The 12 Criteria of Population Management

In 2014, Health Catalyst published a white paper outlining the 12 criteria of population management that they believed were essential in evaluating population health management (PHM) solutions, namely:

1. Precise Patient Registries
2. Patient-Provider Attribution
3. Precise Numerators in Registries
4. Clinical + Cost Metrics
5. Basic Clinical Guidelines
6. Risk Management Outreach
7. Acquiring External Data
8. Communication with Patients
9. Educating + Engaging Patients
10. Complex Clinical Guidelines
11. Care Team Coordination
12. Tracking Specific Outcomes

Summary

An overview of how the transformational Virtual Health population health management solution performs relative to the 12 specific criteria recommended by Health Catalyst, including registry management, patient attribution and engagement, risk management, and care team coordination, among others.
The purpose of this paper is to provide an overview of how Virtual Health performs vis-à-vis each of these 12 criteria.

**No.1 PRECISE PATIENT REGISTRIES**

Virtual Health takes into account the full range of data outlined under this criterion, including conditions codes (both ICD9 and ICD10), lab results (LOINC), functional status measurements (functional and cognitive), diagnostic imaging results (DICOM), medications (NDC), claims data, procedure codes (CPT/HCPCS and clinical observations) (manual and telehealth).

However, Virtual Health goes beyond the base level of this criterion, also providing a way to capture, report, and analyze a customizable set of additional data across demographic, social, behavioral, environmental, financial, and other sets via advanced custom forms.

**No.2 PATIENT-PROVIDER ATTRIBUTION**

Virtual Health exceeds this criterion by providing intuitive tools for plan- or managed care-initiated, patient-initiated, caregiver-initiated, and automated attribution on the basis of such criteria as customizable geographic zones.

**No.3 PRECISE NUMERATORS IN REGISTRIES**

This criterion refers to the capability to identify difficult to manage patients based on such criteria as language barriers, cognitive or physical impairments, or geographic location. Virtual Health allows the patient population to be assessed
in real time with regard to these and other criteria. Cognitive, communication, economic, and geographic details are automatically culled from data sets and tied to alerts and algorithms, such as the automated checking for drug-drug and drug-allergy interactions, or the identification of patients with a high frequency of challenging behaviors.

**No.4 CLINICAL + COST METRICS**

Virtual Health supports a broad spectrum of metrics, including custom key performance indicators that are organization-specific. Any variable or combination of variables existing within the data set may be tracked, trended, and analyzed in real time or in the form of scheduled reports.

**No.5 BASIC CLINICAL GUIDELINES**

Virtual Health makes it possible to build in guidelines in the form of rules and workflows, such as care planning goals and interventions that are tied to specific clinical and behavioral health needs.

**No.6 RISK MANAGEMENT OUTREACH**

Virtual Health enables multiple risk stratification protocols that operate simultaneously, providing care teams with real time data regarding both objective risk measures tied to such factors as ICD and NDC codes and subjective risk measures relating to social and environmental factors.
**No.7 ACQUIRING EXTERNAL DATA**

Virtual Health supports an extraordinary level of interoperability. It is able to take data in virtually any source format via SFTP, web services protocols, or direct access. Virtual Health supports multiple simultaneous connections with disparate systems across a variety of formats and is routinely called upon to process millions of complex records at a time.

**No.8 COMMUNICATION WITH PATIENTS**

Virtual Health has one of the most advanced and multi-faceted patient portals in the market, supporting live video conferencing, secure messaging, sharing of documents, images, and videos, and transmission of results and reports. Each communication is precisely tracked and logged for future compliance, reporting, and performance measurement needs.

**No.9 EDUCATING + ENGAGING PATIENTS**

Virtual Health supports the upload and instant sharing of educational publications, diagrams, and videos with both individuals and groups. Educational materials may be tagged, such as by condition, medication, or lab result, and the system can then automatically share such materials with patients whose health profiles are a fit. From the standpoint of engagement, Virtual Health provides integrated event management and on demand services, enabling managed care organizations to provide patients with transportation, nutritional meals, wellness coaching, remote monitoring, and other health-related services.
CONCLUSION

At the time of publishing the 12 criteria, Health Catalyst proclaimed that “no single vendor today offers an integrated and fully functional population health management solution that meets all 12 criteria”. Virtual Health is pleased to be the first solution that does, providing a uniquely innovative, comprehensive, and advanced PHM platform.

No.10 COMPLEX CLINICAL GUIDELINES

Virtual Health is utilized by a number of clients to treat complex populations with a high number of comorbidities. The solution’s multi-dimensional risk stratification, built-in collaboration tools, and customizable reporting and analytics make it possible to effectively address the unique challenges to treating such populations.

No.11 CARE TEAM COORDINATION

Virtual Health places collaboration front and center, providing multi-dimensional communication tools and common workflows, coupled with the capability to easily move cases, manage calendars, and delegate tasks. Staff members can see information entered by other staff, respond to questions, manage alerts, enter memoranda, and interact in real time through video conferencing or secure messaging. Documents and media can be shared with individual staff members or the entire team with a single click.

No.12 TRACKING SPECIFIC OUTCOMES

Virtual Health is one of the only PHM solutions to incorporate both patient-reported and telehealth-based outcomes data and to overlay adjustable real time triggers over this data to auto-generate critical and timely alerts for the care team.