Patient Monitoring Global Market

Forecast to 2020

[Devices (Cardiac, Prenatal, Fetal and Neonatal monitors, Hemodynamic, Multi-parameter, Neurological, Respiratory, Remote patient monitoring, MEMS, Temperature and Weight monitoring), End-users (Medical centre and Medical specialist, Primary healthcare and Community healthcare centers, Laboratories and diagnostic centers and Home-based users), Regional (North America, Europe, Asia Pacific and Rest of the World)]

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<td>152</td>
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<td>ROCHE LTD.: TOTAL REVENUE, BY SEGMENTS, (2011-2013) ($BN)</td>
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1.1 REPORT DESCRIPTION

Patient monitoring market is mounting as a result of advancement in upcoming technologies that is providing an excellent opportunity for cultivating improvised care for patients across every corner of the globe. Patient monitoring system involves continuous/semi-continuous measurement of patient’s physiological parameters such as heart rate, respiratory rate, blood pressure, core temperatures and pulse oximetry etc., which accelerates patient’s quality care by making superior clinical-decision. Patient monitoring plays a fundamental role in emergency and operating rooms, intensive and critical care units by reducing onset of complications and risks in patient. It is proven to be very useful in respiratory therapy, recovery rooms, out-patient care, transport, radiology, cath labs, gastroenterology departments, ambulatory, home, and sleep screening applications.

Patient monitoring devices market is mainly divided into following segments such as by-devices, by-end-users. Patient Monitoring market by-devices are classified into cardiac monitors, fetal, prenatal and neonatal monitors, hemodynamic monitors, multi-parameter monitors, neurological monitors, respiratory monitors, remote patient monitors, micro electromechanical systems-based monitors, temperature and weight monitors. PM market by-end-users are divided into medical centers and medical specialist, primary healthcare and community healthcare centers, laboratories and diagnostic centers and home-based users.

Patient monitoring devices are requisite part of medical team for every procedure i.e. operating in a clinic or multi specialty hospitals. The reduction in size of the monitors over the years through contemporary technologies and rising adoption of telemetry and remote monitoring has increased the growth of the patient monitoring devices. Cardiac monitoring segment commanded the largest share in global patient monitoring market for 2013 and is expected to maintain its strong share by 2019. Multi-parameter monitoring is the second largest share holder in the market. Moreover, respiratory monitoring and neurological monitors is the fastest growing segments due to rising incidence of respiratory and neuro-degenerative diseases and demand for portable devices.

The global patient monitoring devices market is expected to reach approximately $XX million by 2020 growing at CAGR of around 5.2%. Geographically, North America commands the largest
share and is expected to record a healthy market share by $XX million by 2020. APAC is going to be one of the prominent regions for this market in coming years driven by healthcare awareness, high purchasing power and rising population.

Some of the key players in this market are Abbott Laboratories (U.S.), GE Health care (U.K.), Johnson & Johnson, Inc. (U.S.), Covidien (Ireland), Medtronic (U.S.), St Jude Medical (U.S.), Omron Healthcare (Japan), Philips Healthcare (Netherlands), and Roche Diagnostics Limited (Switzerland).

The report provides an in depth market analysis of the above mentioned segments across the following regions:

- North America
- Europe
- Asia-Pacific
- Rest of the World (RoW)
### TABLE 1

**PATIENT MONITORING GLOBAL MARKET REVENUE, BY REGION (2012-2020) ($MN)**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
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<tr>
<td>North America</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Europe</td>
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<td>RoW</td>
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<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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</table>

Source: International Monitoring Organization (IMO), Medical Device Manufacturers Association (MDMA), North American Approvals Registry and Monitoring Organization (NAARMO), EDMA, WHO, CDC, CMS, MITA, Other Country Associations & Groups and Industry Expert Interviews

North America accounted for the largest revenue of $XX million of the global patient monitoring market in 2013. It is expected to grow at a CAGR of XX% from 2014 to 2020 to reach $XX million by 2020. Asia-Pacific is expected to grow at the highest CAGR of XX% during the forecast period.
### TABLE 2

PATIENT MONITORING GLOBAL MARKET REVENUE, BY DEVICE (2012-2020) ($MN)

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<tr>
<td>Cardiac monitors</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Prenatal, fetal &amp; neonatal monitors</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Hemodynamic monitors</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Multi-parameter monitors</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Neurological monitors</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Respiratory monitors</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Remote patient monitors</td>
<td>XX</td>
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<td>XX</td>
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<tr>
<td>MEMS-based monitors</td>
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<td>XX</td>
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<td>Temperature monitors</td>
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<td>Weight monitors</td>
<td>XX</td>
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<td>XX</td>
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<td>XX</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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</table>

Source: International Monitoring Organization (IMO), Medical Device Manufacturers Association (MDMA), North American Approvals Registry and Monitoring Organization (NAARMO), EDMA, WHO, CDC, CMS, MITA, Other Country Associations & Groups and Industry Expert Interviews

XX commanded the largest share of XX% of the global patient monitoring market. It accounted for $XX million in 2013 growing at a CAGR of XX% from 2014 to 2020. XX device is expected to grow at the highest CAGR of XX% during the forecast period.
FIGURE 1

GLOBAL PATIENT MONITORING MARKET SCENARIO, BY DEVICE OUTLOOK (2013)

Source: International Monitoring Organization (IMO), Medical Device Manufacturers Association (MDMA), North American Approvals Registry and Monitoring Organization (NAARMO), EDMA, WHO, CDC, CMS, MITA, Other Country Associations & Groups and Industry Expert Interviews


**TABLE 3**

**CARDIAC MONITORING DEVICE GLOBAL MARKET REVENUE, BY TYPE (2012-2020) ($MN)**

<table>
<thead>
<tr>
<th>Type</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2020</th>
<th>CAGR (%) (2014-2020)</th>
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<td>Electrocardiograph</td>
<td>XX</td>
<td>XX</td>
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<td>XX</td>
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<td>Holter monitor</td>
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<tr>
<td>Implantable loop recorder</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Total</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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</table>

Source: International Monitoring Organization (IMO), Medical Device Manufacturers Association (MDMA), North American Approvals Registry and Monitoring Organization (NAARMO), EDMA, WHO, CDC, CMS, MITA, Other Country Associations & Groups and Industry Expert Interviews

XX commanded the largest share of XX% of the global Cardiac monitoring device market. It accounted for $XX million in 2013 growing at a CAGR of XX% from 2014 to 2020. XX is expected to grow at the highest CAGR of XX% during the forecast period.
GLOBAL REMOTE PM MARKET SHARE, BY TYPE (2013 V’S 2020)

Source: International Monitoring Organization (IMO), Medical Device Manufacturers Association (MDMA), North American Approvals Registry and Monitoring Organization (NAARMO), EDMA, WHO, CDC, CMS, MITA, Other Country Associations & Groups and Industry Expert Interviews
FIGURE 3

EUROPEAN PATIENT MONITORING MARKET SHARE,
BY DEVICE (2012 - 2020)

Source: International Monitoring Organization (IMO), Medical Device Manufacturers Association (MDMA), North American Approvals Registry and Monitoring Organization (NAARMO), EDMA, WHO, CDC, CMS, MITA, Other Country Associations & Groups and Industry Expert Interviews
### 1.1.1 RESEARCH SOURCES

**TABLE 4**

#### PATIENT MONITORING MARKET: RESEARCH SOURCES

<table>
<thead>
<tr>
<th>Primary Sources</th>
<th>Secondary Sources</th>
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<tbody>
<tr>
<td><strong>Supply Side:</strong> Top-level Executives, Marketing Managers, Sales Managers, Regional Managers</td>
<td>IQ4I Repository</td>
</tr>
<tr>
<td><strong>Demand Side:</strong> Hospital Medical Directors, Laboratory Managers, Research Scientists, Principal Scientists, Purchase/Procurement Managers, Laboratory Technicians, Academic Research</td>
<td>Patient Monitoring Company-Specific annual reports, SEC filings, corporate presentations &amp; Press releases</td>
</tr>
<tr>
<td><strong>Others:</strong> Independent Consultants and Freelancers</td>
<td>Associations and Groups: International Monitoring Organization (IMO), Medical Device Manufacturers Association (MDMA), North American Approvals Registry and Monitoring Organization (NAARMO), EDMA, WHO, CDC, CMS, MITA, Other Country Associations &amp; Groups</td>
</tr>
<tr>
<td></td>
<td>Paid Sources: Factiva, OneSource, Hoovers, Bloomberg</td>
</tr>
<tr>
<td></td>
<td>Social Networking &amp; Databases: LinkedIn, Melt-Water, and Zintro</td>
</tr>
</tbody>
</table>
1.2 RESEARCH METHODOLOGY

**FIGURE 4**

**PATIENT MONITORING MARKET: RESEARCH APPROACH**

- **Secondary Research**
  - Technical information of patient monitoring system
  - Strategic insights, financial revenues & competitive intelligence of key players
  - Devices and end-user market of patient monitoring
  - Upcoming technologies, growth scenario of sub markets and parent market

- **Primary Research**
  - Market size, CAGR and market trends validation
  - Market size of sub segments and market shares of major players
  - Upcoming trends and technological advancements in devices
  - Validation of factors influencing market and regional market shares

- **Market Breakdown**
  - Bottom-up and Top-down approach
  - Data triangulation
  - Qualitative & Quantitative analysis
  - Patient monitoring system market segmentation
1.2.1 ASSUMPTIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Assumptions</th>
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<td>Market growth</td>
<td>The CAGR for the forecast period (2014-2020) is assumed to be normalized and the effect of inflation, recession, economic downturn, regulatory or policy changes, or other factors are not considered.</td>
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<tr>
<td>Segmental &amp; Sub segmental market shares</td>
<td>The market shares are analyzed purely based on the absolute data, in case of the data non availability for the sub markets the parent market trend has been assumed for the forecast period</td>
</tr>
<tr>
<td>Market Share Analysis</td>
<td>Market share analysis of key players is performed based on the primary research insights and their segmental revenues</td>
</tr>
</tbody>
</table>

1.2.2 MARKET SIZE ESTIMATION

The global patient monitoring system market, its segments and sub-segments were estimated and validated through secondary and primary research. The patient monitoring systems market shares, market crackdown and rating companies were determined to acquire qualitative and quantitative data. This data is consolidated and added with detailed inputs and analysis from IQ4I and presented in this report.
Patient Monitoring Global Market
–Forecast to 2020

FIGURE 5

PATIENT MONITORING MARKET: TOP-DOWN AND BOTTOM-UP APPROACH

Global Medical Devices market
Global Patient Monitoring market
Market share of Patient Monitoring devices
Regional market shares
Market share of sub segments in regional markets
Sub segments market size and CAGR
Overall market size and CAGR
Market share of the players in the overall Patient Monitoring Market and sub markets
Top players revenue Abbott (U.S.), Boston (U.S.), Medtronic (U.S.), St. Jude Medical (U.S), GE healthcare (Cleveland), Covidien (Ireland), J&J (U.S.), Philips healthcare (Netherland), Roche (Switzerland), Omron (Japan).
Patient Monitoring Global Market

–Forecast to 2020

**FIGURE 6**

**PATIENT MONITORING MARKET: FORECASTING MODEL**

- **Historical Data and trends of Patient Monitoring Market**
- **Technology Evolution**
- **Supply chain trend**
- **Adoption pattern**
- **Regulations**
- **Market Share**
- **Company developments**
- **Value and volume analysis**
- **Geographical Usage**

**Factors Influencing Market Growth**

- **Market Drivers**
  - Increasing aged population and high incidence of lifestyle diseases
  - High sales of remote monitors
  - Expansion of point-of-care devices

- **Market Opportunities**
  - Emerging market
  - Advancement in wireless & sensor technology

- **Market Penetration**
  - Government initiatives
  - Emerging markets such as India, China and Japan
  - Upcoming devices with advanced technology

- **Product approval**
  - Contributed for 35.82%
  - New product launch
  - Contributed for 38.80%

- **Market Restraints**
  - Financial crisis
  - High pricing of devices
  - Unstable reimbursement issues
  - Uncertain return of investment

- **Investments**
  - In November 2014, LabCorp and Envision lead $15 million investment in remote patient monitoring company Vivify Health.

**Market Trend and Growth Forecasting**

- **Historical Market Data**
- **Market Size & Forecast by Types**
- **Global PM Market Size, Segmental share and CAGR from 2014-2020**
- **Impact Analysis of Market Trends**
- **Market Size & Forecast by Devices and end-users**
1.2.3 MARKET BREAKDOWN & DATA TRIANGULATION

FIGURE 7

PATIENT MONITORING MARKET: MARKET BREAKDOWN & DATA TRIANGULATION

- Top-down
- Bottom-up
- Demand & Supply side: Hospitals, Medical centers, Home-based users, Healthcare organization
- Primary Research
- Secondary Research

Market share of PM Market in Global PM market

PM Market (~ XX MN) (2013)

Major player analysis of key players: Abbott, Boston, Medtronic, St Jude medical, Omron, Philips, GE, Covidien

- Financial/Annual reports
- Investor Presentations
- SEC filings
- Scientific Journals
- Organizations/Associations & Groups

• Financial/Annual reports
• Investor Presentations
• SEC filings
• Scientific Journals
• Organizations/Associations & Groups
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