Healthcare Trends

March 06, 2023
Industry Shifts Towards Preventive, Personalized, and Participatory Care, Enabled by Patient Engagement Technology

Healthcare leaders are harnessing the power of technology to improve access to care, delivery of care, and healthcare support.

**Preventive Care**
- Telehealth, Remote patient Monitoring

**Personalized Care**
- Wearable devices, Care management platform

**Participatory Care**
- Patient communication platforms, patient portal

- Enables healthcare organization to gather actionable patient health information
- Allows patients to better self manage their care and feel supported
- Improves patient experience
- Reduces costs for patients and providers

Source: ISG Research
Horizontal and Vertical Integration of Key Market Players Continues

**Drivers behind healthcare consolidations**

- To tamp down healthcare cost
- To increase market share and gain scale
- To broaden service portfolio and capabilities
- To coordinate care better and improve patient outcome

**Impact on Healthcare**

- Care efficiency increases due to coordinated systems.
- Reduced healthcare as large hospital systems have bargaining power with insurers and pharmaceutical companies.
- Highly consolidated market reduces access to health care through hospital closures and higher prices.

**Horizontal Integration**

- Hospitals
- Payer

**Vertical M&A**

- Health-tech Company
- Hospitals

Source: ISG Research
Non-traditional Players are Transforming Primary Care Delivery

Current Market Situation
- Increased cost awareness
- Consumerism
- Digital adoption
- Physician shortage

 Sites of care are moving from clinics to homes, retailers, and digital platforms.
- Retail giants like CVS, Walgreens, and Walmart making inroads into the primary care space.

Increased Pressure on Existing Care Models

New primary care models
- Higher ease of accessibility for patients
- Reduced wait time
- Relatively lesser costs than hospital admission

Recent Development

Walgreens
- Walgreen's VillageMD unit acquired Summit Health-CityMD to expand Walgreen's reach into primary, specialty and urgent care.

CVS Health
- CVS Health plans to acquire Oak Street Health for $10.6B for extending its primary and value-based care footprint.
- In September 2022, CVS Health acquired Signify Health, a healthcare platform that uses analytics and technology to pair clinicians with patients for home-based visits.

Walmart
- Walmart acquired telehealth company MeMD to add nationwide virtual care options across primary care, urgent care and behavioral health to its clinics' service portfolio.

Dollar General
- Dollar General is piloting mobile clinics at three Tennessee stores in partnership with mobile health provider DocGo.

Source: ISG Research
Demand for Operational and Clinical Efficiency Solutions on Rise, Driven by Labor Shortage

The World Health Organization estimates that by 2035 there will be a global deficit of 12.9M skilled healthcare professionals.

Notable Development

- GE HealthCare and Apprise Health Insights partnered to launch the U.S.’ first statewide automated hospital bed management solution in Oregon.
- Automation Anywhere launched a new cloud-based Epic Fast Healthcare Interoperability Resources (FHIR) API Bot to automate access to electronic health records (EHR) for Epic Systems, one of the largest EHR vendors in the U.S.

Source: ISG Research
Healthcare Players are Using Real-time Data to Improve Outcomes

Use of real-time data varies across ecosystem players

- **Payers**
  - Forecasting, Claims predictions
  - Fraud detection
  - Reduce readmission
  - Streamline customer experience
  - Value-based reimbursement

- **Providers**
  - Personalized care
  - Identify at-risk patients
  - Resource allocation
  - Predict outcomes

- **Medtech companies**
  - Streamline payer and provider workflow
  - Identify opportunities to generate revenue
  - Optimize care delivery

**Advantages of real-time data**

<table>
<thead>
<tr>
<th>Streamlined patient experience</th>
<th>Enhanced remote monitoring capabilities</th>
</tr>
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<tbody>
<tr>
<td>Efficient resource utilization</td>
<td>Improved disease management</td>
</tr>
<tr>
<td>Timely diagnosis and care</td>
<td>Decreased costs</td>
</tr>
</tbody>
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- MedTronic uses InPen, a smart insulin pen on real-world glycemic and insulin dosing outcomes in individuals with poorly controlled diabetes which monitors patients in real-time.

- GE Healthcare and AMC Health collaborated to offer remote patient monitoring to patients with chronic and post-acute care in the home by leveraging real-time data.

Source: ISG Research
IoMT Devices, Enhanced by 5G, Open New Opportunities for Holistic Patient Care

5G offers immense possibilities for healthcare players to move to holistic data-driven personalized care, optimize resource utilization, offer care delivery convenience, and achieve increased patient value.

Key Development

Verizon's Business unit announced the launch of BlueJeans Telehealth, a solution to aid healthcare providers in delivering video telehealth experiences. BlueJeans Telehealth benefits from 5G's bandwidth and latency to deliver a higher-quality, jitter-free video stream to enhance the patient experience and aid in diagnosis.

Source: ISG Research
Data Security becomes a Top Priority across Healthcare Ecosystem

Shift towards digitalization has left healthcare industry overexposed to cyber risks and attacks.

Cybersecurity Challenges Faced by the Healthcare Industry

- Vulnerability of Legacy Systems
- Data Breaches
- Insecure Medical Devices and Equipment
- Ransomware and Malware
- Distributed Denial of Service (DDoS)
- Phishing
- Fragmented Security Architecture

Healthcare players are increasing efforts to reduce security risks

Healthcare providers are partnering with tech companies to protect patient data

Mount Sinai Health System collaborated with Sandbox AQ, an enterprise SaaS company leveraging quantum tech and AI, to protect patient records using sophisticated encryption technology.

IoMT firms are partnering with cybersecurity companies to develop secured solutions

IoMT cybersecurity company Ordr has announced an expanded partnership with Fortinet, a cybersecurity solutions provider, to deliver advanced security solutions across network-connected IoMT devices.

Healthcare IT providers are collaborating with cybersecurity firms to offer improved risk management solutions

Forescout Technologies, the global leader in automated cybersecurity, partnered with First Health Advisory, a leader in healthcare IT risk management to help organizations mitigate IT, OT and IoMT risk.

Source: ISG Research
Big Tech is Ramping Up Investments in Healthcare Space

Tech giants are targeting niche sectors within the industry.

**Focus Area**

**Amazon**
- Setting up initiatives to transform pharmacy, the medical supply chain, health insurance, and care delivery.
- The company is also looking to improve operational and clinical efficiencies through its cloud service AWS.

**Apple**
- Pushing to turn its consumer products into portable patient health hubs and clinical research tools by forging partnerships with payers, health systems, and clinical researchers.

**Google**
- Leaning on its cloud platform artificial intelligence (AI) to partner with hospital to solve challenges with electronic health record (EHR) interoperability and computing infrastructure.

**Microsoft**
- Using its Azure cloud services to enable providers and payers to improve health outcomes and optimize data storage.

**Recent Collaborations**

**Amazon**
- Acquired primary care disruptor One Medical in July 2022 for $3.9B.

**Apple**
- Looking to beef up its the Apple Watch and iPhone with new health features such as allowing users to store 150 different types of medical information on their Apple products and implementing sensors in the Apple Watch that can detect a hard fall or heart irregularities.

**Google**
- Partnered with electronic health record (EHR) company Meditech for its CareStudio platform.
- Cloud and Epic also partnered to enable the EHR company's health system customers to migrate to the cloud.

**Microsoft**
- Partnered with UPMC to provide the health system's clinical analytics team with its computing, AI and machine to help mine clinical and imaging data to create new insights that improve patient care.

Source: ISG Research
Emerging Technology is Shaping the Future of Virtual Care

With the increasing use of the digital front door, remote patient monitoring (RPM), and hospital at home, virtual care is becoming mainstream.

### Application

- **Microsoft and Nuance are working to leverage AI for EHR system.**
- **Telehealth platform XRHealth has AR support that allows clinicians to share the 3D images of their cases during virtual consultations with other professionals.**
- **Apple in its Series 4 smart watch has included FDA-approved electrocardiogram (EKG) and addition of a menstrual health monitoring feature.**

### Artificial Intelligence (AI)

- AI-driven care-assistive apps and predictive algorithms are enabling remote screening the diagnostic needs of patients.
- AI-enabled EHRs are aiding providers to improve the interoperability of data and remote patient monitoring.
- AI-powered healthcare chatbots are helping with patient communication and appointment scheduling.

### AR and VR

- AR/VR is enabling virtual real-time diagnosis and health-tracking.
- AR-enhanced telemedicine tools are allowing better diagnostic collaboration among medical professionals.

### IoT

- IoT enabled monitoring devices and wearables are assisting healthcare providers to remotely monitor patients' vital signs and send alerts.
- IoT platform are enabling medical device manufacturers and providers to ensure adherence to medical advice.
- IoT devices bring transparency between insurers and customers in the underwriting, pricing, claims handling, and risk assessment processes.

Source: ISG Research
Changing Payment Models are Impacting Care Dynamics

Healthcare industry is slowly shifting from fee-for-service model to value-based care (VBC) payment.

- **Fee-for-service Model**
  - Compensate for quantity, rather than quality.
  - Don't take patient outcomes into account when determining reimbursement amounts.
  - Can lead to unnecessary tests and treatments.

- **Value-based reimbursement Model**
  - Compensate for quality, rather than quantity.
  - Incentivize providers to collaborate with care providers to achieve the best health outcomes.
  - Value preventative, holistic, patient-centered care.

- **Alternative Payment Models (APMs)**
  - Bundled Payments
  - Pay for Performance (P4P)
  - Patient-centered Medical Home (PCMH)

**Impact on Healthcare**
- Patients Spend Less for Better Outcomes
- Increased Patient Satisfaction
- Improved Care Coordination
- Stronger cost control and reduced risk for payers.

Source: ISG Research
Thank You

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