



Bringing Care to
Where People Are



Prevvy Connected Health Ecosystem:

Family Health Assistant

Patient Relationship platform

ONC Move Forward Challenge

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Executive Summary

Prevvy is a Connected health ecosystem, based on the usage of cloud and mobile apps, where patients, families, and providers collaborate with each other in the care continuum, in order to get better outcomes, better patient engagement, and patient experience. Prevvy is a consumer/patient-centric platform focused on the empowerment of patients and families about their own health management, their own PHI sharing management, and their relationship with different healthcare-wellness providers, and other Healthcare apps.



In order to get a better exchange between consumers and different providers Prevvy offers a broad interoperability options with current EMRs based on support of different exchange technologies as Direct Messaging, FHIR, SMART-FHIR and IHE XD* standards.

Prevvy users can authorize and control the access to their PHI to family, providers, organizations, apps and third party services. Prevvy is based on HEART WG and HL7 FHIR Consent Directive and Security Label specifications.

Although **Prevvy is free for patients**, in order to get financial sustainability of the ecosystem, Prevvy offers support for the creation of different **Connected Health services or revenue lines by different healthcare and wellness providers**. These Connected Health subscriptions or one-time services can be offered and developed by Healthcentrix or third party providers.

Prevvy offers a set of basic services for third party developers in order to create a Health Apps ecosystem for consumers: Personal Controlled Health Record, Notification Services, Exchange services, Billing Services, Care plan Editor & Library, Prevvy Family Health Assistant App and Prevvy Relationship Platform.

Although the target consumer for Prevvy is any Healthcare Consumer, **our initial goto market will be Medicare patients and their families and related providers**. Initially, Prevvy will offer Connected Health subscription services to physicians in order to provide and accomplish the requirements for the new Medicare reimbursements such as Chronic Care Management and Remote Monitoring .

Physicians will be able to accomplish all CCM requirements with Prevvy such as:

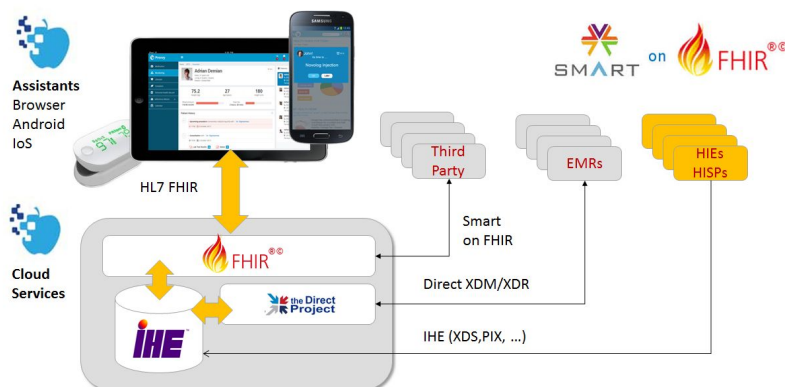
- Offer 24/7 information to patients, families and other providers
- PHI Sharing with different stakeholders based on Patient Consents and Security Labels restrictions
- Care Coordination and Care plan adherence based on Electronic Care Plans
- Self Management tools: Prevvy Family Health Assistant

- Relationship & communication tools: Secure Messaging and Video-conference, social network, ..
- Management tools: Time tracking, Care coordination Issues, Drug interaction, ...

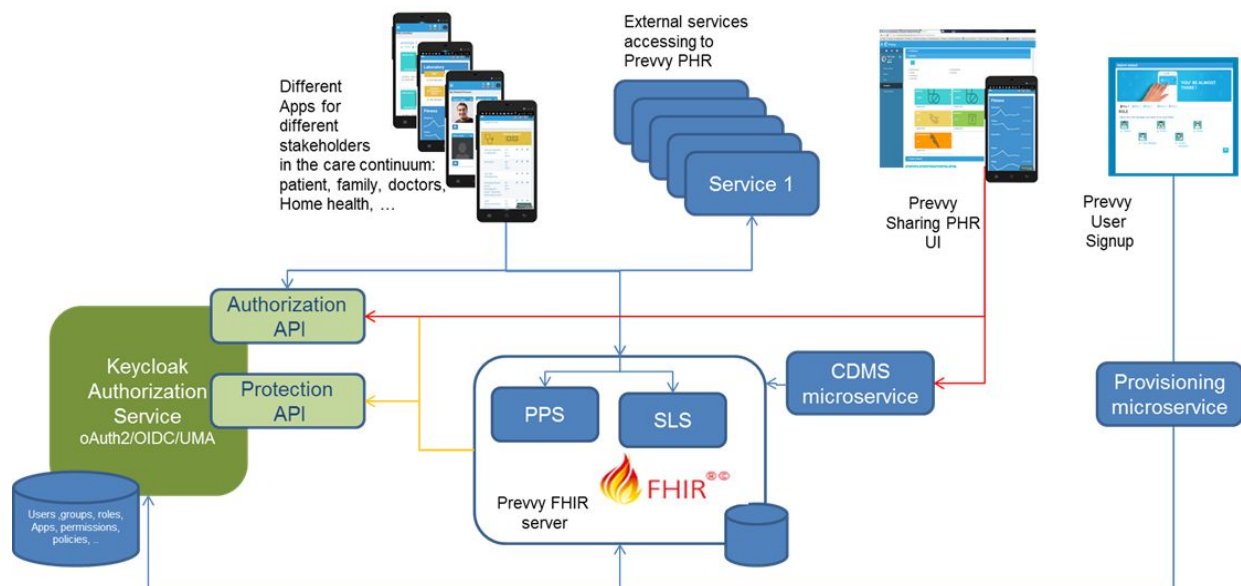
Our goal is the promotion of Prevvy and the enrollment of patients & families based on economic and quality improvement incentives for physicians who want to offer the new Medicare revenue lines. Nevertheless, at the same time, we will promote this initial target, we will promote the free spreading of Prevvy to the rest of physician population. We will offer soon, new premium services to consumers based on convenience services from providers.

Technology

Prevvy's ecosystem framework is based mainly on FHIR-UMA specifications and makes it possible the creation of Connected Health services for healthcare consumers from different providers. In order to get a better exchange between consumers and different providers Prevvy offers a broad interoperability options with current EMRs based on support of different exchange technologies as Direct Messaging, FHIR, SMART-FHIR and IHE XD* standards. For Direct messaging scenery, every Prevvy user have a Direct address such as "user@prevvy.co" where they can receive and aggregate PHI in their own PHR from any current certificated MU2 EMR.



Prevvy users can authorize and control the access to their PHI to family, providers, organizations, apps and third party services. Prevvy is based on HEART WG and HL7 FHIR Consent Directive and Security Label specifications.



Service	Description
FHIR service	<p>Prevvy FHIR services is a FHIR DSTU2 implementation on top of IHE XDS repositories. Prevvy Apps are able to access to FHIR resources and additionally to CCDA documents through FHIR DocumentReference interface. Prevvy FHIR service security is based on:</p> <ul style="list-style-type: none"> • oAuth/UMA JWT Token authorization for apps/services, users, roles and organizations • Integration with Protection API and Authorization API of Authorization server • Patient Protection Service based on Patient Consents Directive resources • Security Label Service based on Security Restrictions Labels to FHIR Resources.
Authorization Service	<p>Prevvy Authorization services is based on oAuth/OpenID/UMA services implemented in open source Keycloak project. Prevvy Apps, Prevvy FHIR service and any other external services or apps are using Prevvy Authorization Service to restrict access to FHIR from apps/services, users and organizations, .. Keycloak Console offer support to create Policies for apps, services, groups, organizations, based on different mechanisms including Business rules engine.</p>
Prevvy CDMS microservices	<p>Consent Directive Management Service is a FHIR microservice which manages Consent Directives for users. Prevvy Consent Widget UI is an UI tool to manage Patients Consent from apps. PHR in Prevvy Family Health Assistant use this UI widget in their "Sharing options".</p>
External apps and services	<p>Each external service could access to Prevvy FHIR server using UMA specifications and Prevvy Authorization Service. Additionally, each Prevvy microservice is based on FHIR messaging specification invoking operations based on Messages. Each message is a FHIR bundle with FHIR Resources like parameters and a MessageHeader like operation. Prevvy microservices security is also based on UMA specifications.</p>
IHE XD* Repository	<p>Prevvy IHE Repository is an IHE XD* implementation based on a light modification of HIEOS open source project. IHE Repository could be setup to connect to other HIE repositories.</p>
HISP service	<p>Prevvy HISP service is based on Direct Project open source project. Each Prevvy user will have a personal Prevvy Direct Address; any Direct messaging to a provisioned Prevvy Direct address will be redirected through XDM/XDR interface of our IHE repository.</p>
FHIR<>CDA Conversion Service	<p>Prevvy Fhir2CDA converter is a microservice which is able to convert bidirectionally a CDA document to a bundle of FHIR resources. Any new received CDA document, from Direct or from other IHE repository in an Affinity Domain, will be transformed to FHIR resources; this new FHIR resources will be available for Prevvy Apps and Services.</p>

Financial overview

Healthcentrix is a Digital Health startup whose mission is to create a Connected Health Ecosystem (Prevvy) where empowered healthcare consumers manage their health, their relationship with providers and where they could acquire or be offered Connected Health Services from different providers.

Healthcentrix has fundraised \$540,000 until now from founders, physicians and healthcare organizations, and business schools teachers in Miami area. Healthcentrix participated in Healthbox Accelerator Program. Healthcentrix has signed 2 contracts with prepayments with a South Florida healthcare provider and a large ACO for piloting a bootstrap Connect Health ecosystem based on Chronic Care Management services to Medicare patients. Our initial revenue lines are based on subscription services to physicians associated to Medicare reimbursements for physicians.

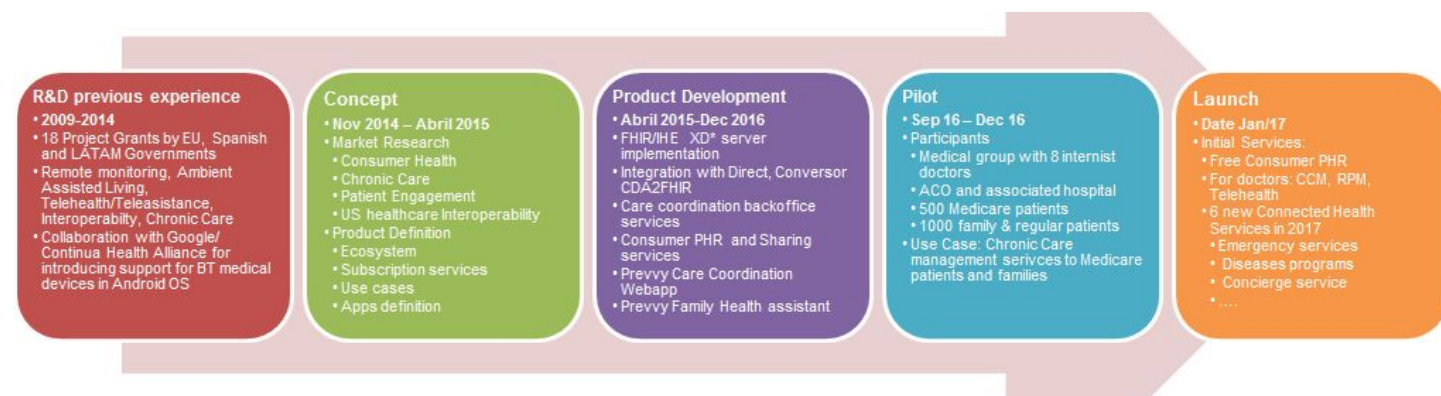
Prevvy Service	Description	Pricing to provider	Provider Billing
CMS Chronic Care management for Medicare FFS patients with 2+ chronic conditions (70% of Medicare population)	Shared PHI with careteam (providers, family), Assessments, Drug Interaction, Adherence, Time Tracking, Async communication, Billing). A doctor could earn up \$200,000 new revenues per year with this new CMS revenue lines.	\$6 PPM	\$42.5 PPM from Medicare
Remote monitoring services	Device management, Patient generated health data	\$8 PPM	\$52PPM from Medicare
Transition of Care services	Share PHI with careteam Care Coordination and Careplan Management	\$25 PP	Reduction of penalties
Telehealth Services	Video conference, PHI from patient, Screen sharing, Careplan Management	\$5 per visit	self-pay or insurance.
Wellness & Careplans made by MDs, nutritionists,	Disease, Diets, Concierge Careplans from different providers	\$2 PPM	self-pay or insurance

Our projections for next 3 years and Cost Structure for 1st year after launching are:

PROJECTIONS	Year 1	Year 2	Year 3
Sales	\$1,548,171	\$6,384,568	\$13,339,936
CAGR		312%	109%
Total Cost of services Sold	\$1,264,775	\$1,837,288	\$2,428,695
Gross Margin	\$283,396	\$9,094,562	\$21,822,482
Total Operating Expenses	\$465,959	\$862,103	\$1,849,422
EBITDA	-\$182,563	\$8,232,458	\$16,274,215
Net Income	-\$234,563	\$7,851,458	\$16,274,215

Costs 1st year	
Product Development and R&D	55%
Services Operations	23%
Marketing and Sales	13%
Management, finance / administrative	9%
	100%

Development plan and timeline



Metrics for success

Enrollment metrics	<ul style="list-style-type: none"> • Number of enrolled doctors • Number of Medicare patients with CCM services • Number of total patients with Prevvy service
Exchange metrics	<ul style="list-style-type: none"> • Number of Received CDA documents • Number of SMRT-FHIR syncing sessions
Revenues	<ul style="list-style-type: none"> • Monthly revenue • Growth monthly revenue • Number of new launched Connected health services per year

Risks and mitigations

Risks	Mitigation
Promotion and Enrollment of doctors and patients	ACO organizations are a perfect distribution and promotion channel because alignment incentives with better quality, experience and savings
Technological skills of Medicare patients	Family and caregiver on boarding of the program are key elements for the successful of the program, specially women and daughter, could be a powerful Health leader
Security	Security technologies such as encryption of communications, storage and fine granularity authorization based on Patient Consents

Privacy model

Healthcentrix will sign HIPAA Business Associate Agreements (BAAs) with all of our provider partners, and a BAA with our cloud service provider. We want our physician partners and individual users to be confident that their data is transmitted and stored securely. Healthcentrix will therefore follow all applicable state and federal ONC MPN PHR privacy guidelines. We will be fully transparent with all of our partners and users with regard to how we store, transmit, and use data in the Prevvy system

Participants

Healthcentrix have signed different Business contracts with healthcare providers at South Florida for piloting a bootstrap Connected Health Ecosystem project based on initial Chronic Care Management reimbursement

Medicine on Call (Business contract)	Medicine On Call is hospitalist group with 8 internist specialist working for Tenet facilities
Baroma Health Partners ACO NG (Business contract)	Baroma ACO has more than 1200 PCPs participating in new ACO Next Generation Program
Tenet South Florida Hialeah Hospital (engaging in this moment)	Main Medical and Hospital group at South Florida