

sessment · Social Services In-Home Assessment · Patient Engagement · Activities of Daily Living · Care Transition Management · Fall Risk Assessment · Housing Safety & Security Evaluation · Palliative Care activities of Daily Living · Care Transition Management · Fall Risk Assessment · Hospital Readmission Risk · Behavioral Health Readmission Activities of Daily Living · Care Readmission Readmission

l Depression Survey · PHQ Assessment · Hospital Readmission Risk · Behavioral Health Readmission Risk · Pediatric

## **About avixena**

**avixena Population Health Solutions** (avixena) is a software as a service (SaaS) provider of cloud-based, evidence-based population health management tools that are designed to prevent costly and unnecessary readmissions, and facilitate care transitions and post-discharge care. avixena provides real-time state of the art population health management support systems for health systems, payers and physicians.

# Our mission is to help your organization improve patient outcomes, create operational efficiencies and manage costs.

#### **Our Products**

avixenas' tools are evidence-based products that were developed after reviewing more than 60,000 inpatient Medicare FFS, Medicare advantage, D-SNP, and Managed Medicaid admissions; 20,000 pediatric admissions; and 4,000 behavioral health admissions in Arizona, Arkansas, California, Georgia, Indiana, Maryland, Missouri, Oklahoma, South Carolina and Texas from 2007-2014. This total includes approximately 5,000 Adult, 500 Behavioral Health and 1,200 Pediatric readmissions. All of avixenas' tools are evidence based, have a specificity, sensitivity and positive predicting value of >90% for identification of patients who are at high-and medium-risk for readmission. Each readmission tool generates actionable interventions and communications required to lower the rate of readmissions.

- State of the art assessment tools that accurately identify individuals who are at high- and medium- risk for readmission or preventable complications.
- Comprehensive set of care transitions and outpatient care tools and surveys.
- Simple and intuitive apps.
- Extremely cost effective SaaS based subscription programs and licenses.
- Paradigm shift from compliance-based activities to creation of actionable care plans.
- Real-time, cloud-based mobile apps that are device agnostic and can be simultaneously accessed by multiple providers.
- All apps development include re-engineered processes rather than automating paper-based activities.
- The tools with scoring capabilities will allow for longitudinal comparison and assist with monitoring the patient's status.
- Tools that are not based on the claims information or Legacy Systems.
- Assessments can be completed in fraction of the existing time requirements.
- Reporting capabilities.
- System access will be available to patients and caregivers. The products are designed with the premise that most can be used by lay and non-clinical persons.

avixena Population Health Solutions' cloud-based software tools are designed for mobile platforms on the iOS and Android operating systems as well as traditional desktop and laptops running Windows, Apple OSX and Chrome OS. The system includes a program application (AKA app), HIPAA compliant data warehouse and real-time information availability.



## **Hospital Readmissions**

**Reducing hospital readmission rates** have become a major issue for all healthcare providers because readmissions are common and costly. A reasonable fraction of readmissions are preventable. Therefore, reducing readmission rates represents a unique opportunity to simultaneously improve quality of care and reduce costs. As part of the Affordable Care Act (ACA), Congress directed the Centers for Medicare and Medicaid Services (CMS) to penalize hospitals with "worse than expected" 30-day readmission rates. This part of the ACA has motivated hospitals, health systems, professional societies and independent organizations to invest substantial resources into finding and implementing solutions for the "readmissions problem."

avixena has developed a suite of software tools that have been specifically developed to help reduce the rate of readmissions, provide substantial cost savings and improve quality of care.

## Readmission Risk Assessment Tools (apps)

## Readmission Risk Assessment Survey (RAS)

**Tool** - This Tool is the most advanced assessment tool in its class and is designed to identify patient's readmission risk status, has a scoring system, and allows for automatic generation of action items (such as a discharge plan).

**Behavioral Health RAS Tool** – The Behavioral Health RAS Tool has all the features described in Adult RAS Tool and is the only tool of its kind that identifies and incorporates the impact of age, previously diagnosed behavioral health conditions, and discharge destination on readmissions.

Pediatric RAS Tool - Pediatric RAS Tool has all the features described in the Adult RAS Tool but also incorporates and quantifies the effect of issues limited to pediatric population on readmissions (i.e., impact of pre-term birth, genetic conditions, immunization status, impairment of growth and development, and caregiver's mental health status). The Pediatric RAS Tool was developed based on Dr. Shafa's experience with two of the largest Pediatric-only managed care organizations in the US.

## Readmission Root Cause Assessment (RRCA)

**Tool** - This Tool was designed to assess root causes and contributing factors that have resulted in a readmission and automatically creates an action plan to mitigate and manage the identified issues.

**Extended Care Facility Transfer Readmission Risk Assessment (TRRA) Tool** - This Tool is designed to alert and assist extended care facilities with managing moderate- and high- risk patients prior to transfer from the acute care setting. The same methodology was used to develop and validate its effectiveness as was used for the RAS Tools.



## **Assessment Tools**

A single tool will not resolve a complex issue such as readmission.



## **Care Transitions**



## **Home Safety and Security Assessment Tool:**

This tool assesses structural, environmental, safety and security related elements that are necessary for patients to reside in their residences and if appropriate, receive care in their home setting. The greatest feature of this tool is that the completion of the assessment will automatically generate a suggested action plan to address the findings. This is the only tool that automatically generates an action plan based on the assessment findings.

## **Home Healthcare Referral Tool:**

A comprehensive tool that streamlines the process of ordering Home Healthcare services, documentation of provided services, and instructions for how to inform the ordering providers of the patient's progress.

### **Palliative Care Assessment Tool:**

The only available tool that allows assessment and follow-up care for Palliative Care services. The tool also contains an action plan that allows documentation and communication for the planned interventions.

## **Fall Risk Assessment:**

This tool was designed to serve as a guide to assess the patient's fall risk factors through physical examination, observation and interaction with patient.

## **Patient Engagement Assessment:**

Designed to assess Patient and/or Caregiver's engagement is a very useful tool to initiate an effective care plan in pre- to post-discharge spectrum of care.

## **Activities of Daily Living Assessment Tool:**

This evidence-based tool was created to independently assess patient's mental functions, basic ADLs and industrious ADLs and is the only tool of its kind that assesses and scores patient's basic and industrious daily activities, and allows objective longitudinal comparisons. This is an evidence-based tool that allows evaluation of functional status of Activities of Daily Living (ADLs). This tool was re-designed to independently assess mental functions, basic ADLs and Industrious ADLs. In addition, the app allows long-term monitoring of change of status, and assists with provision of correct services at the most appropriate level of care.

### **In-Home Social Work Assessment:**

Allows social workers to perform and document an accurate and thorough in-home assessment. The assessment includes evaluation of mental, emotional, cognitive, social determinants of health and environmental factors. The app also includes a summary section which is extremely valuable as it can be used to provide feedback to the ordering practitioner and other providers involved in patient's care. This tool is designed to initiate intake and screening with careful documentation of the implemented steps and an up-to-date summary of relevant information.

## **Transition of Care Tool:**

Is intended to help with an effective discharge planning and to provide care information continuity following discharge from acute setting.

### Post-admission Medication Reconciliation

Creates an accurate and complete record of all medications that are taken by the patient following an admission to inpatient level of care. The survey may also be completed during transition of care process, care in the outpatient setting (hospital observation care), following transfer to another health care facility, or as part of care coordination by community providers.

- Manage PCP and pharmacy information.
- Easy to complete medication list from a complete data base of brand and generic drugs
- Compliance, adherence, side effects and interactions survey.
- The reconciled medication list and generated action items can be shared with patient and other providers.

avixena has designed multiple products that will manage patients across the post-discharge spectrum of care.

## **Home / Community**

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## **Perinatal Care**

## **PHQ-9 Depression Survey:**

The PHQ-9 is the nine item depression scale of the Patient Health Questionnaire. It is a powerful tool to assist clinicians with diagnosing depression and monitoring treatment response. The nine questions of the PHQ-9 are based directly on the nine diagnostic criteria for major depressive disorder. This tool can help track a patients overall depression severity as well as the specific symptoms that are improving or not with treatment. PHQ9 is not included in the majority of electronic medical records, and this deficiency has resulted in low completion rates in the US. This tool is designed to assist practitioners to document completion of the questionnaire, identify those undiagnosed cases of depression, and promote monitoring and documentation of response to treatment.

## **Health Risk Assessment:**

A comprehensive tool that captures patient's risk status, allows identification of needed preventive services and HEDIS performance measures, and dramatically reduces the need for chart reviews (e.g. embedded BMI calculator). This tool is specifically designed to be completed by either a clinician, patient or caregiver.

#### **Social Determinants of Health (SDOH):**

Are major contributors and obstacle for patients to manage their chronic conditions and other health needs. The first of its kind, this app allows longitudinal monitoring of patient's status, and also allows institutions such as Community Health Centers to generate reports that will facilitate determining the network and community resources needed to meet those demands.

## **SNF Discharge Plan:**

Comprehensive survey covering patient and caregiver engagement, transitional care and post discharge needs. Also includes, follow-up care and medication reconciliation. Easily produce an action plan that can be shared with caregivers and the patient.

## **High-risk Pregnancy Assessment Tool:**

This tool was designed by Robert Johnson, MD, a recognized authority in Perinatal Medicine in Phoenix, Arizona. It is the first tool of its kind that allows accurate identification of high-risk pregnancies by the obstetricians, facilitates referral to perinatalogists, addresses issues related to information continuity, and assists with follow-up and continuity of care with the referring obstetricians.

## **Edinburgh Postnatal Depression Scale:**

The Edinburgh Postnatal Depression Scale (EPDS) is a self-report questionnaire originally designed by Cox and colleagues to screen for postnatal depression. Large community surveys have shown the EPDS to have strong validity and reliability, and the latest medical evidence indicates that the EPDS can effectively identify mothers at risk for postnatal depression as soon as at 2 to 3 days postpartum while many mothers are still in hospital. EPDS is not included in the majority of electronic medical records, and this has resulted in low use and completion rates. This tool is designed to assist practitioners to document completion of the questionnaire and identify mothers at risk for postnatal depression.

#### **Patient Follow-up App**

Designed to assist providers to monitor and assess patients' post-visit compliance and creates a very effective tool for patients to accurately report back their status or change of condition in a timely manner. The tool is designed to allow two-way communication between patients and providers and will improve compliance with care plan and instructions, reporting back obtaining needed appointments, care outcomes, and informing providers when a patient had an ED visit or inpatient admission post encounter.

Population Health Made Simple

## **Clinical Practice Guidelines**

One-page, interactive evidence-based clinical practice guidelines that are user friendly, HEDIS compliant and include performance measurements for the following conditions:

- Advanced Care Planning
- Asthma
- Cellulitis
- Community Acquired Pneumonia
- Congestive Heart Failure
- COPD
- Chronic Kidney Disease Mgmt.
- Diabetes

- Diabetic Foot
- Dyslipidemia
- Low Back Pain
- Heel Pain
- Hypertension
- Major Depression
- Migraine
- Obesity

- Office Sedation
- Osteoarthritis
- Osteoporosis
- Preventive Services
- Smoking Cessation
- Substance Use Disorder

Clinical Practice Guidelines for Diabetes- This evidence-based tool provides a systematic approach to assessment, risk identification and clinical management of diabetes for primary care providers. In addition, Avixena has developed a diabetic check list that includes the most recent and the future dates of all needed interventions and measures needed for appropriate management of diabetes. The diabetes guidelines is HEDIS compliant, which will allow clinicians to provide optimal care and qualify for pay-for-performance measures.

## **Patient Safety**

The ability for physicians to follow-up directly with patients is vital to their safety, improving outcomes, quality of care and reducing health care costs. avixenas' ability to work with any desktop or mobile device makes it the perfect platform for creating patient-facing apps that will allow patients to communicate directly with their care providers.



## **Post-Op Pain Management Assessment Tool**

Track your patient's pain control during their recovery period. This Tool allows physicians to send out an email or text invite for patients to report back their pain levels and recuperation directly from the avixena apps dashboard.

- Ordering physicians can set frequency of reporting.
- The alert and prompting features can send reminders to patients via text or email.
- Patients can use a web browser on any desk-top or mobile device by simply clicking on the link
- Simple design of patient input screen takes only one minute to fill out and submit.

#### **Great features:**

- All data is in real time.
- Physicians can securely access information anytime, anywhere using their mobile device.
- Patient data is shown on dashboard and is reported in an easy to read chart.
- Physicians can alter post-op treatment based on generated reports and prevent avoidable ER visits.
- Physicians can share info with other care providers via email or fax.
- Is a great tools for monitoring medication use, including use of opioids.
- HIPAA Compliant.

# **Technical Specifications**

**avixena** cloud-based software tools and apps are designed for mobile platforms on the iOS and Android operating systems as well as traditional desktop and laptops running Windows, Apple OSX and Chrome OS. The system includes a program application (AKA app), HIPAA compliant data warehouse and real-time information availability. The apps and infrastructure to support these tools are built with the following attributes:

- Web app support for modern desktop and mobile browsers including Chrome, Internet Explorer, Firefox and Safari.
- Web app support for mobile and desktop devices including those operating on the iOS, Android, Windows, Mac OSX and Chrome OS platforms.
- Secure cloud-based application servers. HIPAA-compliance.
- Integration-capable with existing EHR/EMR and legacy systems.
- RESTful HTTP API to integrate features into custom applications. Java Script and open source tools.
- Feature rich reporting and analytics.
- Simple web-based user administration.
- Flexible and customizable.







