CLAIMS

1. A computer-implemented method for deploying a digital therapeutic program, the method comprising:

determining a likelihood of use of the digital therapeutic for each of a plurality of users, wherein a machine learning model receives a plurality of user characteristics to output the likelihood of use of the digital therapeutic for each of the plurality of users, wherein each of the plurality of users can access the digital therapeutic using a single respective account linked to one or more respective target user electronic devices, wherein the digital therapeutic for a given user from the plurality of users communicates with at least one external application associated with the given user, the external application selected from at least one of an exercise tracking application or a health related application, each respective target user electronic device configured to received data from a clinical data server and a user interface server, the user interface server configured to receive and process user inputs, each respective target user electronic device comprising a presentation layer selected from a web browser, application, or messaging interface, wherein the presentation layer provides notifications and alerts associated with the digital therapeutic,

wherein the digital therapeutic is configured to output a treatment based on:

initial data comprising current medication, adherence history to prescribed medications, carbohydrate intake, weight, and blood glucose levels;

a user history of engagement with a respective target user electronic device; and

an identified cohort of users associated with each of the plurality of users, respectively, the identified cohort of users determined based on one of a similarity in physical condition, similarity in medical condition, or similarity in psycho determinant condition;

determining a feedback potential for each of the plurality of users, the feedback potential corresponding to a likelihood of feedback of the digital therapeutic, wherein the machine learning model outputs the feedback potential based the user characteristics, past feedback potentials, and past user characteristics;

identifying a plurality of target users from the plurality of users for the digital therapeutic based on one or more target parameters comprising the likelihood of use of the digital therapeutic and the feedback potential for each of the plurality of target users and further based on at least one clinical factor wherein a clinical factor is based on a health acuity, at least one disease factor, wherein the at least one disease factor is based on a presence of a co-morbid condition, at least one social factor, wherein the at least one social factor is based on one or more of a level of education, an income, an access to care, or mental health, and at least one geographical factor, wherein the at least one geographical factor is based on one or more of a geographical attribute and an age attribute;

determining access to technology for each of the plurality of users, the access to technology comprising identifying access to a wired or wireless internet connection and access to hardware, the hardware comprising a respective target user electronic device that is connected to the wired or wireless internet connection;

determining a technological sophistication for each of the plurality of users, the technological sophistication being determined based on an interaction with the respective target user electronic device, the interaction being assessed real-time;

determining a market segment factor for each of the plurality of users, the market segment factor comprising a likelihood of insurance coverage for each respective plurality of users, the market segment factor being based on market segment information received from a cloud database that comprises insurance attributes associated with the each of the plurality of users;

identifying the plurality of target users further based on the access to technology for each of the plurality of users, and excluding the plurality of users for whom the access to technology is not sufficient;

identifying the plurality of users further based on the technological sophistication for each of the plurality of users, and excluding the plurality of users for whom the technological sophistication is not sufficient;

identifying the plurality of users further based on the market segment factor and excluding the plurality of users for whom the market segment factor indicates a low likelihood of insurance coverage;

identifying optimal outreach for one or more of the plurality of target users using an outreach medium, wherein the optimal outreach is provided to a highest awareness output selected from one or more of a service output, a methodology output, an individual output, a group output, or an entity output, wherein the outreach is identified based on an outreach factor selected from one or more of an outreach method, an outreach modality, an outreach frequency, an outreach time, and an outreach level of interaction the outreach medium being conducted based on a scalability potential, wherein:

the outreach method is an automated outreach,

the outreach modality is a technological modality selected from a broadcast, a multicast or a single cast modality, and

the outreach frequency is based on a balance ratio determined based on an amount of outreach over an outreach time period, the ratio output by the machine learning model to prevent oversaturation;

identifying an activation to optimize use of the digital therapeutic using respective target user electronic devices wherein the machine learning model identifies the activation based the user characteristics, past activation, and past characteristics, the activation based on one or more of a modality, a data-enablement verses data-entry, or location, the activation being identified to maximize an activation to outreach ratio, the activation being automated via at least one of a non-deep link, deep link, or automated bot;

providing medical treatments via the digital therapeutic on respective target user electronic devices, based on importing activity tracking device data

for the respective target users, the medical treatments comprising a specific treatment plan, the specific treatment plan comprising a medication component, a diet component, and an exercise component;

receiving an engagement level of the digital therapeutic by one or more of the plurality of target users via the target user electronic devices, wherein the engagement level comprises a frequency of engagement determine based on an amount of times the digital therapeutic is engaged with by the one or more of the plurality of users and further comprises a length of engagement based on a duration of engagement with the digital therapeutic by the one or more plurality of users; and

updating the machine learning model based on the received engagement level and further by a training component based on a comparison result of the plurality of target users to a number of user reached via the optimal outreach.

2. The computer-implemented method of claim 1, further comprising generating a report based on one or more of the target users, the outreach, the activation, or activating the digital therapeutic.

3. The computer-implemented method of claim 2, wherein the report is based on one or more of an informative analysis, discovery analysis, extrapolative analysis, or an adaptive analysis.

4. The computer-implemented method of claim 2, wherein the report comprises a comparison of an N+1 stage score to an N stage score for each stage except a final stage.

5. The computer-implemented method of claim 1, wherein the activation is based on one or more of a modality, data-enablement versus data-entry, or a location.

6. The computer-implemented method of claim 1, wherein the engagement level is based on one or more of an in-solution versus out-of-solution, a frequency, a length, or a modality, wherein the in-solution corresponds to the digital therapeutic and the out-of-solution is external to the digital therapeutic.

7. The computer-implemented method of claim 1, wherein at least one of the identifying the plurality of target users, conducting outreach, identifying an activation , and activating the activation is based on an output of a machine learning model.

8. The computer-implemented method of claim 7, wherein the machine learning model is trained using training data that comprises one or more of stage inputs, known outcomes, and comparison results.

9. The computer-implemented method of claim 8, wherein the comparison results are a ratio of an N+1 stage score to an N stage score for each stage except a final stage.

10. A system for deploying a digital therapeutic, the system comprising:

a data storage device storing a machine learning model, wherein the machine learning model is trained using at least one of supervised training or unsupervised training; and

a processor operatively connected to the data storage device and configured to execute the machine learning model for

determining a likelihood of use of the digital therapeutic for each of a plurality of users, wherein the machine learning model receives a plurality of user characteristics to output the likelihood of use of the digital therapeutic for each of the plurality of users, wherein each of the plurality of users can access of the digital therapeutic using a single respective account linked to one or more respective target user electronic devices, wherein the digital therapeutic for a given user from the plurality of users communicates with at least one external application associated with the given user, the external application selected from at least one of an exercise tracking application or a health related application, each respective target user electronic device configured to received data from a clinical data server and a user interface server, the user interface server configured to receive and process user inputs, each respective target user electronic device comprising a presentation layer selected from a web browser,

application, or messaging interface, wherein the presentation layer provides notifications and alerts associated with the digital therapeutic;

wherein the digital therapeutic is configured to output a treatment based on:

initial data comprising current medication, adherence history to prescribed medications, carbohydrate intake, weight, and blood glucose levels;

a user history of engagement with a respective target user electronic device; and

an identified cohort of users associated with each of the plurality of users, respectively, the identified cohort of users determined based on one of a similarity in physical condition, similarity in medical condition, or similarity in psycho determinant condition;

determining a feedback potential for each of the plurality of users, the feedback potential corresponding to a likelihood of feedback of the digital therapeutic, wherein the machine learning model outputs the feedback potential based the user characteristics, past feedback potentials, and past user characteristics;

identifying a plurality of target users from the plurality of users for the digital therapeutic based on one or more target parameters comprising the likelihood of use of the digital therapeutic and the feedback potential for each of the plurality of target users and further based on at least one clinical factor

wherein a clinical factor is based on a health acuity, at least one disease factor, wherein the at least one disease factor is based on a presence of a co-morbid condition, at least one social factor, wherein the at least one social factor is based on one or more of a level of education, an income, an access to care, or mental health, and at least one geographical factor, wherein the at least one geographical factor is based on one or more of a geographical attribute and an age attribute;

determining access to technology for each of the plurality of users, the access to technology comprising identifying access to a wired or wireless internet connection and access to hardware, the hardware comprising a respective target user electronic device that is connected to the wired or wireless internet connection;

determining a technological sophistication for each of the plurality of users, the technological sophistication being determined based on an interaction with the respective target user electronic device, the interaction being assessed real-time;

determining a market segment factor for each of the plurality of users, the market segment factor comprising a likelihood of insurance coverage for each respective plurality of users, the market segment factor being based on market segment information received from a cloud database that comprises insurance attributes associated with the each of the plurality of users;

identifying the plurality of target users further based on the access to technology for each of the plurality of users, and excluding the plurality of users for whom the access to technology is not sufficient;

identifying the plurality of users further based on the technological sophistication for each of the plurality of users, and excluding the plurality of users for whom the technological sophistication is not sufficient;

identifying the plurality of users further based on the market segment factor and excluding the plurality of users for whom the market segment factor indicates a low likelihood of insurance coverage;

identifying optimal outreach for one or more of the plurality of target users using an outreach medium, wherein the optimal outreach is provided to a highest awareness output selected from one or more of a service output, a methodology output, an individual output, a group output, or an entity output, wherein the outreach is identified based on an outreach factor selected from one or more of an outreach method, an outreach modality, an outreach frequency, an outreach time, and an outreach level of interaction the outreach medium being conducted based on a scalability potential, wherein:

the outreach method is an automated outreach,

the outreach modality is a technological modality selected from a broadcast, a multicast or a single cast modality, and

the outreach frequency is based on a balance ratio determined based on an amount of outreach over an outreach time period, the ratio output by the machine learning model to prevent oversaturation;

identifying an activation to optimize use of the digital therapeutic using respective target user electronic devices wherein the machine learning model identifies the activation based the user characteristics, past activation, and past characteristics, the activation based on one or more of a modality, a data-enablement verses data-entry, or location, the activation being identified to maximize an activation to outreach ratio, the activation being automated via at least one of a non-deep link, deep link, or automated bot;

providing medical treatments via the digital therapeutic on respective target user electronic devices, based on importing activity tracking device data for the respective target users, the medical treatments comprising a specific treatment plan, the specific treatment plan comprising a medication component, a diet component, and an exercise component;

receiving an engagement level of the digital therapeutic by one or more of the plurality of target users via the target user electronic devices, wherein the engagement level comprises a frequency of engagement determine based on an amount of times the digital therapeutic is engaged with by the one or more of the plurality of users and further comprises a length of engagement based on a duration of engagement with the digital therapeutic by the one or more plurality of users; and

updating the machine learning model based on the received engagement level and further by a training component based on a comparison result of the plurality of target users to a number of user reached via the optimal outreach.

11. A non-transitory computer-readable medium storing instructions that, when executed by processor, cause the processor to perform operations for deploying a digital therapeutic program, the operations comprising:

determining a likelihood of use of the digital therapeutic for each of a plurality of users, wherein a machine learning model receives a plurality of user characteristics to output the likelihood of use of the digital therapeutic for each of the plurality of users, wherein each of the plurality of users can access the digital therapeutic using a single respective account linked to one or more respective target user electronic devices, wherein the digital therapeutic for a given user from the plurality of users communicates with at least one external application associated with the given user, the external application selected from at least one of an exercise tracking application or a health related application, each respective target user electronic device configured to received data from a clinical data server and a user interface server, the user interface server configured to receive and process user inputs, each respective target user electronic device comprising a presentation layer selected from a web browser, application, or messaging interface, wherein the presentation layer provides notifications and alerts associated with the digital therapeutic,

wherein the digital therapeutic is configured to output a treatment based on:

initial data comprising current medication, adherence history to prescribed medications, carbohydrate intake, weight, and blood glucose levels;

a user history of engagement with a respective target user electronic device; and

an identified cohort of users associated with each of the plurality of users, respectively, the identified cohort of users determined based on one of a similarity in physical condition, similarity in medical condition, or similarity in psycho determinant condition;

determining a feedback potential for each of the plurality of users, the feedback potential corresponding to a likelihood of feedback of the digital therapeutic, wherein the machine learning model outputs the feedback potential based the user characteristics, past feedback potentials, and past user characteristics;

identifying a plurality of target users from the plurality of users for the digital therapeutic based on one or more target parameters comprising the likelihood of use of the digital therapeutic and the feedback potential for each of the plurality of target users and further based on at least one clinical factor wherein a clinical factor is based on a health acuity, at least one disease factor, wherein the at least one disease factor is based on a presence of a co-morbid condition, at least one social factor, wherein the at least one social factor is based on one or more of a level of education, an income, an access to care, or mental health, and at least one geographical factor, wherein the at least one geographical factor is based on one or more of a geographical attribute and an age attribute;

determining access to technology for each of the plurality of users, the access to technology comprising identifying access to a wired or wireless internet connection and access to hardware, the hardware comprising a respective target user electronic device that is connected to the wired or wireless internet connection;

determining a technological sophistication for each of the plurality of users, the technological sophistication being determined based on an interaction with the respective target user electronic device, the interaction being assessed real-time;

determining a market segment factor for each of the plurality of users, the market segment factor comprising a likelihood of insurance coverage for each respective plurality of users, the market segment factor being based on market segment information received from a cloud database that comprises insurance attributes associated with the each of the plurality of users;

identifying the plurality of target users further based on the access to technology for each of the plurality of users, and excluding the plurality of users for whom the access to technology is not sufficient;

identifying the plurality of users further based on the technological sophistication for each of the plurality of users, and excluding the plurality of users for whom the technological sophistication is not sufficient;

identifying the plurality of users further based on the market segment factor and excluding the plurality of users for whom the market segment factor indicates a low likelihood of insurance coverage;

identifying optimal outreach for one or more of the plurality of target users using an outreach medium, wherein the optimal outreach is provided to a highest awareness output selected from one or more of a service output, a methodology output, an individual output, a group output, or an entity output, wherein the outreach is identified based on an outreach factor selected from one or more of an outreach method, an outreach modality, an outreach frequency, an outreach time, and an outreach level of interaction the outreach medium being conducted based on a scalability potential, wherein:

the outreach method is an automated outreach,

the outreach modality is a technological modality selected from a broadcast, a multicast or a single cast modality, and

the outreach frequency is based on a balance ratio determined based on an amount of outreach over an outreach time period, the ratio output by the machine learning model to prevent oversaturation;

identifying an activation to optimize use of the digital therapeutic using respective target user electronic devices wherein the machine learning model identifies the activation based the user characteristics, past activation, and past characteristics, the activation based on one or more of a modality, a data-enablement verses data-entry, or location, the activation being identified to maximize an activation to outreach ratio, the activation being automated via at least one of a non-deep link, deep link, or automated bot;

providing medical treatments via the digital therapeutic on respective target user electronic devices, based on importing activity tracking device data

for the respective target users, the medical treatments comprising a specific treatment plan, the specific treatment plan comprising a medication component, a diet component, and an exercise component;

receiving an engagement level of the digital therapeutic by one or more of the plurality of target users via the target user electronic devices, wherein the engagement level comprises a frequency of engagement determine based on an amount of times the digital therapeutic is engaged with by the one or more of the plurality of users and further comprises a length of engagement based on a duration of engagement with the digital therapeutic by the one or more plurality of users; and

updating the machine learning model based on the received engagement level and further by a training component based on a comparison result of the plurality of target users to a number of user reached via the optimal outreach.