Avatar Solutions’ Intelligent Patient Surveys™

Avatar’s Intelligent Patient Survey Framework

Avatar’s survey development and framework is based on the American Customer Satisfaction Index. This model was developed by the University of Michigan School of Business and is the most researched customer loyalty model in the world.

Avatar’s Customer Satisfaction Model

All Avatar surveys query patients about their Expectations, Processes and Outcomes. This model shows causal relationships: Expectations impact how the Processes that the patients interact with are perceived, which in turn affect very important business Outcomes. Avatar Outcomes include Endorsement (would patient recommend ABC Medical Center to others without hesitation), Loyalty (would patient return to ABC Medical Center if care was needed), Differentiation (how does ABC Medical Center compare with other local or regional care centers).

Avatar’s Intelligent Patient Survey Design

Avatar is the only survey provider with the ability to custom print surveys specific to each patient and the services he or she received. Avatar Intelligent Patient Surveys are designed to measure the entire patient experience.

Avatar’s surveys are constructed from a comprehensive bank of items by patient type for each client, including the following types of items:

- CAHPS Items (if applicable)
- Core Avatar Items
- Client Unique Items
- Service-Specific Items
- Clinically-Relevant Items
CAHPS

The Hospital Consumer Assessment of Health Providers and Systems (HCAHPS) Survey is the first nationally standardized, publicly reported survey. The primary goal of HCAHPS is to complement existing survey vendor and hospital-based survey instruments to measure the patient experience and provide valid comparisons across all hospitals. Avatar’s integrated HCAHPS survey includes the 27 required questions. Additional Avatar items are added to the CAHPS survey to capture important aspects of the patient experience not currently being measured by the standardized survey instrument. Avatar’s items are highly correlated to overall satisfaction and provide further insight into understanding the patient experience.

Avatar also offers Home Health CAHPS (HH-CAHPS), Clinician and Group CAHPS (CG-CAHPS), Clinician and Group Child CAHPS (CG-CAHPS Child), Patient-Centered Medical Home CAHPS (PCMH-CAHPS), Patient-Centered Medical Home Child (PCMH-CAHPS Child), In-center Hemodialysis CAHPS (ICH-CAHPS), Pediatric HCAHPS (Pediatric-HCAHPS) Surveys, and Accountable Care Organizations CAHPS (ACO-CAHPS).

Core Avatar Items

Intelligent Survey creation begins by pulling core Avatar items for the applicable patient type (e.g. Inpatient, Emergency, Outpatient Tests, Physician Office, etc.). Core items are used by all Avatar clients and allow for national comparisons. These items also capture the most pertinent aspects of care and service experienced by patients to provide clients with key data from which to base improvement efforts.
Avatar offers a patient survey for all experiences, including the following patient types:

- Inpatient
- Emergency Department
- Outpatient Test and Treatment
- Ambulatory Surgery
- Physician Office
- Home Health
- Hospice
- Inpatient Behavioral Health
- Outpatient Behavioral Health
- Long Term Care
- Assisted Living
- End of Life

**Client Unique Items**

In addition to core items, unique items may be added to the item bank if an existing core item does not already capture the information desired. For example, many faith-based organizations have added items measuring the spiritual aspects of care. Unique items should not be confused with personalized items. All items can be personalized as appropriate (e.g. naming the hospital in the item rather than using "hospital", or naming the physician rather than using "doctor").

**Service-Specific Items**

As Avatar uses patient datafiles to intelligently recognize the specific services and care provided to each patient, we are able to include service-specific items on surveys to appropriately allow only patients who experienced a specific service to measure it. For example, ancillary items are used to rate areas such as ED admission, ICU, or ultrasound. Only patients who experienced these aspects of care would receive these items, ensuring better validity of results. Another example would include a patient who delivers a baby and has an epidural. The epidural is recognized in the patient’s datafile and an appropriate item can be added automatically to that patient’s survey. Service-Specific items are added into the item bank and applied to surveys as appropriate. Avatar is the only patient survey vendor with this unique capability.

Some examples of the type of ancillary services Avatar is able to capture through the survey process including the following:

- Ambulance
- Audiology
- CT Scan
- Cardiac Rehab
- Cardiology
- Cardiology Stress Test
- Cath Lab
- Coronary Care
- Diabetes Education
- Diagnostic Radiology
- Dialysis
- EKG/ECG
- EMG/EEG
- Emergency Admissions
- GI Lab
- Intensive Care
- Laboratory
- MRI
- Mammography
- Neonatal Transport
- Neuorintensive Care
- Nuclear Medicine
- Occupational Therapy
- Physical Therapy
- Radiation Oncology
- Respiratory Services
- Speech-Language Therapy
- Ultrasound
- Vascular Lab
Clinically-Relevant Items

Just as Service-Specific items are applied to patient surveys, Avatar can add clinically relevant items to the item bank to specifically measure health behaviors, education and outcomes around specific conditions. For example, if a patient suffers from a chronic condition such as a stroke or diabetes, items regarding their education and management of these conditions can be automatically applied only to the appropriate patients. Clinically-Relevant items are not required to be included in item banks, but offer distinct advantages to Avatar clients who utilize them. These items are most widely used by Avatar partners for meeting third-party requirements for specialty and disease specific certifications (i.e. The Joint Commission's Primary Stroke Center Certification). Using diagnostic and ICD9 codes in the data file, Avatar is able to apply clinically-relevant items on the patient survey of only those patient populations of interest.

Matrix Sampling

Avatar understands the importance of providing patients with a specific survey that requires minimal time to complete but allows our clients to receive valid data pertinent to their patients’ continuum of care. Achieving both is made possible through the use of matrix sampling, by which each patient only receives a subset of items from the item bank to reduce the total number of items a patient must complete. Matrix sampling is a well-established statistical technique for increasing the efficiency of data collection. Matrix sampling has been commonly used in large-scale, validated research efforts such as the U.S. Census and the National Assessment of Educational Progress.

Using Matrix Sampling, each patient survey includes a different subset of the full set of items. The subsets are designed in such a way that there is adequate sample size for each item, ensuring uniform volume of data for each item within the entire item bank. All factors (e.g. groups of related items such as Nursing Care, Pain Management, and Patient Safety) are represented on the survey, and individual items are balanced within the factor to assure representative and consistent data for results. Through the use of matrix sampling, Avatar is able to collect a broad overview of all patient encounters while minimizing the number of items on each survey.

The specific advantages of matrix sampling include a) the reduction of respondent burden for participation, and b) the opportunity to expand content by asking more questions without making any single survey excessively long.