. In some cases, the benefit includes a discount on future purchases of prescribed products or services, a membership status, a coupon for a service or product unrelated to prescribed products or services, a preferred status when booking appointments with the doctor, other benefits, or combinations thereof.

[0161] In this example, the output 1695 is in communication with a server 1655. But, in other examples, the server 1655 may be direct communication with the I/O controller 1620. The server 1655 may receive the user responses from the users in a processed format, a partially processed format, or in a raw format. The server 1655 may process or further process the information so the information is organized for members of the distribution system to perform the analysis. The server may also process the information to make the information easier to analyze. In some cases, the server performs an analysis on the user’s

responses. The server may receive responses from multiple users and may organize and/or perform an analysis across a group of users. In some examples, the input 1690 is in communication with the server 1655 and information processed by the server 1655 is relayed back to the user through the user profile and device 1605.

[0162] FIG. 17 shows a diagram of a system 1700 including a device 1705 that supports evaluating the user's experience with prescribed products or services, in accordance with aspects of the present disclosure. Device 1705 may include components for bi-directional voice and data communications including components for transmitting and receiving communications, including processor 1715, I/O controller 1720 in communication with an input 1790 and an output 1795, and memory 1725. These components may be in electronic communication via one or more busses (e.g., bus 1710). Memory 1725 may also include analyzer 1765, categorizer 1770, aggregator 1785, and recommender 1775.

[0163] Aggregator 1785 may aggregate the received data. Analyzer 1765 may analyze the information sent from the users by determining when the threshold of unsatisfactory ratings is reached. Categorizer 1770 may categorize types of the unsatisfactory ratings into groups with common characteristics.

[0164] Recommender 1775 may recommend a change to a manufacturing process in response to reaching a predetermined threshold of the unsatisfactory ratings, recommend a change of temporarily stopping a portion of the manufacturing process, recommend a change to a material included in a batch of the prescribed products or services, recommend a geometry change to a geometry included in a batch of the prescribed products or services, recommend a change to a shelf life of a batch of the prescribed products or services, recommend another change, or combinations thereof.

[0165] FIG. 18 shows a flowchart illustrating a method 1800 for evaluating prescribed optical devices in accordance with aspects of the present disclosure. In this example, the method 1800 includes matching 1805 a user profile with a prescribed optical device, matching 1810 the prescribed optical device with a set of members of a distribution system of the prescribed optical device, requesting 1815 information about the prescribed optical device through a user interface, 1820 receiving information in response to requesting the information, and sending 1825 feedback based on the received information to one of the members of the distribution system. The operations of method 1800 may be implemented by a device operated by a user or its components as described herein. For example, the operations of method 1800 may be performed by the devices as described with reference to FIGS. 1-16. In some examples, the device may execute a set of codes to control the

functional elements of the device to perform the functions described below. Additionally or alternatively, the device may perform aspects of the functions described below using special-purpose hardware.

[0166] At block 1805, a user profile is matched with a prescribed optical device. The operations of block 1805 may be performed according to the methods described with reference to FIGS. 1 through 16. In certain examples, aspects of the operations of block 1805 may be performed by a profile matcher as described with reference to FIGS 15 and 16.

[0167] At block 1810, the prescribed optical device is matched with a plurality of members of a distribution system of the prescribed optical device. The operations of block 1810 may be performed according to the methods described with reference to FIGS. 1 through 16. In certain examples, aspects of the operations of block 1810 may be performed by a member matcher as described with reference to FIGS. 15 and 16.

[0168] At block 1815, information about the prescribed optical device is requested through a user interface. The operations of block 1815 may be performed according to the methods described with reference to FIGS. 1 through 16. In certain examples, aspects of the operations of block 1815 may be performed by a requester as described with reference to FIG. 18.

[0169] At block 1820, information is received. The operations of block 1820 may be performed according to the methods described with reference to FIGS. 1 through 16. In some cases, the information is received in response to answering the requests for information.

[0170] At block 1825, feedback based on the received information is sent to one of the members of the distribution system. The operations of block 1825 may be performed according to the methods described with reference to FIGS. 1 through 16. In addition, as illustrated in block 1830, some type of benefit or free merchandise may be provided to the user in exchange for sending the requested information, thereby encouraging participation.

[0171] FIG.19 shows a flowchart illustrating a method 1900 for evaluating prescribed products or services in accordance with aspects of the present disclosure. In this example, the method 1900 includes matching 1905 a user profile with a prescribed products or services, matching 1910 the prescribed products or services with a set of members of a distribution system of the prescribed products or services, requesting 1915 comfort information about the prescribed products or services through a user interface, 1920 receiving comfort information in response to requesting the information, sending 1925 feedback based on the received information to one of the members of the distribution system, processing 1930 the received comfort information at the server, sending 1935 feedback based on the received comfort

information to one of the members of the distribution system, and linking 1940 a user responding to the requested comfort information to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information. The operations of method 1900 may be implemented by a device or its components as described herein. For example, the operations of method 1900 may be performed by a device as described with reference to FIG. 18. In some examples, the device may execute a set of codes to control the functional elements of the device to perform the functions described below. Additionally or alternatively, the device may perform aspects of the functions described below using special-purpose hardware.

[0172] At block 1940, a user may be linked to a member of the distribution system in response to receiving an unsatisfactory threshold rating in the requested information. The operations of block 1940 may be performed according to the methods described with reference to FIGS. 1 through 17. In certain examples, aspects of the operations of block 1940 may be performed by a linking manager as described with reference to FIG. 17.

[0173] FIG. 20 shows a flowchart illustrating a method 2000 for evaluating prescribed products or services in accordance with aspects of the present disclosure. In this examples, the method 2000 includes receiving 2005 real time comfort information about prescribed products or services matched to a manufacturer, analyzing 2010 the comfort information by aggregating a total number of unsatisfactory ratings contained in the comfort information, categorizing 2015 types of the unsatisfactory ratings, and recommending 2020 a change to a manufacturing process in response to reaching a predetermined threshold of the unsatisfactory rating. The operations of method 2000 may be implemented by device or its components as described herein. For example, the operations of method 2000 may be performed by the device as described with reference to FIGS. 1 to 16. In some examples, the device may execute a set of codes to control the functional elements of the device to perform the functions described below. Additionally or alternatively, the device may perform aspects of the functions described below using special-purpose hardware.

[0174] At block 2005, real time comfort information is received about prescribed products or services matched by a manufacturer. The operations of block 2005 may be performed according to the methods described with reference to FIGS. 1 through 16. In certain examples, aspects of the operations of block 2005 may be performed by an analyzer as described with reference to FIG. 17.

[0175] At block 2010, the comfort information is analyzed by aggregating a total number of unsatisfactory ratings contained in the comfort information. The operations of block 2010

may be performed according to the methods described with reference to FIGS. 14 through 17. In certain examples, aspects of the operations of block 2010 may be performed by an analyzer as described with reference to FIG. 17.

[0176] At block 2015, the information is categorized into types of unsatisfactory ratings. The operations of block 2015 may be performed according to the methods described with reference to FIGS. 14 through 17. In certain examples, aspects of the operations of block 2015 may be performed by a categorizer as described with reference to FIG. 17.

[0177] At block 2020, recommend is generated to make a change to a manufacturing process in response to reaching a predetermined threshold of the unsatisfactory ratings. The operations of block 2020 may be performed according to the methods described with reference to FIGS. 14 through 17. In certain examples, aspects of the operations of block 2120 may be performed by a recommender as described with reference to FIG. 17.

[0178] FIG. 21 illustrates a system 2100 for receiving information about a user, utilizing the received information to determine a treatment, advice, modification, and providing information from a doctor or medical professional to the user. As shown in Fig. 21, the system 2100 includes a computing device 2101 accessible by the user. As mentioned previously, the computing device 2101 may be any type of computing device having a processor and configured to receive a signal and information from a remote source, and to display information, including an avatar of a doctor or other medical professional associated with the user. According to one exemplary embodiment, the computing device 2101 may include a smartphone, a tablet computer, a personal computer, a laptop computer, a gaming system, or any other computing device mentioned above or otherwise configured to receive and process information and display graphical information. As mentioned previously, user information may be transmitted to the system 2100 via the computing device 2101. The user may manually input information to the system using the computing device via an input device such as a keyboard or a touchscreen; information may be automatically collected by the computing device; information may be automatically collected by an associated optional smart device 2108 such as a smart contact lens, smart earphones, or other device configured to evaluate biomarkers or other physiological changes experienced by the user.

[0179] Once information is entered into the system 2100, it may be passed to a server or a remote computer 2103 for processing. As illustrated, the data transfer may occur via the cloud 2102 if the server or remote computer 2103 is remote from the computing device 2101. Alternatively, the processing may occur locally on the computing device 2101. A processor 2104 may receive the information and apply any number of rules and/or commands to

analyze the data received and select or prepare a response to the user. As shown, a database or other large data collections 2105 may be used to determine the course of action to take with the received user data. Again, the database/big data 2105 database may be remote to the server/remote computer 2103 and can be accessed via the cloud 2102. Once the data, such as detected biomarker indicators, is received and analyzed, a recommended communication may be selected by the server/remote computer 2103 for the user. As noted above, that recommendation may then be delivered to the user on the computing device 2101 by a doctor avatar. The use of the avatar more readily creates trust between the user and the doctor, causes the recommended treatment to be more readily accepted by the user, and reduces the feeling of lonesomeness or isolation by the user.

[0180] Additionally, the server/remote computer 2103 may transmit the determined message, along with the gathered information to a doctor for approval and or modification. According to this exemplary embodiment, exposure to the data and recommendation by a licensed doctor prior to transmission of the message to the user's computing device 2101 allows for the writing of valid prescriptions, and allows the licensed doctor to see more patients, lower office overhead, and receive the benefit of artificial intelligence or other heavy computing resources analyzing the biomarkers and other indicators to provide a recommended course of action, if any.

[0181] FIG. 22 depicts a block diagram of a computer system 2200 suitable for implementing the present exemplary system and method. The depicted computer system 2200 may be one example of a device described above, such as a smart phone, a wearable, an automobile, a server, a tablet computer, a home computer, and the like. While described in detail with a number of components, the present system can be incorporated into any number of computing systems including all, some, or none of the elements detailed in FIG. 22. Particularly, the present exemplary system can be connected to a system on a chip (SOC) device wherein the functionality of the system is associated with the other components on the chip, rather than through a bus or other system.

[0182] As shown in FIG. 22, the computer system 2200 includes a bus 2202 which interconnects major subsystems of computer system 2200, such as a central processor 2204, a system memory 2206 (typically RAM, but which may also include ROM, flash RAM, or the like), an input/output controller 2208, an external audio device, such as a speaker system 2210 via an audio output interface 2212, an external device, such as a disk, card, or chip unit 2232 operative to receive a disk, memory card, or a chip 2234; a display screen 2222 via display adapter 2216; serial ports 2218 and mouse 2220; a keyboard 2222 (interfaced with a

keyboard controller 2224); multiple USB devices 2223 (interfaced with a USB controller 2228); a storage interface 2230; a host bus adapter (HBA) interface card 2236A operative to connect with a Fiber Channel network 2238; a host bus adapter (HBA) interface card 2236B operative to connect to a SCSI bus 2240; and an optical disk drive 2242 operative to receive an optical disk 2244. Also included are a mouse 2246 (or other point-and-click device, coupled to bus 2202 via serial port 2218), a modem 2248 (coupled to bus 2202 via serial port 2220), and a network interface 2250 (coupled directly to bus 2202).

[0183] Bus 2202 allows data communication between central processor 2204 and system memory 2206, which may include read-only memory (ROM) or flash memory (neither shown), and random access memory (RAM) (not shown), as previously noted. The RAM is generally the main memory into which the operating system and application programs are loaded. The ROM or flash memory can contain, among other code, the Basic Input-Output system (BIOS) which controls basic hardware operation such as the interaction with peripheral components or devices. Applications resident with computer system 2200 are generally stored on and accessed via a non-transitory computer readable medium, such as a hard disk drive (*e.g.*, fixed disk 2252), an optical drive (*e.g.*, optical drive 2242), or other storage medium. Additionally, applications can be in the form of electronic signals modulated in accordance with the application and data communication technology when accessed via network modem 2248 or interface 2250.

[0184] Storage interface 2230, as with the other storage interfaces of computer system 2200, can connect to a standard computer readable medium for storage and/or retrieval of information, such as a fixed disk drive 2252. Fixed disk drive 2252 may be a part of computer system 2200 or may be separate and accessed through other interface systems. Modem 2248 may provide a direct connection to a remote server via a telephone link or to the Internet via an internet service provider (ISP). Network interface 2250 may provide a direct connection to a remote server via a direct network link to the Internet via a POP (point of presence). Network interface 2250 may provide such connection using wireless techniques, including digital cellular telephone connection, Cellular Digital Packet Data (CDPD) connection, digital satellite data connection or the like.

[0185] As illustrated in FIG. 22, a biomarker sensor 2260 may be integrated into the computer system 2200. When the biomarker sensor detects a certain biomarker or biomarkers, a signal may be transmitted through the bus to the central processor 2204, which may then access instructions on the system memory 2206, that dictate what subsequent action is taken by the central processor 2204, if any.

[0186] Many other devices or subsystems (not shown) may be connected in a similar manner (*e.g.*, document scanners, digital cameras and so on). Conversely, all of the devices shown in FIG. 22 need not be present to practice the present systems and methods. The devices and subsystems can be interconnected in different ways from that shown in FIG. 22. The operation of at least some of the computer system 2200 such as that shown in FIG. 22 is readily known in the art and is not discussed in detail in this application. Code to implement the present disclosure can be stored in a non-transitory computer-readable medium such as one or more of system memory 2206; a disk, memory card, or chip 2234; a fixed disk 2252; or optical disk 2244. The operating system provided on computer system 2200 may be MS-DOS[®], MS-WINDOWS[®], OS/2[®], UNIX[®], Linux[®], or another known operating system.

[0187] The description set forth herein, in connection with the appended drawings, describes example configurations and does not represent all the examples that may be implemented or that are within the scope of the claims. The term “exemplary” used herein means “serving as an example, instance, or illustration,” and not “preferred” or “advantageous over other examples.” The detailed description includes specific details for the purpose of providing an understanding of the described techniques. These techniques, however, may be practiced without these specific details. In some instances, well-known structures and devices are shown in block diagram form in order to avoid obscuring the concepts of the described examples.

[0188] In the appended figures, similar components or features may have the same reference label. Further, various components of the same type may be distinguished by following the reference label by a dash and a second label that distinguishes among the similar components. If just the first reference label is used in the specification, the description is applicable to any one of the similar components having the same first reference label irrespective of the second reference label.

[0189] Information and signals described herein may be represented using any of a variety of different technologies and techniques. For example, data, instructions, commands, information, signals, bits, symbols, and chips that may be referenced throughout the above description may be represented by voltages, currents, electromagnetic waves, magnetic fields or particles, optical fields or particles, or any combination thereof.

[0190] The various illustrative blocks and modules described in connection with the disclosure herein may be implemented or performed with a general-purpose processor, a DSP, an ASIC, an FPGA or other programmable logic device, discrete gate or transistor logic, discrete hardware components, or any combination thereof designed to perform the

functions described herein. A general-purpose processor may be a microprocessor, but in the alternative, the processor may be any conventional processor, controller, microcontroller, or state machine. A processor may also be implemented as a combination of computing devices (e.g., a combination of a digital signal processor (DSP) and a microprocessor, multiple microprocessors, one or more microprocessors in conjunction with a DSP core, or any other such configuration).

[0191] The functions described herein may be implemented in hardware, software executed by a processor, firmware, or any combination thereof. If implemented in software executed by a processor, the functions may be stored on or transmitted over as one or more instructions or code on a computer-readable medium. Other examples and implementations are within the scope of the disclosure and appended claims. For example, due to the nature of software, functions described above can be implemented using software executed by a processor, hardware, firmware, hardwiring, or combinations of any of these. Features implementing functions may also be physically located at various positions, including being distributed such that portions of functions are implemented at different physical locations. Also, as used herein, including in the claims, “or” as used in a list of items (for example, a list of items prefaced by a phrase such as “at least one of” or “one or more of”) indicates an inclusive list such that, for example, a list of at least one of A, B, or C means A or B or C or AB or AC or BC or ABC (i.e., A and B and C). Also, as used herein, the phrase “based on” shall not be construed as a reference to a closed set of conditions. For example, an exemplary step that is described as “based on condition A” may be based on both a condition A and a condition B without departing from the scope of the present disclosure. In other words, as used herein, the phrase “based on” shall be construed in the same manner as the phrase “based at least in part on.”

[0192] Computer-readable media includes both non-transitory computer storage media and communication media including any medium that facilitates transfer of a computer program from one place to another. A non-transitory storage medium may be any available medium that can be accessed by a general purpose or special purpose computer. By way of example, and not limitation, non-transitory computer-readable media can comprise RAM, ROM, electrically erasable programmable read only memory (EEPROM), compact disk (CD) ROM or other optical disk storage, magnetic disk storage or other magnetic storage devices, or any other non-transitory medium that can be used to carry or store desired program code means in the form of instructions or data structures and that can be accessed by a general-purpose or special-purpose computer, or a general-purpose or special-purpose processor.

Also, any connection is properly termed a computer-readable medium. For example, if the software is transmitted from a website, server, or other remote source using a coaxial cable, fiber optic cable, twisted pair, digital subscriber line (DSL), or wireless technologies such as infrared, radio, and microwave, then the coaxial cable, fiber optic cable, twisted pair, digital subscriber line (DSL), or wireless technologies such as infrared, radio, and microwave are included in the definition of medium. Disk and disc, as used herein, include CD, laser disc, optical disc, digital versatile disc (DVD), floppy disk and Blu-ray disc where disks usually reproduce data magnetically, while discs reproduce data optically with lasers. Combinations of the above are also included within the scope of computer-readable media.

[0193] The description herein is provided to enable a person skilled in the art to make or use the disclosure. Various modifications to the disclosure will be readily apparent to those skilled in the art, and the generic principles defined herein may be applied to other variations without departing from the scope of the disclosure. Thus, the disclosure is not limited to the examples described herein, but is to be accorded the broadest scope consistent with the principles and novel features disclosed herein.

CLAIMS

What is claimed is:

1. A method for evaluating a prescribed optical device, the method comprising:
matching a user profile with a prescribed optical device, the user profile comprising a plurality of attributes associated with a user;
generating a user interface at a network device that includes information associated with the prescribed optical device;
detecting an input at the user interface related to the prescribed optical device;
matching the prescribed optical device with one or more members of a distribution system of the prescribed optical device;
sending feedback to the one or more members of the distribution system based on the detected input and the user profile;
generating a summary from data collected from the user, the summary comprising responses provided by the user and data collected from one or more sensors;
providing the summary to the one or more members of the distribution system; and
generating a second user interface at the network device that includes modified information associated with the prescribed optical device based on the detected input.
2. The method of claim 1, wherein the detected input is associated with comfort information about the prescribed optical device.
3. The method of claim 1, wherein:
the method further comprises, in response to the operation of sending feedback, receiving information from the one or more members of the distribution system; and
the modified information of the second user interface is based on the information received from the one or more members of the distribution system.
4. The method of claim 1, wherein the one or more members of the distribution system includes at least one of a prescriber of the prescribed optical device, a supplier of the prescribed optical device, or a manufacturer of the prescribed optical device.

5. The method of claim 1, wherein:
 - the user profile is a first user profile;
 - the prescribed optical device is a first prescribed optical device; and
 - the method further comprises:
 - matching a second user profile with a second prescribed optical device; and
 - generating a second user interface that includes information associated with the second prescribed optical device.
6. The method of claim 5, wherein the method further comprises:
 - collecting feedback from a first user associated with the first user profile pertaining to the first prescribed optical device;
 - collecting feedback from a second user associated with the second user profile pertaining to the second prescribed optical device; and
 - in response to determining the collected feedback from one of the first user or second user meets an unsatisfactory threshold, linking the one of the first user or second user to the one or more members of the distribution system.
7. A method for evaluating a prescribed optical device, the method comprising:
 - matching a prescribed optical device with one or more members of a distribution system of the prescribed optical device;
 - receiving an input about the prescribed optical device via a network device having a user interface adapted to display information associated with the prescribed optical device, wherein the input comprises data automatically collected from a first user by one or more sensors;
 - analyzing the input by aggregating a total number of unsatisfactory ratings from inputs collected across a group of users, each of the users having a user profile matched with a prescribed optical device, each user profile comprising a plurality of attributes associated with the respective user;
 - generating a feedback response based on the unsatisfactory ratings and corresponding with the matched one or more members of the distribution system of the prescribed optical device, wherein generating the feedback response further includes generating the feedback response as adapted to individual ones of the group of users based on the unsatisfactory ratings; and

generating a summary from data collected from the first user, the summary comprising responses provided by the first user and data collected from the one or more sensors.

8. The method of claim 7, wherein:

the operation of analyzing further includes determining the total number of unsatisfactory ratings exceeds a predetermined threshold; and

the method further includes generating an alert based on the determination of the total number of unsatisfactory ratings exceeding the predetermined threshold.

9. The method of claim 8, further comprising:

transmitting the alert to the one or more members of the distribution system; and

in response to the alert, initiating one or more of:

a temporary stoppage of at least a portion a manufacturing process associated with the prescribed optical device; or

a change to one or more of a material, a geometry, or a shelf life of a batch of devices manufactured using the manufacturing process.

10. The method of claim 7, wherein the received input corresponds to comfort information.

11. The method of claim 7, wherein the operation of generating a feedback response further includes generating a first user interface for a first user, and generating a second user interface for a second user that is distinct from the first user interface.

12. The method of claim 11, wherein:

the first user interface includes information associated with the prescribed optical device based on a first user profile; and

the second user interface includes modified information associated with the prescribed optical device based on a second user profile.

13. The method of claim 7, wherein the operation of generating a feedback response includes providing a response from a doctor or other medical professional through a user

interface of a network device, the doctor or other medical professional included in the one or more members of the distribution system.

14. The method of claim 13, wherein the operation of generating a feedback response includes displaying an avatar of the doctor via the user interface.

15. A system for evaluating a prescribed optical device, the system comprising:
a processor;
a display of a network device, the display configured to define a user interface; and
a memory coupled to the processor, the memory for storing instructions which, when executed by the processor, causes the processor to:

match a user profile with a prescribed optical device, the user profile comprising a plurality of attributes associated with a user;

match the prescribed optical device with one or more members of a distribution system of the prescribed optical device;

generate a first user interface at the display including information associated with the prescribed optical device;

receive one or more inputs associated with the prescribed optical device via the network device;

using the received one or more inputs, generate a second user interface including modified information associated with the prescribed optical device; and

using the received one or more inputs and data collected from one or more sensors, generate a summary and provide the summary to the one or more members of the distribution system.

16. The system of claim 15, wherein the memory stores further instruction which, when executed by the processor, causes the processor to send feedback to the one or more members of the distribution system based on the received input.

17. The system of claim 16, wherein:

the memory stores further instruction which, when executed by the processor, causes the processor to receive information from the one or more members of the distribution system; and

the modified information of the second user interface is based on the information received from the one or more members of the distribution system.

18. The system of claim 16, wherein:

the memory stores further instructions which, when executed by the processor, causes the processor to analyze the one or more inputs by aggregating a total number of unsatisfactory ratings contained in the one or more inputs; and

the modified information of the second user interface is based on the unsatisfactory ratings.

19. The system of claim 18, wherein the memory stores further instructions which, when executed by the processor, causes the processor to:

determine the total number of unsatisfactory ratings exceeds a predetermined threshold;

generate an alert based on the determination of the total number of unsatisfactory ratings exceeding the predetermined threshold; and

transmit the alert to the one or more members of the distribution system.

20. The system of claim 15, wherein one or both of the first user interface or the second user interface comprises an avatar that is adapted to deliver a message to a user of the network device associated with the prescribed optical device.

21. The system of claim 20, wherein the user profile corresponds to the user of the network device.

22. The system of claim 20, wherein the avatar comprises an animated avatar adaptable to the one or more inputs received via the network device, or to a feedback response from the one or more members of the distribution system.

23. The system of claim 15, wherein the memory stores further instruction which, when executed by the processor, causes the processor to generate the second user interface using an age of the user of the network device.

24. The method of claim 1, wherein the plurality of attributes associated with the user include non-identifying information.