Diagnostic Imaging Global Market

[[Products (Computed Tomography Scanners, Nuclear Imaging(NI) Equipments, Magnetic Resonance Imaging Systems, Ultrasound Scanners, X-ray Devices and Others), Techniques (Computed Tomography, Nuclear Imaging(NI), Magnetic Resonance Imaging, Ultrasound, X-ray and Others), Applications (Cardiovascular diseases, Oncology, Abdominal related problems, Neurological disorders, Orthopaedic related problems, Gynecology and others), End-Users (Hospitals, Diagnostic laboratories and Research laboratories), Region (North America, Europe, APAC and RoW)]]

– Forecast to 2020

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*Forecast to 2020*

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1.1 REPORT DESCRIPTION

Diagnostic imaging is a non-invasive diagnosis and treatment of some of the most life threatening diseases such as cancer and heart diseases and they have nearly eliminated the need for exploratory surgery. It is being identified as one of the fastest growing markets among the healthcare sector. Imaging techniques would allow diagnosing, treating and curing patients without causing any harmful side effects. The different diagnostic imaging modalities include X-ray systems, Computed Tomography (CT) Scanners, Magnetic Resonance Imaging (MRI) systems, Ultrasound systems and Nuclear imaging systems.

Globally Diagnostic imaging market is segmented into product outlook, technology outlook, applications and end-users. Product outlook is further segmented into Computed Tomography (CT) scanners, Nuclear Imaging (NI) equipment, Magnetic Resonance Imaging (MRI) systems, Ultrasound scanners and X-ray devices and others. Technology outlook is also alienated again into Computed Tomography (CT), Nuclear Imaging (NI), Magnetic Resonance Imaging (MRI), Ultrasound and x-ray and others. Application outlook is classified into Cardiovascular Diseases (CVD’s), Oncology, Neurological disorders, abdominal related problems, Orthopaedic related problems, gynecology related problems and others. Depending on the end-users, the market is segmented into hospitals, diagnostic laboratories and research laboratories.

Globally among the diagnostic imaging techniques, X-ray is the most frequently used imaging technique with more than 100 million X-ray exams per year followed by MRI, PET, SPECT, CT and nuclear medicine. This indicates that diagnostic imaging market contributes to its highest share among all imaging techniques.

This report studies the Diagnostic imaging technologies global market over the forecast period 2014 to 2020. The market is expected to grow at a CAGR of more than 5.1% during the forecast period. Increasing incidence of life threatening diseases with growth of aged cohort, growing awareness among people about early disease diagnosis and improving healthcare expenditure in emerging markets, high number of ongoing research activities across the globe are the factors driving the market growth. High cost of diagnostic imaging systems, imposition of excise tax on sale of medical devices and risk of radiation exposure limiting the usage of some diagnostic imaging systems are the factors hampering the market growth.
North America holds the largest share in the global diagnostic imaging market, followed by Europe. However, the Asia-Pacific market is expected to grow at the highest CAGR of 6.5% during the forecast period. The Asian and Latin American countries represent the fastest growing markets due to increasing government support for research and rising industry and academic partnerships for pre-clinical research. But still the factors such as economic slowdown, pricing pressures may compel the companies to focus on Asian markets.

The key market players in the global diagnostic imaging market are Analogic Corporation (U.S.), GE Healthcare (U.K), Philips Healthcare (Netherland), Siemens Healthcare (U.S.), Toshiba Medical Systems Corporation (Japan), Hitachi Medical Corporation (Japan), Carestream Health, Inc. (U.S.), Hologic, Inc. (U.S.), Samsung Medison (South Korea) and Shimadzu Corporation (Japan). Among them GE Healthcare (U.K.) holds the leadership position in the global market by launching many new products into the market.

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

DIAGNOSTIC IMAGING GLOBAL MARKET REVENUE, BY REGION (2012-2020) ($MN)

<table>
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<tr>
<td>North America</td>
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<td>Europe</td>
<td>XX</td>
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<td>XX</td>
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<tr>
<td>Asia-Pacific</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>RoW</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<td>Total</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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</tbody>
</table>

Source: International Society of Ultrasound in Obstetrics and Gynecology (ISUOG), Association of Medical Imaging Management (AHRA), American Board of Radiology (ABR), World Health Organization (WHO), MITA, SNM, CDC, CMS, ADIA, Other Country Associations & Groups and Industry Expert Interviews

North America accounted for the largest revenue of $XX million of the global diagnostic imaging 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

DIAGNOSTIC IMAGING GLOBAL MARKET REVENUE, BY PRODUCT (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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<tr>
<td>Computed Tomography (CT) Scanners</td>
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<td>XX</td>
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<tr>
<td>Nuclear Imaging (NI) Equipment</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Magnetic Resonance Imaging (MRI) Systems</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Ultrasound Scanners</td>
<td>XX</td>
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<td>X-ray Devices</td>
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<td>XX</td>
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<td>Others</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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Source: International Society of Ultrasound in Obstetrics and Gynecology (ISUOG), Association of Medical Imaging Management (AHRA), American Board of Radiology (ABR), World Health Organization (WHO), MITA, SNM, CDC, CMS, ADIA, Other Country Associations & Groups and Industry Expert Interviews

XX commanded the largest share of XX% of the global diagnostic imaging market. It accounted for $XX million in 2013 growing at a CAGR of XX% from 2014 to 2020. XX application is expected to grow at the highest CAGR of XX% during the forecast period.
GLOBAL DIAGNOSTIC IMAGING MARKET SCENARIO, BY PRODUCT OUTLOOK (2013)

Source: International Society of Ultrasound in Obstetrics and Gynecology (ISUOG), Association of Medical Imaging Management (AHRA), American Board of Radiology (ABR), World Health Organization (WHO), MITA, SNM, CDC, CMS, ADIA, Other Country Associations & Groups and Industry Expert Interviews
FIGURE 2

GLOBAL DIAGNOSTIC IMAGING MARKET REVENUE, BY TECHNOLOGY OUTLOOK (2013) ($BN)

Source: International Society of Ultrasound in Obstetrics and Gynecology (ISUOG), Association of Medical Imaging Management (AHRA), American Board of Radiology (ABR), World Health Organization (WHO), MITA, SNM, CDC, CMS, ADIA, Other Country Associations & Groups and Industry Expert Interviews
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ULTRASOUND SCANNERS GLOBAL MARKET REVENUE, BY TECHNOLOGY (2012-2020) ($MN)

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<tr>
<th>Type</th>
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<th>2014</th>
<th>2020</th>
<th>CAGR (%) (2014-2020)</th>
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<td>2D Ultrasound systems</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<td>3D and 4D Ultrasound systems</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Doppler Ultrasonography</td>
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<td>XX</td>
<td>XX</td>
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<td>HIFU Imaging systems</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Contrast ultrasound systems</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<td>Ultrasound Elastography</td>
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<td>Others</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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</tr>
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</table>

Source: International Society of Ultrasound in Obstetrics and Gynecology (ISUOG), Association of Medical Imaging Management (AHRA), American Board of Radiology (ABR), World Health Organization (WHO), MITA, SNM, CDC, CMS, ADIA, Other Country Associations & Groups and Industry Expert Interviews

XX commanded the largest share of XX% of the global diagnostic imaging 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.
FIGURE 3

GLOBAL MRI MARKET SHARE, BY PRODUCT TYPE (2013 VS 2020)

Source: International Society of Ultrasound in Obstetrics and Gynecology (ISUOG), Association of Medical Imaging Management (AHRA), American Board of Radiology (ABR), World Health Organization (WHO), MITA, SNM, CDC, CMS, ADIA, Other Country Associations & Groups and Industry Expert Interviews
FIGURE 4

NORTH AMERICAN DIAGNOSTIC IMAGING MARKET SHARE, BY PRODUCT OUTLOOK (2013)

Source: International Society of Ultrasound in Obstetrics and Gynecology (ISUOG), Association of Medical Imaging Management (AHRA), American Board of Radiology (ABR), World Health Organization (WHO), MITA, SNM, CDC, CMS, ADIA, Other Country Associations & Groups and Industry Expert Interviews
### 1.1.1 RESEARCH SOURCES

#### TABLE 4

**DIAGNOSTIC IMAGING MARKET: RESEARCH SOURCES**

<table>
<thead>
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<th>Primary Sources</th>
<th>Secondary Sources</th>
</tr>
</thead>
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<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>Diagnostic Imaging 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 Society of Ultrasound in Obstetrics and Gynecology (ISUOG), Association of Medical Imaging Management (AHRA), American Board of Radiology (ABR), World Health Organization (WHO), MITA, SNM, CDC, CMS, ADIA, and Other Country Associations &amp; Groups</td>
</tr>
<tr>
<td></td>
<td>Paid Sources: Factiva, OneSource, Hoovers, Bloomberg</td>
</tr>
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<td>Social Networking &amp; Databases: LinkedIn, Melt-Water, and Zintro</td>
</tr>
</tbody>
</table>
1.2 RESEARCH METHODOLOGY

FIGURE 5

DIAGNOSTIC IMAGING MARKET: RESEARCH APPROACH

Secondary Research
- Technical information of diagnostic imaging products
- Strategic insights, financial revenues and competitive intelligence of key players
- Techniques, Products, Applications and End-users involved in Diagnostic imaging Market
- Market trends and 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 applications and products
- Validation of factors influencing market and regional market shares

Market Breakdown
- Bottom-up and Top-down approach
- Data triangulation
- Qualitative & Quantitative analysis
- Diagnostic Imaging market segmentation
1.2.1 ASSUMPTIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tr>
<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 diagnostic imaging market size, its different segments and sub-segments are analyzed using both top-down and bottom-up approaches. The market size and revenue calculated using research methodology involves primary and secondary research of major players in the market, factors influencing the market, market segmentation and geographical market scenario.

Secondary research of major players include the study of their annual and financial reports, press release while primary research involves interviews from the supply side (CEOs, directors, strategic growth managers, international/regional marketing managers, and marketing executives) and the demand side (laboratory heads, hospitals, and purchase managers).

Primary and secondary sources helped in verification of percentage shares, splits, and breakdowns. This data is consolidated with detailed inputs and presented in this report.
FIGURE 6

DIAGNOSTIC IMAGING MARKET: TOP-DOWN AND BOTTOM-UP APPROACH

- Global Medical devices market
- Global Diagnostic Imaging (DI) market
- Market share of DI Techniques, Applications, Products and End Users
- 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 Diagnostic Imaging Market and sub markets
- Top players revenue: GE Healthcare (U.K.), Siemens healthcare (Germany), Philips Healthcare (Netherlands), Toshiba Medical Systems Corp. (Japan), Hitachi medical systems Corp. (Japan), Samsung Medison (South Korea), Shimadzu Corp. (Japan)
**Factors Influencing Market Growth**

**Historical Data and trends of Diagnostic Imaging Market**
- Technology Evolution
- Market Share
- Company Developments
- Adoption Pattern
- Regulations
- Geographical Usage

**Market Drivers**
- Raised aged cohort and life threatening diseases
- Increasing investments in emerging economies
- Emerging applications in diagnostic imaging

**Market Penetration**
- Automated Breast Ultrasound
- Digital Breast Tomosynthesis
- Magnetoencephalography
- Photo Acoustic Tomography
- Extracorporeal Shock Wave Lithotripsy

**Market Restraints**
- Risk of radiation
- Excise tax on medical devices
- Shortage of skilled personnel
- Reimbursement cuts

**New product launch**
- GE Healthcare recently received FDA approval for Share Wave Elastography for LOGIQE9 ultrasound system, which generates a precise measurement of tissue stiffness and helps in identifying the underlying diseases

**Agreements and Collaborations**
- Contributed for 28.3%
- Contributed for 23.4%

**Market Trend and Growth Forecasting**
- Historical Market Data
- Impact Analysis of Market Trends
- Market Size & Forecast by Technology & End Users
- Global Diagnostic Imaging Market Size, Segmental share and CAGR from 2014-2020

**Market Opportunities**
- Technological advancements
- Improving healthcare infrastructure
- Extenuating the risks associated with diagnostic imaging

**Market Size & Forecast by Applications & Products**

**Funding:** The Diagnostic Imaging representative groups and the Department of Health takes the responsibility for managing Medicare-funded Diagnostic Imaging services in order to maintain the quality, accessibility and affordability of these services. The Diagnostic Imaging services are currently funded through Medicare Benefits Schedule (MBS).
1.2.3 MARKET BREAKDOWN & DATA TRIANGULATION

FIGURE 8

DIAGNOSTIC IMAGING MARKET: MARKET BREAKDOWN & DATA TRIANGULATION

Market share of Diagnostic Imaging Market in Global Medical Devices market

Primary Research
Demand & Supply side
Hospitals, Medical Device Manufacturers, Diagnostic Laboratories and CRO’s

Secondary Research
Top-down

Diagnostic Imaging Market (~23.3 Bn) (2013)

Major player analysis of key players: GE, Siemens, Philips, Samsung, Toshiba, Hitachi

Bottom-up

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