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(54) **BUSINESS PROCESS AUTOMATION IN A HEALTH PLAN ORGANIZATION**

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G06Q 40/00 (2006.01)

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(58) **Field of Classification Search** 705/1, 2, 705/4, 7, 26, 35, 45; 706/45; 707/10; 715/523
See application file for complete search history.

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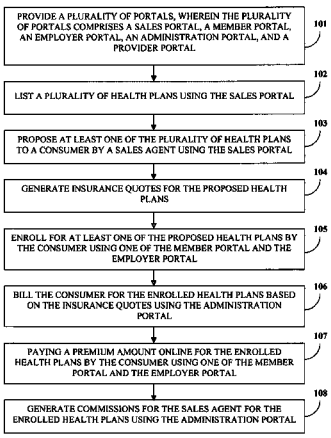
(57) **ABSTRACT**

The computer implemented method and system disclosed herein automates business processes of a health plan organization using a plurality of portals. The portals comprise a sales portal, a member portal, an employer portal, an administration portal, and a provider portal. Health plans are listed using the sales portal. A sales agent proposes at least one of the health plans to a consumer using the sales portal. The administration portal generates insurance quotes for the proposed health plans. The consumer enrolls for the proposed health plans using one of the member portal and the employer portal. The consumer is billed for the enrolled health plans based on the insurance quotes using the administration portal. The consumer pays a premium amount online for the enrolled health plans using the member portal or the employer portal. The administration portal then generates commissions for the sales agent for the enrolled health plans.

17 Claims, 3 Drawing Sheets



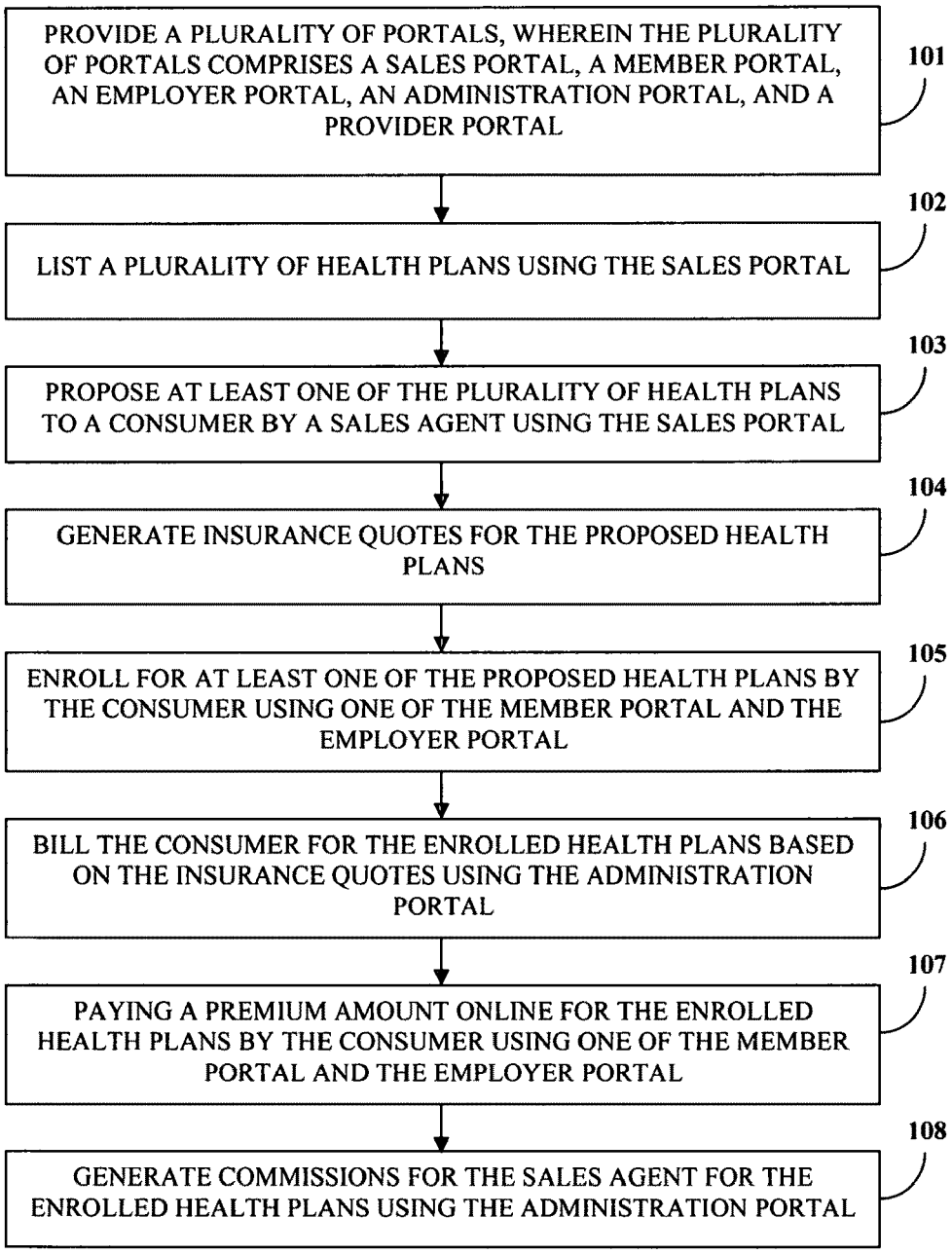

PROVIDE A PLURALITY OF PORTALS, WHEREIN THE PLURALITY OF PORTALS COMPRISES A SALES PORTAL, A MEMBER PORTAL, AN EMPLOYER PORTAL, AN ADMINISTRATION PORTAL, AND A PROVIDER PORTAL
101
LIST A PLURALITY OF HEALTH PLANS USING THE SALES PORTAL
102
PROPOSE AT LEAST ONE OF THE PLURALITY OF HEALTH PLANS TO A CONSUMER BY A SALES AGENT USING THE SALES PORTAL
103
GENERATE INSURANCE QUOTES FOR THE PROPOSED HEALTH PLANS
104
ENROLL FOR AT LEAST ONE OF THE PROPOSED HEALTH PLANS BY THE CONSUMER USING ONE OF THE MEMBER PORTAL AND THE EMPLOYER PORTAL
105
BILL THE CONSUMER FOR THE ENROLLED HEALTH PLANS BASED ON THE INSURANCE QUOTES USING THE ADMINISTRATION PORTAL
106
PAYING A PREMIUM AMOUNT ONLINE FOR THE ENROLLED HEALTH PLANS BY THE CONSUMER USING ONE OF THE MEMBER PORTAL AND THE EMPLOYER PORTAL
107
GENERATE COMMISSIONS FOR THE SALES AGENT FOR THE ENROLLED HEALTH PLANS USING THE ADMINISTRATION PORTAL
108

FIGURE 1

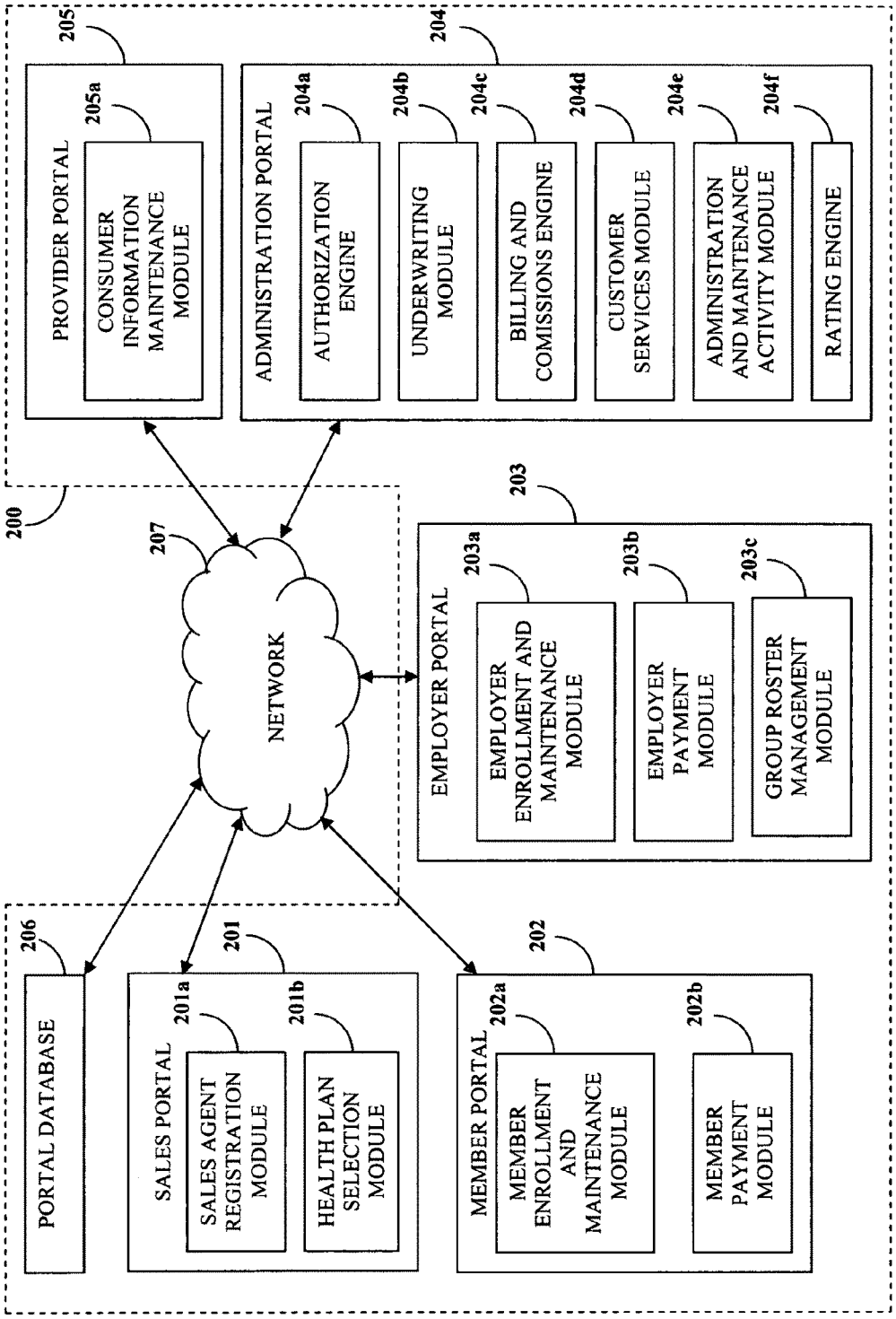

200
205
PROVIDER PORTAL
205a
CONSUMER INFORMATION MAINTENANCE MODULE
204
ADMINISTRATION PORTAL
204a
AUTHORIZATION ENGINE
204b
UNDERWRITING MODULE
204c
BILLING AND COMISSIONS ENGINE
204d
CUSTOMER SERVICES MODULE
204e
ADMINISTRATION AND MAINTENANCE ACTIVITY MODULE
204f
RATING ENGINE
207
NETWORK
203
EMPLOYER PORTAL
203a
EMPLOYER ENROLLMENT AND MAINTENANCE MODULE
203b
EMPLOYER PAYMENT MODULE
203c
GROUP ROSTER MANAGEMENT MODULE
206
PORTAL DATABASE
201
SALES PORTAL
201a
SALES AGENT REGISTRATION MODULE
201b
HEALTH PLAN SELECTION MODULE
202
MEMBER PORTAL
202a
MEMBER ENROLLMENT AND MAINTENANCE MODULE
202b
MEMBER PAYMENT MODULE

FIGURE 2

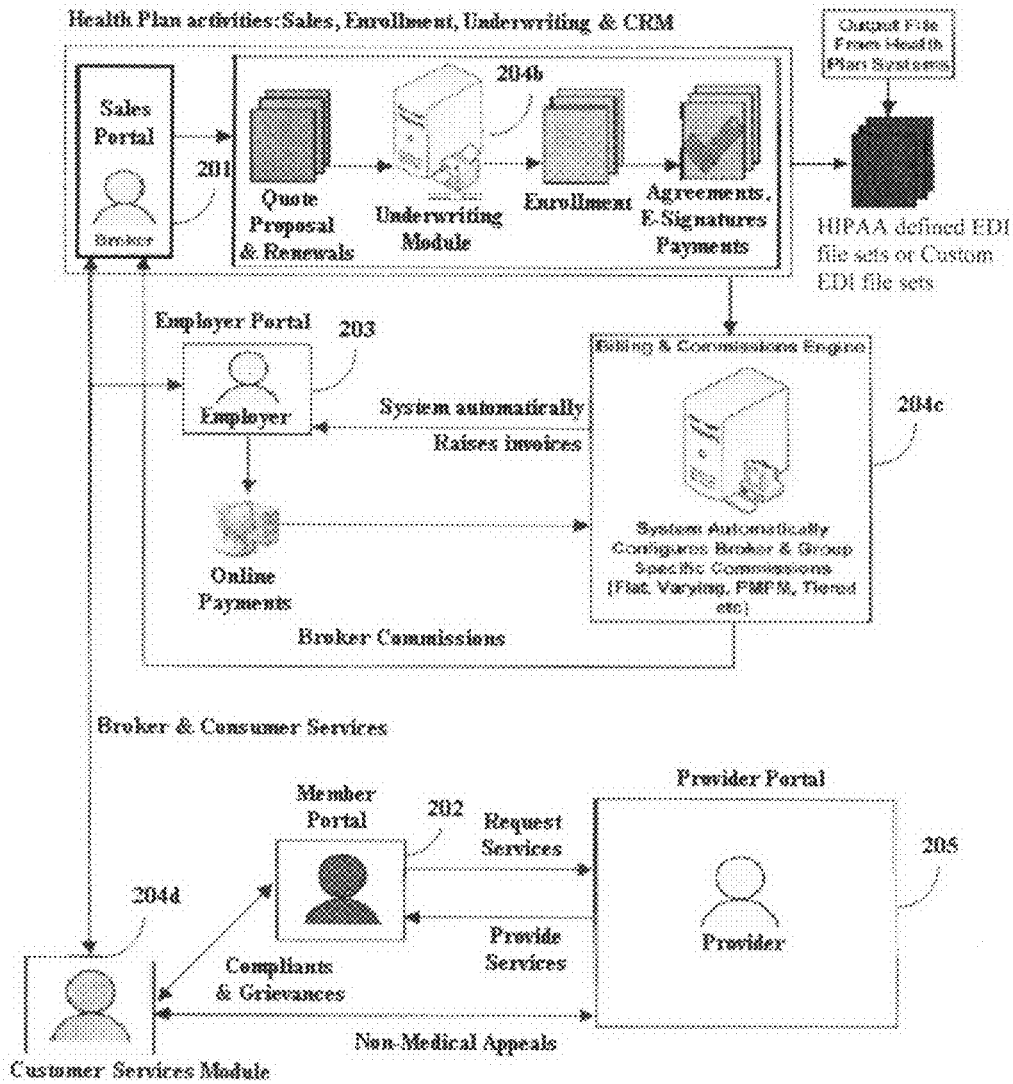

Health Plan activities: Sales, Enrollment, Underwriting & CRM
Outputs Files From Health Plan Systems
Sales Portal
Broker
201
Quote Proposal & Renewals
204b
Underwriting Module
Enrollment
Agreements, E-Signatures Payments
HIPAA defined EDI file sets or Custom EDI file sets
Employer Portal
203
Employer
System automatically Raises Invoices
Billing & Commissions Engine
204c
System Automatically Configures Broker & Group Specific Commissions (Flat, Varying, PMPM, Tiered etc)
Online Payments
Broker Commissions
Broker & Consumer Services
Member Portal
202
Request Services
Provide Services
Provider Portal
205
Provider
204d
Compliants & Grievances
Non-Medical Appeals
Customer Services Module

FIGURE 3

BUSINESS PROCESS AUTOMATION IN A HEALTH PLAN ORGANIZATION

BACKGROUND

This invention, in general, relates to a health plan organization. More particularly, this invention relates to automating business processes of the health plan organization.

Health plan organizations provide health care and health insurance coverage to a consumer. There are various business processes involved in the functioning of a health plan organization. These business processes involve many interactions between the departments of the health plan organization. The departments within a health plan organization may include, but not limited to, a marketing department, a sales department, a finance department, an underwriting department, and a customer services department. The business processes of each of these departments require manual intervention by brokers, sales representatives, underwriters, administrators, and customer service representatives. The activities of the departments including generating health plan proposals and insurance quotes, enrolling consumers for various health plans, underwriting, tracking of payments etc., would therefore be time consuming and may lead to inefficiency of the business processes. Therefore, there is a need for increasing efficiency of the business processes of the health plan organization and also integrating the business processes within the health plan organization in order to improve the quality of the health plans.

Moreover, the business processes in the health plan organization need to adhere to certain compliancy standards defined by the Health Insurance Portability and Accountability Act (HIPAA). These compliancy standards ensure privacy of consumer health information, secure electronic transactions, and simplified administration of the various business processes in the health plan organization. The HIPAA requires compliancy of standards for transactions such as enrollment, eligibility or benefit inquiries, referral certification and authorization, payment of premiums, etc.

Hence, there is a need for a computer implemented method and system for automating the business processes in a health plan organization and improving the efficiency of transactions between various departments of a health plan organization to improve the quality of the heath plans.

SUMMARY OF THE INVENTION

The computer implemented method and system disclosed herein addresses the need for automating business processes of a health plan organization. The above stated need is addressed by providing a plurality of portals for automating the business processes of the health plan organization.

The plurality of portals provided by the computer implemented method and system disclosed herein comprises a sales portal, a member portal, an employer portal, an administration portal, and a provider portal. A sales agent registers with the health plan organization using the sales portal. The sales agent may be a broker or an individual authorized by the health plan organization to sell the health plans. The administration portal authorizes the sales agent to access the sales portal. A plurality of health plans is then listed using the sales portal. The plurality of health plans comprises commercial health plans, dental plans, life insurance, vision insurance, long term disability insurance plans, short term disability insurance plans, Medicare health plans, and Medicaid health plans. The sales agent proposes at least one of the plurality of health plans to a consumer using the sales portal. The consumer may be one of a member and an employer. A member may be one of an individual, an individual with a family, an individual eligible for Medicare, a beneficiary or a recipient of a government program such as a special needs plan (SNP) or Medicaid, and a member of an employer group. The employer provides health care benefits to a group of members of a company through the health plans. The administration portal generates insurance quotes for the proposed health plans for the consumer.

The consumer then enrolls for the proposed health plans using one of the member portal and the employer portal. The step of enrolling of the consumer further comprises authorizing the consumer via an electronic correspondence compliant with Health Insurance Portability and Accountability Act (HIPAA) standards, using one of the sales portal, the employer portal, and the member portal. A provider renders health care services defined by the enrolled health plans to the consumer using the provider portal. The provider may also view membership and status of membership of the consumer enrolled for the health plans and track status of consumer claims using the provider portal. The administration portal then bills the consumer for the enrolled health plans. The step of billing the consumer includes generating invoices for the consumer based on the insurance quotes. The consumer then pays a premium amount online for the enrolled health plans using one of the member portal and the employer portal. Furthermore, the administration portal generates commissions for the sales agent for the enrolled health plans. The computer implemented method and system disclosed herein also comprises renewing the health plans and the insurance quotes for the consumer using the administration portal. The consumer may also request for effective changes to the enrolled health plans, consumer demographics, and constituents using one of the member portal and the employer portal.

The computer implemented method and system disclosed herein ensures increased efficiency of the business processes involved in the health plan organization by integrating the plurality of departments of the health plan organization using the plurality of portals. The disclosed method and system also adheres to the compliancy standards defined by the HIPAA, thereby improving the quality of the health plans.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing summary, as well as the following detailed description of the embodiments, is better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, exemplary constructions of the invention are shown in the drawings. However, the invention is not limited to the specific methods and instrumentalities disclosed herein.

FIG. **1** illustrates a method of automating business processes of a health plan organization.

FIG. **2** illustrates a system for automating business processes of a health plan organization.

FIG. **3** exemplarily illustrates the interaction of various business processes using the plurality of portals in a health plan organization.

DETAILED DESCRIPTION OF THE DRAWINGS

FIG. **1** illustrates a method of automating business processes of a health plan organization. The computer implemented method disclosed herein provides **101***a* plurality of portals. The plurality of portals comprises a sales portal **201**, a member portal **202**, an employer portal **203**, an administration portal **204**, and a provider portal **205**. A sales agent

registers with the health plan organization using the sales portal **201**. The administration portal **204** authorizes the sales agent to access the sales portal **201**. The sales agent maybe a broker or an individual authorized by the health plan organization to sell the health plans. The registered sales agent is authorized via an electronic correspondence compliant with predefined standards. The predefined standards are characterized by compliancy standards defined by the Health Insurance Portability and Accountability Act (HIPAA). The HIPAA protects health insurance coverage for a consumer. The HIPAA also determines the availability of health insurance plans for the consumer. The consumer may be one of a member and an employer. A member may be one of an individual, an individual with a family, an individual eligible for Medicare, a beneficiary or a recipient of a government program such as a special needs plan (SNP) or Medicaid, and a member of an employer group. The employer provides health care benefits to a group of members of a company through the health plans. Health care benefits may also be provided to members of the group even after termination of their employment. The registered sales agent receives an HIPAA compliant electronic mail (email) with a username and a password. The username and password combination provided to the registered sales agent authorizes the sales agent to access the sales portal **201**, thereby ensuring security and privacy of information of the sales agent.

A plurality of health plans is listed **102** using the sales portal **201**. The plurality of health plans comprises commercial health plans, Medicare health plans, Medicaid health plans, and other health plans including dental plans, life insurance, vision insurance, long term disability insurance plans, short term disability insurance plans, etc. Commercial health plans typically provide health care to consumers including members and employers. The employer provides health care benefits to a group of members of a company through the health plans. Medicare health plans may cover consumers of ages sixty-five years and above. Medicare health plans include hospital insurance and medical insurance. Hospital insurance may cover expenses of hospital stays of the consumer, whereas medical insurance covers outpatient requirements. Medicaid health plans provide medical coverage for consumers with low incomes and resources. The consumers covered by Medicaid health plans may include low-income parents, children, seniors, and consumers with disabilities.

The sales agent captures information of the consumer in order to propose **103** at least one of the plurality of health plans to the consumer using the sales portal **201**. The captured consumer information comprises contact information, medical history details, and insurance history details of the consumer. The consumer information is provided by the consumer using one of the member portal **202** and the employer portal **203**. For example, the sales agent proposes certain health plans covering illnesses to consumers requiring more intensive care management activities, such as consumers with asthma, diabetes, rare health conditions, or also consumers with specific unhealthy conditions or behaviors, such as obesity, smoking and sedentary lifestyles. The sales agent proposes the health plans to the consumer based on the captured consumer information. The sales agent may propose the health plans to the consumer via email using the sales portal **201**.

Insurance quotes are then generated **104** for the health plans proposed by the sales agent using the administration portal **204**. The step of generating the insurance quotes comprises evaluating health risks and health exposures of the consumer. The evaluation of risks is managed by the administration portal **204** using an underwriting module **204***b*. An underwriter analyzes the various factors to determine high and low insurance risks. The level of risks determines the quotations of the insurance premiums. The sales portal **201** then lists the insurance quotes for the proposed health plans for the consumer generated by the administration portal **204**.

The consumer, namely a member or an employer may then enroll **105** for at least one of the proposed health plans using one of the member portal **202** and the employer portal **203** respectively. The member portal **202** is used by the member to enroll for the proposed health plans, whereas the employer portal **203** is used by the employer to enroll the group of members of a company for the proposed health plans. The step of enrolling of the consumer using one of the member portal **202** and the employer portal **203** comprises authorizing the consumer via an electronic correspondence compliant with predefined standards. The consumer may select a primary care physician (PCP) associated with the health plan organization using one of the member portal **202** and the employer portal **203**. The consumer may also select the PCP for the consumer's family using one of the member portal **202** and the employer portal **203**. The predefined standards are characterized by compliancy standards defined by the HIPAA. The consumer receives an HIPAA compliant electronic mail with a username and a password from the administration portal **204**. The username and password combination provided to the consumer authorizes the consumer to access one of the member portal **202** and the employer portal **203**, thereby ensuring security and privacy of information of the consumer. The consumer may compare the proposed health plans with the listed health plans for assessing benefits of the health plans proposed by the sales agent. The consumer enrolls for the health plans by comparing the insurance quotes of the proposed health plans. The employer verifies whether the group of members has enrolled for the proposed health plans.

A provider renders health care services defined by the enrolled health plans to the consumer using a provider portal **205**. The provider of health care may be one of a primary care physician, a hospital network, or a medical lab network. When a particular provider is selected by the consumer as the PCP, the provider is kept informed through the provider portal **205**. The health benefits of the consumer are also determined through the provider portal **205** based on the enrolled health plans. The provider then renders health care services defined by the enrolled health plans and the health plan contract to the consumer. The administration portal **204** bills **106** the consumer for the enrolled health plans based on the insurance quotes. A billing and commissions engine **204***c* of the administration portal **204** generates invoices for the consumer based on the insurance quotes. The administration portal **204** tracks the payment of the invoices by the consumer. The step of tracking the payment comprises sending reminders to the consumer to make the required payments. The consumer makes payments after receiving the invoices by using one of the member portal **202** and the employer portal **203**. The consumer pays **107** a premium amount online for the enrolled health plans using one of the member portal **202** and the employer portal **203**. The payments may be made online using the member portal **202** and employer portal **203** through one of credit cards, debit cards, electronic checks, and other modes of electronic payment.

The administration portal **204** then generates **108** commissions for the sales agent using the billing and commissions engine **204***c*, and sends the commission information to the sales portal **201** for viewing by the sales agent. Commissions are generated as remuneration for the health plans sold by the sales agent. Commission payments may be made to the sales

agent using an electronic deposit method. The health plans and insurance quotes for a consumer may also be renewed using the administration portal **204** and sent to the sales portal **201** via a network **207**. The administration portal **204** coordinates the business processes of the sales portal **201**, the member portal **202**, the employer portal **203**, and the provider portal **205** via the network **207**.

FIG. **2** illustrates a system for automating business processes of a health plan organization. The computer implemented system **200** disclosed herein comprises a plurality of portals. The plurality of portals comprises a sales portal **201**, a member portal **202**, an employer portal **203**, an administration portal **204**, and a provider portal **205**. A plurality of health plans such as commercial health plans, Medicare health plans, and Medicaid health plans are listed using the sales portal **201**. The sales portal **201** comprises a sales agent registration module **201***a* and a health plan selection module **201***b*. The sales agent registration module **201***a* enables the registration of the sales agent with the health plan organization. The administration portal **204** authorizes the registered sales agent via an electronic correspondence compliant with predefined standards using an authorization engine **204***a*. The predefined standards are characterized by compliancy standards defined by the HIPAA as explained in the detailed description of FIG. **1**. The registered sales agent receives an HIPAA compliant electronic mail with a username and a password. The username and password combination provided to the registered sales agent authorizes the sales agent to access the sales portal **201**. The sales agent information comprising sales agent identification, sales agent login details, and summary of the sales agent commissions is stored in a portal database **206**.

The health plan selection module **201***b* of the sales portal **201** enables the sales agent to select health plans for the consumer. The sales agent selects the health plans based on the information provided by the consumer. The consumer information comprises contact information, medical history details, and insurance history details of the consumer. The consumer information is provided by the consumer using one of the member portal **202** and the employer portal **203**. The consumer information comprising the login details of the consumer, contact information of the consumer, medical history details of the consumer, a summary of the enrolled health plans, consumer identification number, consumer name, date of service, type of service, provider details, total billable service details, amounts of service charges etc., is stored in the portal database **206**. The health plans to be proposed to the consumer may be compared across the list of health plans to determine the benefits of the proposed health plans. The sales agent then uses the health plan selection module **201***b* to propose at least one of the selected health plans to the consumer. The administration portal **204** generates insurance quotes for the health plans proposed by the sales agent. Generating insurance quotes requires the evaluation of health risks and health exposures of the consumer. The health plan selection module **201***b* also lists insurance quotes for the proposed health plans generated by the administration portal **204**. The administration portal **204** communicates with the sales portal **201** via a network **207**. The sales agent proposes the health plans to the consumer via electronic mail (email) using the health plan selection module **201***b* of the sales portal **201**.

The member portal **202** of the computer implemented system **200** disclosed herein comprises a member enrollment and maintenance module **202***a* and a member payment module **202***b*. The administration portal **204** authorizes a member via an electronic correspondence compliant with predefined standards using the authorization engine **204***a*. The predefined standards are characterized by compliancy standards defined by the HIPAA. The member receives an HIPAA compliant electronic mail with a username and a password. The username and password combination provided to the member authorizes the member to access the member portal **202**. The administration portal **204** communicates with the member portal **202** via the network **207**.

On receiving access to the member portal **202**, the member may view the health plans and insurance quotes proposed by the sales agent. The member portal **202** communicates with the sales portal **201** via the network **207**. The member may compare the proposed health plans with the list of health plans for assessing the benefits of the proposed health plans. The member enrollment and maintenance module **202***a* of the member portal **202** is used for enrolling the member for at least one of the health plans proposed by the broker. The member may select a primary care physician (PCP) associated with the health plan organization using the member portal **202**. The member may also select the PCP for the member's family using the member portal **202**. The member may also waive coverage of certain health plans depending on the needs of the member. After enrollment for at least one of the proposed health plans, the member may request for identification cards and change member information including login details, contact information etc., using the member enrollment and maintenance module **202***a* of the member portal **202**. The member information is stored in the portal database **206**.

The member payment module **202***b* of the member portal **202** enables the member to make payments for the enrolled health plans. The member receives invoices generated by a billing and commissions engine **204***c* of the administration portal **204** via the network **207**. The member pays a premium amount online for the enrolled health plans using the member portal **202**. The member makes payments for the enrolled health plans online using the member payment module **202***b* through one of credit cards, debit cards, electronic checks, and other modes of electronic payment. The computer implemented system **200** disclosed herein also comprises a provider portal **205** used by a provider to render health care services defined by the enrolled health plans to the consumer. The provider may be one of a primary care physician, a hospital network, and a medical lab network. The member may select a provider based on the requirements of the member through the member portal **202**. Once the selection is made, the member information including the health benefit information is updated in a consumer information maintenance module **205***a* of the provider portal **205**.

The employer portal **203** of the computer implemented system **200** disclosed herein comprises an employer enrollment and maintenance module **203***a*, an employer payment module **203***b*, and a group roster management module **203***c*. The administration portal **204** authorizes the employer via an electronic correspondence compliant with predefined standards using the authorization engine **204***a*. The predefined standards are characterized by compliancy standards defined by the HIPAA. The employer receives an HIPAA compliant electronic mail with a username and a password. The username and password combination provided to the employer authorizes the employer to access the employer portal **203**. The administration portal **204** communicates with the employer portal **203** via the network **207**. The employer of a company provides health care benefits to a group of members of the company through the health plans. The group of members may be further divided into subgroups based on the number of members. For example, the group of members of

the company may be divided into small groups of fifty members and large groups of fifty and above members. The members of a company may also be grouped into active members, terminated members, etc. The information about the groups of members is maintained using the group roster management module **203***c*.

The employer uploads preliminary group census information or detailed group census information to the portal database **206** using the group roster management module **203***c*. The preliminary group census information contains mandatory group member details such as age, gender, applicable tier and zip code of location. The preliminary group census information may also comprise email addresses and Medicare eligibility of the group. The detailed group census information contains group member details such as first name, last name, age, gender, applicable tier, zip code of location, date of birth, email address, and Medicare eligibility, wherein age, gender, applicable tier and zip code of location are mandatory details. The employer may either specify the member's age or provide a date of birth. The employer may also designate a sales agent or a broker agency for each group of members. The employer may view, verify, and update group census information using the employer portal **203**. The employer may also select a primary care physician (PCP) associated with the health plan organization using the employer portal **203**. The employer may also select the PCP for the member's family using the employer portal **203**.

The employer portal **203** enables the employer to view the health plans and insurance quotes proposed by the sales agent. The employer portal **203** communicates with the sales portal **201** via the network **207**. The employer may compare the proposed health plans with the list of health plans for assessing the benefits of the proposed health plans for the group of members. The employer enrolls the group of members for at least one of the health plans proposed by the sales agent using the employer enrollment and maintenance module **203***a* of the employer portal **203**. The employer may also waive coverage of certain health plans depending on the needs of the group of members. After enrollment for at least one of the proposed health plans, the employer may request for identification cards and change login details, contact information, and group census information etc., using the employer enrollment and maintenance module **203***a* of the employer portal **203**. The employer manages the details of the group members using the group roster management module **203***c* of the employer portal **203**.

The employer payment module **203***b* of the employer portal **203** enables the employer to make payments for the enrolled health plans. The employer receives invoices generated by a billing and commissions engine **204***c* of the administration portal **204** via the network **207**. The employer pays a premium amount online for the enrolled health plans using the employer portal **203**. The employer makes payments for the enrolled health plans online using the employer payment module **203***b* through one of credit cards, debit cards, electronic checks, and other modes of electronic payment. The computer implemented system **200** disclosed herein further comprises a provider portal **205** used by a provider to render health care services defined by the enrolled health plans to the group of members of the company. The employer may select a provider based on the requirements of the group of members through the employer portal **203**.

The provider portal **205** comprises a consumer information maintenance module **205***a* for maintaining and managing information of the consumer associated with the provider. The consumer information maintenance module **205***a* also submits and tracks the status of provider claims, and views the status of membership of the consumer. The consumer information maintenance module **205***a* also informs the provider when any new consumers select that provider as the PCP. The consumer's health benefits are determined and accessed through the consumer information maintenance module **205***a* of the provider portal **205** based on the health plans enrolled by the consumer and as proposed by the sales agent.

In one embodiment of the computer implemented system **200** disclosed herein, the members of the group may also be provided with health care benefits after termination from employment of the company as defined by the statutes of the Consolidated Omnibus Budget Reconciliation Act (COBRA). COBRA enables members of the group to maintain health insurance coverage of the health plans after termination of employment. The computer implemented system **200** disclosed herein manages health insurance coverage of terminated members of the group by generating COBRA letters for the terminated members of the group, and updating the status of the terminated members. The administration portal **204** generates monthly coupons for the terminated members. The generated COBRA letters and coupons may be viewed by the employer using the employer portal **203**. The billing and commissions engine **204***c* of the administration portal **204** generates invoices for the terminated members and tracks payment of the invoices via the network **207**.

The administration portal **204** of the computer implemented system **200** disclosed herein comprises an authorization engine **204***a*, an underwriting module **204***b*, a billing and commissions engine **204***c*, a customer services module **204***d*, an administrative and maintenance activity module **204***e*, and a rating engine **204***f*. The authorization engine **204***a* authorizes the sales agent, the member, and the employer via an electronic correspondence compliant with Health Insurance Portability and Accountability Act standards as explained in the detailed description of FIG. **1**. The authorization engine **204***a* authorizes the consumer with a unique set of username and password. The authorization engine **204***a* authorizes the sales agent to access the sales portal **201**, the member to access the member portal **202**, and the employer to access the employer portal **203**. The authorization engine **204***a* of the administration portal **204** communicates with the sales portal **201**, the member portal **202**, and the employer portal **203** via the network **207**.

The rating engine **204***f* generates insurance quotes for the health plans proposed by the sales agent. The underwriting module **204***b* of the administration portal **204** further modifies the insurance quotes generated by the rating engine **204***f* based on the evaluation of the health risks and health exposures of the consumer by an underwriter. The underwriting module **204***b* determines debit points for pre-existing medical conditions of the consumer. The underwriter approves or rejects the consumer for the health plans based on the debit points calculated for the consumer. The underwriting module **204***b* then sends the generated insurance quotes to the sales portal **201** via the network **207**. The underwriting module **204***b* also renews the health plans and the insurance quotes for the consumer and sends the renewed health plans and insurance quotes to the sales portal **201** via the network **207**.

The billing and commissions engine **204***c* bills the consumer for the enrolled health plans based on the insurance quotes generated by the health plan selection module **201***b* of the sales portal **201**. The billing and commissions engine **204***c* generates invoices for the consumer based on the insurance quotes. In the case of an inclusion or a removal of a member in a group of a company, the billing and commissions engine **204***c* recalculates the invoices and renews the invoices for the enrolled health plans. The billing and commissions

engine **204***c* also renews invoices for the consumer, in the case of payment deficits, over payments by the consumer, and a change in the health plans. The renewed invoices are sent to one of the member portal **202** and the employer portal **203** via the network **207**. The invoices may be tracked for payment by the consumer using the billing and commissions engine **204***c*. The billing and commissions engine **204***c* sends reminders to the consumer for the payment. The billing details comprising the invoices, status of payment, billing cycle, and reminders for the payment are stored in the portal database **206**.

The billing and commissions engine **204***c* generates commissions for the sales agent based on the enrolled health plans. In the case of an inclusion or a removal of a member in a group of a company, the billing and commissions engine **204***c* recalculates the commissions and renews the commissions for the sales agent. The billing and commissions engine **204***c* generates commissions as remuneration for the health plans sold by the sales agent. The billing and commissions engine **204***c* sends the commissions information to the sales portal **201** via the network **207**. Commission payments may be made to the sales agent using an electronic deposit method.

The customer services module **204***d* of the administration portal **204** resolves service issues, complaints, grievances, and non medical appeals of the consumer. The customer services module **204***d* communicates with the sales portal **201**, the member portal **202**, the employer portal **203**, the administration portal **204**, and the provider portal **205** via the network **207** using secured communication. Further, secured messaging ability is provided between all the components of the computer implemented system **200**. The consumer may submit service issues, complaints or grievances online to the customer services module **204***d* using one of the member portal **202** and the employer portal **203**. Further, the administration and maintenance activity module **204***e* is used to manage and control all other administrative and maintenance activities of the health plan organization.

Based on the health plans or insurance company policies and business rules, the health plan organization allows employers to add or terminate members from the group roster within a certain number of days. The employer may add or terminate members from the group using the group roster management module **203***c*. The administration portal **204** allows the health plan organization to dynamically control the number of days by using a configurable parameter represented by the alphabet "x". The health plan organization may change the configurable parameter "x" as the health plan organization's policies change to allow the employer to make roster changes retro-actively or for future dates. In some cases, the sales agent may act as the roster manager for a group after receiving authorization from the employer.

FIG. **3** exemplarily illustrates the interaction of various business processes using the plurality of portals in a health plan organization. The administration portal **204** communicates and coordinates the sales portal **201**, the member portal **202**, the employer portal **203**, and the provider portal **205** used by a plurality of departments in the health plan organization. The portals communicate with the administration portal **204** via the network **207**. For example, the administration portal **204** authorizes the sales agent to access the sales portal **201**. A plurality of health plans is listed using the sales portal **201**. The health plans listed in the sales portal **201** include, but not limited to, commercial health plans, Medicare health plans, Medicaid health plans and other health plans including dental plans, life insurance, vision insurance, long term disability insurance plans, short term disability insurance plans, etc. The sales agent proposes at least one of the plurality of health plans to the consumer using the sales portal **201**. Insurance quotes are generated for the proposed health plans using the administration portal **204**. The administration portal **204** may alter the generated insurance quotes based on the on the evaluation of the health risks and health exposures of the consumer by an underwriter. The generated insurance quotes are then sent to the sales portal **201** from the administration portal **204** via the network **207**. The administration portal **204** authorizes the consumer to gain access to one of the member portal **202** and the employer portal **203**. The consumer enrolls for at least one of the health plans proposed by the sales agent using one of the member portal **202** and the employer portal **203**. The administration portal **204** also coordinates the provision of health care services defined by the enrolled health plans to the consumer by a provider using the provider portal **205** as illustrated in FIG. **3**. The administration portal **204** then bills the consumer for the enrolled health plans based on the insurance quotes using a billing and commissions engine **204***c*. The billing details comprising the invoices, status of payment, billing cycle, and reminders for the payment are stored in the portal database **206**. The consumer then pays a premium amount online for the enrolled health plans using one of the member portal **202** and the employer portal **203**. The administration portal **204** also generates commissions for the sales agent for the enrolled health plans. The commissions generated by the administration portal **204** are then sent to the sales portal **201** for viewing by the sales agent.

It will be readily apparent that the various methods and algorithms described herein may be implemented in a computer readable medium appropriately programmed for general purpose computers and computing devices. Typically a processor, for e.g., one or more microprocessors will receive instructions from a memory or like device, and execute those instructions, thereby performing one or more processes defined by those instructions. Further, programs that implement such methods and algorithms may be stored and transmitted using a variety of media, for e.g., computer readable media in a number of manners. In one embodiment, hardwired circuitry or custom hardware may be used in place of, or in combination with, software instructions for implementation of the processes of various embodiments. Thus, embodiments are not limited to any specific combination of hardware and software. A 'processor' means any one or more microprocessors, Central Processing Unit (CPU) devices, computing devices, microcontrollers, digital signal processors or like devices. The term 'computer-readable medium' refers to any medium that participates in providing data, for example instructions that may be read by a computer, a processor or a like device. Such a medium may take many forms, including but not limited to, non-volatile media, volatile media, and transmission media. Non-volatile media include, for example, optical or magnetic disks and other persistent memory volatile media include Dynamic Random Access Memory (DRAM), which typically constitutes the main memory. Transmission media include coaxial cables, copper wire and fiber optics, including the wires that comprise a system bus coupled to the processor. Transmission media may include or convey acoustic waves, light waves and electromagnetic emissions, such as those generated during Radio Frequency (RF) and Infrared (IR) data communications. Common forms of computer-readable media include, for example, a floppy disk, a flexible disk, hard disk, magnetic tape, any other magnetic medium, a Compact Disc-Read Only Memory (CD-ROM), Digital Versatile Disc (DVD), any other optical medium, punch cards, paper tape, any other physical medium with patterns of holes, a Random Access Memory (RAM), a Programmable Read Only Memory (PROM), an Erasable Programmable Read Only Memory

(EPROM), an Electrically Erasable Programmable Read Only Memory (EEPROM), a flash memory, any other memory chip or cartridge, a carrier wave as described hereinafter, or any other medium from which a computer can read. In general, the computer-readable programs may be implemented in any programming language. Some examples of languages that can be used include C, C++, C#, or JAVA. The software programs may be stored on or in one or more mediums as an object code. A computer program product comprising computer executable instructions embodied in a computer-readable medium comprises computer parsable codes for the implementation of the processes of various embodiments.

Where databases are described such as the portal database **206**, it will be understood by one of ordinary skill in the art that (i) alternative database structures to those described may be readily employed, and (ii) other memory structures besides databases may be readily employed. Any illustrations or descriptions of any sample databases presented herein are illustrative arrangements for stored representations of information. Any number of other arrangements may be employed besides those suggested by, e.g., tables illustrated in drawings or elsewhere. Similarly, any illustrated entries of the databases represent exemplary information only; one of ordinary skill in the art will understand that the number and content of the entries can be different from those described herein. Further, despite any depiction of the databases as tables, other formats including relational databases, object-based models and/or distributed databases could be used to store and manipulate the data types described herein. Likewise, object methods or behaviors of a database can be used to implement various processes, such as the described herein. In addition, the databases may, in a known manner, be stored locally or remotely from a device that accesses data in such a database.

The present invention can be configured to work in a network environment including a computer that is in communication, via a communications network, with one or more devices. The computer may communicate with the devices directly or indirectly, via a wired or wireless medium such as the Internet, Local Area Network (LAN), Wide Area Network (WAN) or Ethernet, Token Ring, or via any appropriate communications means or combination of communications means. Each of the devices may comprise computers, such as those based on the Intel® processors, AMD® processors, UltraSPARC® processors, etc, that are adapted to communicate with the computer. Any number and type of machines may be in communication with the computer.

The foregoing examples have been provided merely for the purpose of explanation and are in no way to be construed as limiting of the present method and system disclosed herein. While the invention has been described with reference to various embodiments, it is understood that the words, which have been used herein, are words of description and illustration, rather than words of limitation. Further, although the invention has been described herein with reference to particular means, materials and embodiments, the invention is not intended to be limited to the particulars disclosed herein; rather, the invention extends to all functionally equivalent structures, methods and uses, such as are within the scope of the appended claims. Those skilled in the art, having the benefit of the teachings of this specification, may effect numerous modifications thereto and changes may be made without departing from the scope and spirit of the invention in its aspects.

We claim:

1. A computer implemented method of integrating and coordinating business processes of a health plan organization, comprising:

providing a plurality of portals, wherein said plurality of portals comprises:

(a) a sales portal comprising a sales agent registration module and a health plan selection module, wherein said sales agent registration module registers the sales agent with said health plan organization, wherein said health plan selection module enables selection of a plurality of health plans by the sales agent, and allows at least one of said plurality of health plans to be proposed to one or more consumers, wherein said one or more consumers comprise prospective or enrolled consumers;

(b) a member portal accessible by said one or more prospective or enrolled consumers for enrolling at least one of said plurality of health plans;

(c) an employer portal accessible by a prospective or enrolled employer for enrolling at least one of said plurality of health plans by said prospective or enrolled employer, wherein the prospective or enrolled employer provides health care benefits to a group of members of a company through the plurality of health plans;

(d) an administration portal further comprising an authorization engine, an underwriting module, a billing and commission engine, and a rating engine; and

(e) a provider portal associated with a provider for coordination and delivery of necessary care to said one or more prospective or enrolled consumers;

wherein said portals interface with and work in coordination with each other over a network, and wherein the administration portal coordinates the business processes of said sales portal, said member portal, said employer portal, and said provider portal over said network;

authorizing each of one or more of a sales agent and said one or more prospective or enrolled consumers to access one or more of said portals through an electronic correspondence compliant with one or more predefined standards by said authorizing engine of said administration portal;

listing said plurality of health plans using said sales portal;

proposing at least one of said listed plurality of health plans to said one or more prospective or enrolled consumers by said sales agent using the health plan selection module of the sales portal;

generating one or more insurance quotes for said at least one of said listed plurality of health plans using the administration portal, comprising:

generating said one or more insurance quotes for said at least one of said plurality of health plans by said rating engine of said administration portal;

evaluating health risk levels and health exposures of the one or more prospective or enrolled consumers by said underwriting module; and

modifying said generated one or more insurance quotes based on said health risk levels and said health exposures of the one or more prospective or enrolled consumers by said underwriting module;

sending the generated one or more insurance quotes to the sales portal via the network by said administration portal;

listing the generated one or more insurance quotes for said at least one of said plurality of health plans for the one or more prospective or enrolled consumers generated by the administration portal;

enrolling said one or more prospective or enrolled consumers for said at least one of the plurality of health plans using one of said member portal and said employer portal;

billing the one or more consumers for said at least one of said plurality of health plans enrolled by the one or more consumers based on said generated one or more insurance quotes using said billing and commission engine of the administration portal;

receiving a premium amount online from the one or more consumers for the at least one of said plurality of health plans enrolled by the one or more consumers using one of the member portal and the employer portal; and

generating commissions for said sales agents for the at least one of said plurality of health plans enrolled by the one or more consumers using the billing and commission engine;

whereby integrating said business processes of said health plan organization by the plurality of portals increases efficiency of transactions between said business processes of said health plan organization.

2. The computer implemented method of claim **1**, wherein said group of members are provided with said health care benefits after termination of employment from said company.

3. The computer implemented method of claim **1**, wherein the plurality of health plans comprises one or more of a commercial health plan, a dental plan, life insurance, vision insurance, a long term disability insurance plan, a short term disability insurance plan, a Medicare health plan, and a Medicaid health plan.

4. The computer implemented method of claim **1**, wherein the sales agent is one of a broker and an individual authorized by the health plan organization to sell said health plans.

5. The computer implemented method of claim **1**, wherein said registered sales agent is authorized via an electronic correspondence compliant with Health Insurance Portability and Accountability Act Standards.

6. The computer implemented method of claim **1**, wherein said step of proposing at least one of said plurality of health plans comprises capturing information of the consumer, wherein said captured consumer information includes contact information, medical history details, and insurance history details of the consumer.

7. The computer implemented method of claim **1**, wherein said step of enrolling of the consumer using one of the member portal and the employer portal comprises authorizing the consumer via an electronic correspondence compliant with Health Insurance Portability and Accountability Act standards.

8. The computer implemented method of claim **1**, wherein said step of enrolling comprises comparing the proposed at least one of said listed plurality of health plans with said listed plurality of health plans for assessing benefits of the proposed at least one of said listed plurality of health plans.

9. The computer implemented method of claim **1** further comprising a step of rendering health care services defined by the at least one of said plurality of health plans enrolled by the one or more consumers by said provider using said provider portal.

10. The computer implemented method of claim **9**, wherein said provider is one of a primary care physician, a hospital network, and a medical lab network.

11. The computer implemented method of claim **1**, wherein said step of billing comprises generating invoices for the consumer based on insurance quote rate and cost sharing arrangements.

12. The computer implemented method of claim **11**, wherein said invoices are tracked for payment by the consumer, using the administration portal.

13. The computer implemented method of claim **12**, wherein said step of tracking comprises sending reminders to the consumer for said payment.

14. The computer implemented method of claim **1** further comprising the step of paying for the at least one of said plurality of health plans enrolled by the one or more consumers using one of the member portal and the employer portal.

15. The computer implemented method of claim **1** further comprising the step of renewing said at least one of said plurality of health plans and the insurance quotes for the consumer using the administration portal.

16. The computer implemented method of claim **1**, wherein the underwriter module determines debit points for pre-existing medical conditions of the consumer, wherein an underwriter approves or rejects the consumer for the at least one of said listed plurality of health plans based on said debit points determined for the consumer.

17. A computer program product comprising computer executable instructions embodied in a computer-readable medium, wherein said computer program product comprises:

a first computer parsable program code for providing a plurality of portals, wherein said plurality of portals comprises a sales portal, a member portal, an employer portal, an administration portal, and a provider portal, wherein said plurality of portals interface with and work in conjunction with each other over a network, and wherein the administration portal coordinates the business processes of said sales portal, said member portal, said employer portal and said provider portal over said network;

a second computer parsable program code for listing a plurality of health plans using said sales portal;

a third computer parsable program code for proposing at least one of said listed plurality of health plans to one or more consumers by a sales agent using the sales portal, wherein said one or more consumers comprise prospective or enrolled consumers;

a fourth computer parsable program code for generating insurance quotes for said at least one of said listed plurality of health plans using the administration portal, comprising:

a fifth computer parsable program code for generating said insurance quotes for the at least one of said listed plurality of health plans; and

a sixth computer parsable program code for evaluating health risk levels and health exposures of the one or more consumers, and for modifying said generated insurance quotes based on said health risk levels and said health exposures of the one or more consumers;

a seventh computer parsable program code for sending the generated insurance quotes to the sales portal via the network;

an eighth computer parsable program code for listing the insurance quotes for the at least one of said listed plurality of health plans for the consumers generated by the administration portal;

a ninth computer parsable program code for enrolling said one or more consumers for the at least one of the listed plurality of health plans using one of said member portal and said employer portal;

a tenth computer parsable program code for billing the one or more consumers for said at least one of said listed plurality of health plans enrolled by the one or more consumers based on said insurance quotes using said administration portal;

a eleventh computer parsable program code for paying a premium amount online by the one or more consumers for the at least one of the listed plurality of health plans enrolled by the one or more consumers using one of the member portal and the employer portal; and

a twelfth computer parsable program code for generating commissions for said sales agent for the at least one of the listed plurality of health plans enrolled by the one or more consumers using the administration portal.

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