# HiMSS Analytics®

# Essentials Brief

2016 Year in Review &
2017 through 2018 HIT Demand Forecasts

January 2017

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    - Bed management, data warehousing/mining, enterprise master patient index (EMPI), executive information system, infection surveillance system, outcomes and quality management, business intelligence – financial, patient acuity, physician assessment software tool, business intelligence – clinical
  - **Auto ID Application Index**
    - RFID, real-time location services (RTLS), barcoding

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- **2017 Healthcare IT Application Adoption Projections**
  - **Clinical Application Index**
    - Oncology information system, intensive care, emergency department information system (EDIS), operating room management system, obstetrical systems (labor and delivery), physician portal, respiratory care information system, anesthesia information management system (AIMS)
  - **EMR Application Index**
    - Computerized practitioner order entry (CPOE), EMR, physician documentation, order entry (includes order communications), clinical decision support system, clinical documentation
  - **Finance Application Index**
    - Patient portal, patient billing, general ledger, accounts payable, budgeting, credit/collections, ADT/Registration, customer relationship management (CRM)
  - **HIM Application Index**
    - In-house transcription, abstracting, electronic forms management, encoder, computer assisted coding, dictation, dictation with speech recognition, document management
  - **Human Resources Application Index**
    - Learning management software (LMS), time and attendance, payroll, personnel management, benefits administration
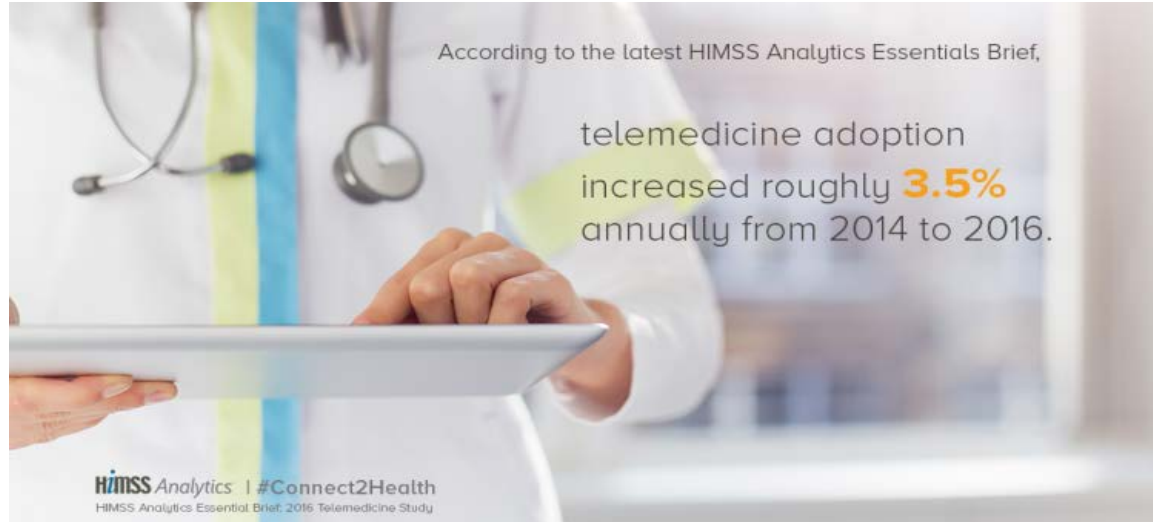  - **Laboratory Application Index**
    - Anatomical pathology, molecular diagnostics, laboratory outreach services, blood bank, specimen collection management system, microbiology, transfusion management system, laboratory information system (LIS)

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- **2017 Healthcare IT Application Adoption Projections**
  - **Payer Application Index**
    - Cost accounting, contract management, electronic data interchange/clearinghouse (EDI), medical necessity checking content
  - **Pharmacy Application Index**
    - Pharmacy management system, electronic management administration record (EMAR)
  - **Procurement Application Index**
    - Asset tracking/management, enterprise resource planning (ERP), materials management
  - **Radiology & Cardiology Imaging Application Index**
    - Radiology & cardiology information system (RIS & CIS), radiology and cardiology PACS (radiology, MRI, ultrasound, orthopedic, nuclear medicine, digital radiography, digital fluoroscopy, computerized topography, angiography, mammography)
  - **Scheduling Application Index**
    - OR scheduling, patient scheduling, staff scheduling, nurse/staff scheduling
  - **Security Application Index**
    - Spam/spyware filter, security information and event management (SIEM), encryption, firewall, biometric

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# 2016 Telemedicine Study Highlights: 3.5 percent annual market adoption increase since 2014 while level of uncertainty around use of telemedicine solutions has dropped considerably



According to the latest HIMSS Analytics Essentials Brief,

telemedicine adoption increased roughly **3.5%** annually from 2014 to 2016.

HIMSS Analytics | #Connect2Health
HIMSS Analytics Essential Brief: 2016 Telemedicine Study

| Model/Program | 2016 % of Respondents | 2015 % of Respondents |
|---|---|---|
| **Hub and spoke model** (audio/visual only between originating sites) | 55.2% | 57.2% |
| **Patient portal or application-focused patient engagement** (services delivered via portal with mobile or desktop access) | 49.7% | 49.7% |
| **Concierge services** (eVisits, online consults, and consumer oriented consults) | 26.9% | 20.0% |
| **Remote patient monitoring – clinical grade** (services delivered into the home) | 9.7% | 15.9% |
| **Remote patient monitoring – consumer grade** (data collected from off the shelf devices) | 11.7% | N/A |
| **Unsure** | 8.3% | 5.5% |
| **Other** | 2.8% | 5.5% |

- Telemedicine Adoption: roughly **3.5 percent increase** year to year
- The **hub and spoke model** continues to be the top model in use by organizations, however other models and programs have shown impressive year over year improvement
- Usage of **two-way video/webcam** the most commonly used telemedicine technology, but use is still relatively limited via mobile or tablet platforms, for both physician to physician and physician to patient.
- Telemedicine is beginning to evolve beyond providing care to those who need it most. While telemedicine technologies can be part of broader patient engagement initiatives (i.e.: Population Health, ACOs) organizational reasons are still primarily focused on providing widespread care
- Telemedicine is seen as playing a larger role in providing patient care, which has led to the creation of **specialized virtual care facilities**. Roughly 20 percent of study respondents revealed planned construction for a virtual care facility had occurred, is currently in progress or is being planned.
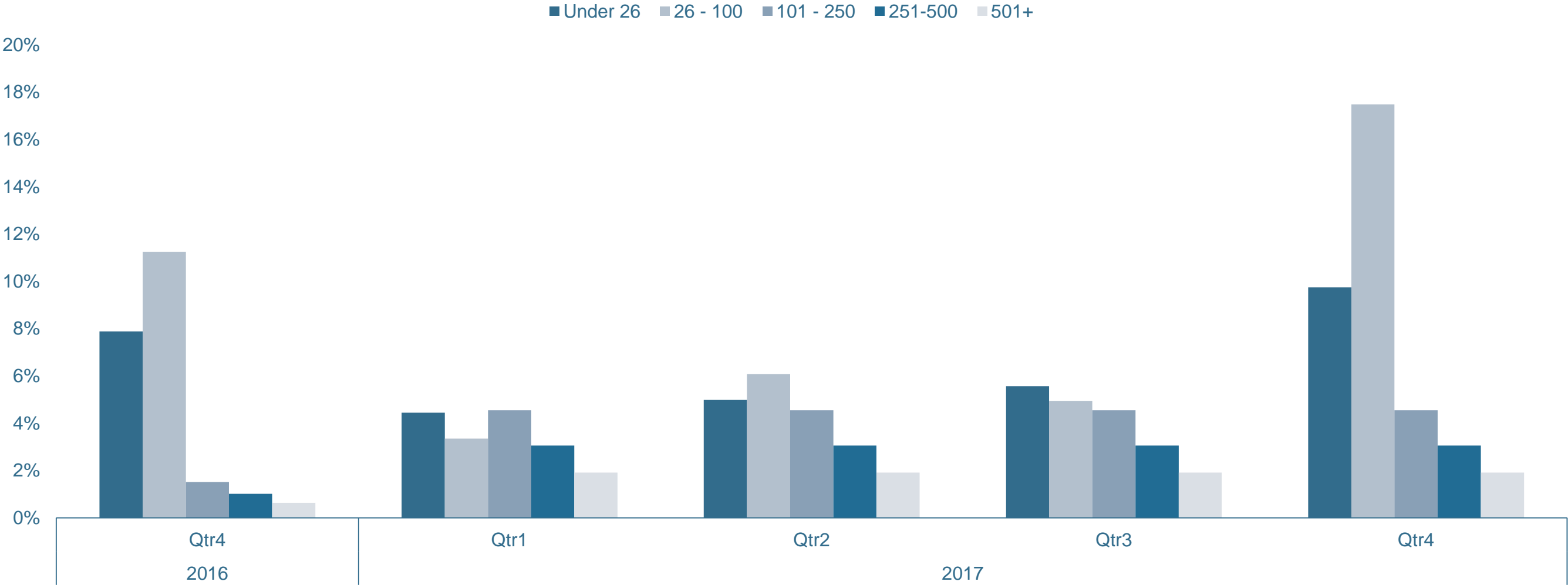
# Demand Forecast Methodology

The IT application demand forecasting contained in this study is based upon historical IT application adoption data from HIMSS Analytics LOGIC, the most robust healthcare IT dataset in the world, and the statistical analysis of this data through the HIMSS Analytics Predictive Adoption Algorithm. Factored into the application predictions and the analysis are different healthcare industry factors, expert analysis and data review, organizational propensity to buy/adopt, replace or do nothing regarding specific healthcare IT applications. Once the data was collected and analyzed, it was tested using the HIMSS analytics Predictive Adoption Algorithm against historical data to prove directional accuracy.

The end result is the predictive demand outlook for 81 different healthcare IT applications, individually and grouped together in 14 specific indexes, from December 2016 to November 2018. Predicted adoption and forecasted demand data was looked at for the last three years, analyzed and projected over the next 24 months for individual applications and over the next year at the index level. There is an 80 percent prediction interval for each of the demand forecasts month to month and quarter to quarter for possible outcomes.
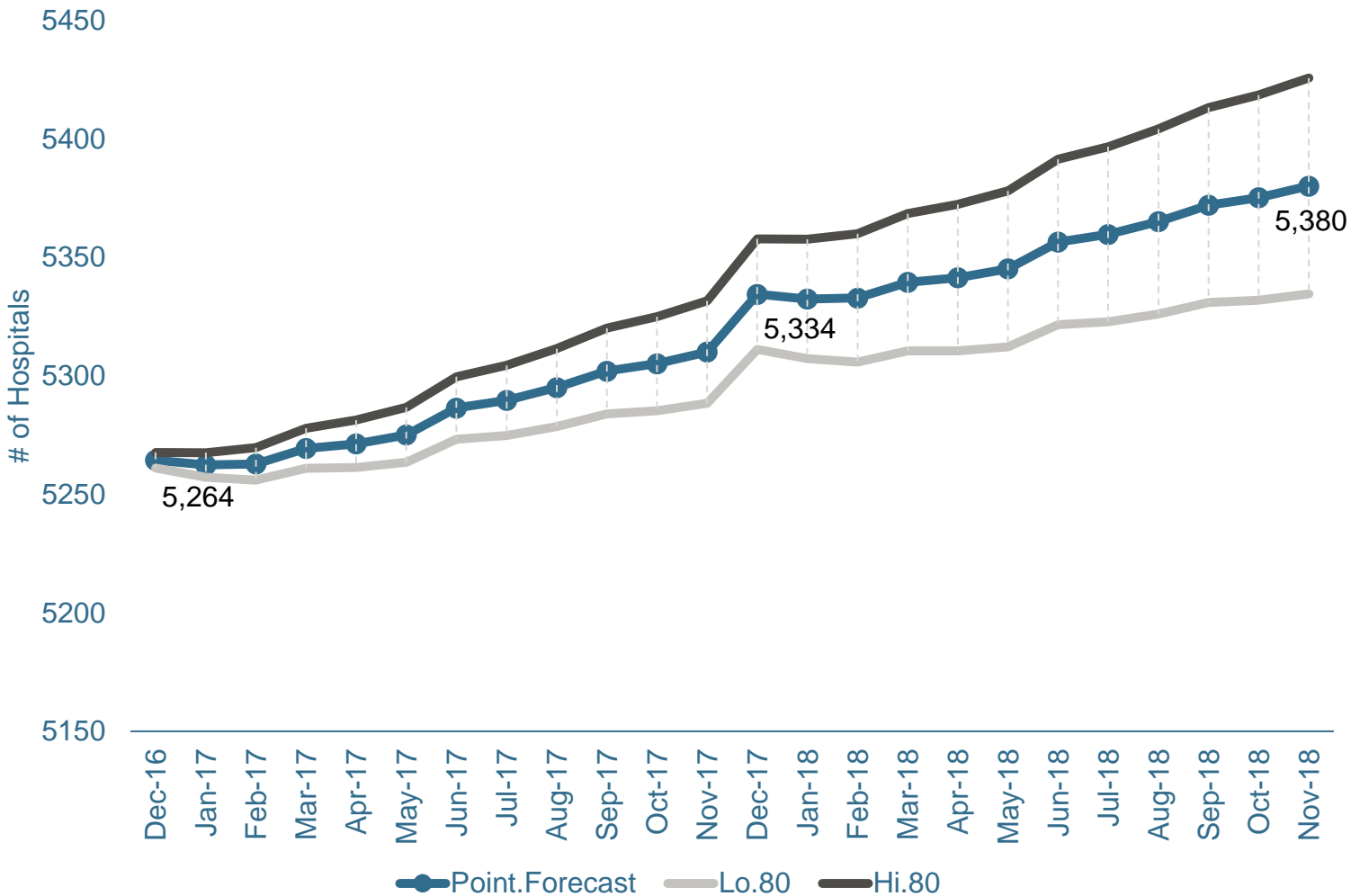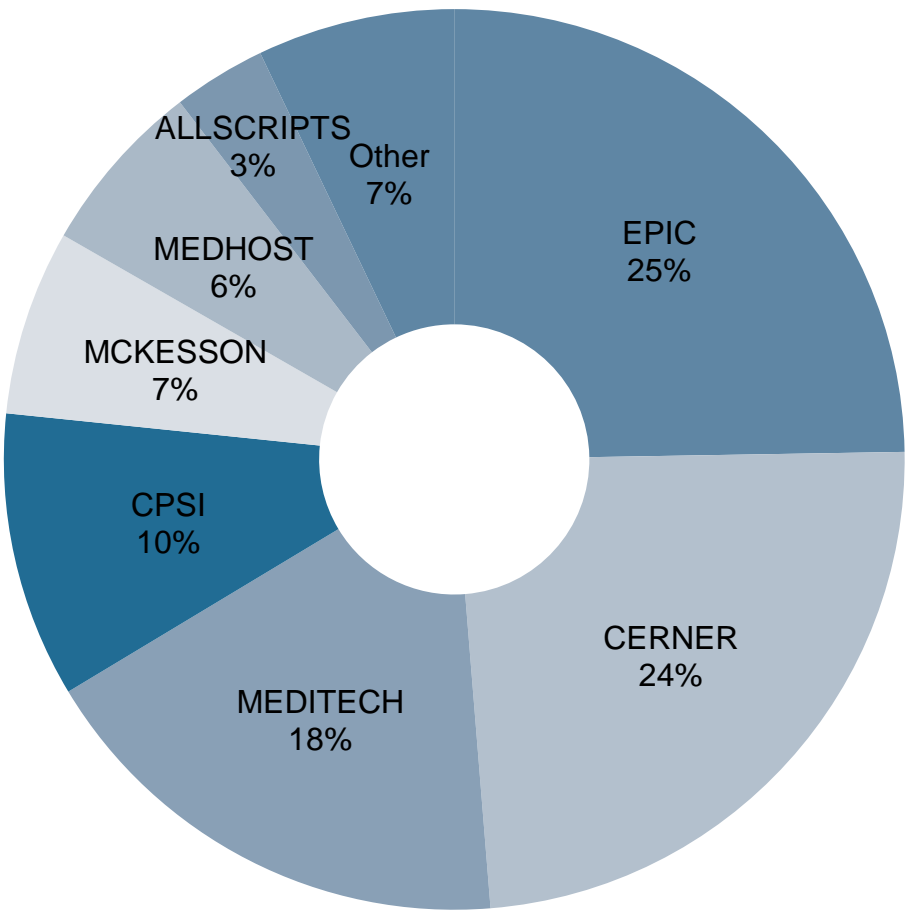
# EMR Application Projection: EMR

The centralized transactional database that allows organizations to collect, store, access, and report on clinical, administrative, and financial information collected from various applications within or across the healthcare organization that provides healthcare organizations an open environment for accessing/viewing, managing, and reporting enterprise information. The transactional database allows for real-time triggering of alerts and protocols at the point of care.

## Top Vendors



Donut chart – Top Vendors:
- EPIC 25%
- CERNER 24%
- MEDITECH 18%
- CPSI 10%
- MCKESSON 7%
- MEDHOST 6%
- ALLSCRIPTS 3%
- Other 7%



Line chart – # of Hospitals (Dec-16 to Nov-18):
- 5,264
- 5,334
- 5,380

Legend: Point.Forecast, Lo.80, Hi.80

*NOTE: Individual Application Projection represent net new purchasers over the next 24 months*

# Get all the insight in the Premium Essentials Brief!



**Purchase the study**

Highlights of the 2016 study include:

- Review of top findings for 2016 Essential Briefs, including Telemedicine, Precision Medicine and Population Health

- An update on the state of the U.S. hospital market according to the Electronic Medical Record Adoption Model (EMRAM)

- Predictive adoption outlook for 81 different healthcare IT applications, individually and grouped together in 14 specific indexes, from December 2016 to November 2018

For more information on Essentials Briefs topics and how to purchase this report, please visit: http://www.himssanalytics.org/research-list

For additional information on the LOGIC™ Database, please visit www.himssanalytics.org

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