Delivering Healthcare to the World
a Latin America forecast
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About AMI
AMI is Latin America's leading Market Intelligence and Advisory group.

AMI’s founding partners are pioneers in the field of Market Intelligence in Latin America, with over 20 years experience in the region.

AMI has experience in every market in Latin America and the Caribbean.

AMI is a member of SCIP – Strategic and Competitive Intelligence Professionals.
Industry expertise in LAC markets

Visit the [Insights](#) section of our website to explore dozens of case studies.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Projects</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAYMENTS</td>
<td>215 projects</td>
<td>Consumer &amp; corporate cards, pre-paid cards, digital wallets, mobile payments, POS technology</td>
</tr>
<tr>
<td>CONSUMER &amp; RETAIL</td>
<td>330 projects</td>
<td>Food, beverage, snacks, appliances, beauty products, toys, entertainment</td>
</tr>
<tr>
<td>TELCO, IT, MEDIA</td>
<td>75 projects</td>
<td>Telco – wireless, ISP, services, equipment; IT – ERP, computers &amp; accessories, AMT; Media – gaming, pictures, print, TV, radio</td>
</tr>
<tr>
<td>HEALTHCARE</td>
<td>145 projects</td>
<td>Medical equipment, devices, hospital services, health policy, pharmaceuticals, supplements, vaccines</td>
</tr>
<tr>
<td>NATURAL RESOURCES</td>
<td>115 projects</td>
<td>Mining – exploration, equipment; Energy – oil &amp; gas, alternatives, petrochems; Agriculture – commodities, fertilizers, technology</td>
</tr>
<tr>
<td>LOGISTICS</td>
<td>115 projects</td>
<td>3PL, air cargo, FTL, LTL, rail, ocean, warehousing, distribution, equipment, software</td>
</tr>
<tr>
<td>AUTOMOTIVE</td>
<td>115 projects</td>
<td>Cars, trucks, buses, OEM parts, aftermarket, service, finance</td>
</tr>
<tr>
<td>INDUSTRIAL</td>
<td>340 projects</td>
<td>Transportation, manufacturing, chemicals, lubricants, metals, plastics, paper, packaging, safety</td>
</tr>
<tr>
<td>INSURANCE</td>
<td>45 projects</td>
<td>Accident &amp; Health, E &amp; O / Professional Liability Insurance, General Liability Insurance, Political Risks, Property Insurance, Re-insurance</td>
</tr>
</tbody>
</table>
Our track record speaks for itself
Select Clients and Media partners in AMI’s Healthcare Practice

CLIENTS

- CareFusion
- Hospira
- Medtronic
- GE Healthcare Life Sciences
- OLYMPUS
- GE Healthcare
- COVIDIEN
- Baxter
- Dräger
- Boston Scientific
- Konica Minolta

MEDIA PARTNERS

- América Económica
- Salud
- Pan American Health Organization
- U.S. Cooperative for International Patient Programs
- Latinvex
- Global Connections
Winning growth strategies in healthcare

Brazil, Mexico, Colombia, Chile
Strong and solid healthcare base
With over 16,000 hospitals across the region

Interest to grow in second-tier markets

- Amidst the economic and political woes, Brazil will remain a point of interest for medical device providers, driven primarily by the size of the market and the importance of healthcare in the political context.
  - Smaller players and new entrants remain optimistic about prospects in Brazil, looking to grow by taking market share from established players.
  - As sales in Brazil taper off, established players begin to place greater emphasis on cost reduction and growth in second tier markets such as Colombia, Argentina, Chile, Peru.
- Colombia has generated high interest in the past 3 years and is expected to continue being a point of focus moving forward.
- Mexico’s healthcare sector is growing fast, driven primarily by the expansion of the private sector.

Number of hospitals per country

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>6,954</td>
<td>3,631</td>
<td>2,265</td>
</tr>
<tr>
<td>Mexico</td>
<td>3,631</td>
<td>2,265</td>
<td>1,501</td>
</tr>
<tr>
<td>Argentina</td>
<td>2,265</td>
<td>1,501</td>
<td>~900</td>
</tr>
<tr>
<td>Colombia</td>
<td>1,501</td>
<td>883</td>
<td>883</td>
</tr>
<tr>
<td>Venezuela</td>
<td>~900</td>
<td>~900</td>
<td>~900</td>
</tr>
<tr>
<td>Peru</td>
<td>883</td>
<td>883</td>
<td>883</td>
</tr>
<tr>
<td>Dominican Rep.</td>
<td>447</td>
<td>447</td>
<td>447</td>
</tr>
<tr>
<td>Chile</td>
<td>415</td>
<td>415</td>
<td>415</td>
</tr>
<tr>
<td>Central America</td>
<td>~345</td>
<td>~345</td>
<td>~345</td>
</tr>
<tr>
<td>Ecuador</td>
<td>197</td>
<td>197</td>
<td>197</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>67</td>
<td>67</td>
<td>67</td>
</tr>
</tbody>
</table>

Countries of primary interest
Countries of secondary interest
Countries of tertiary interest

Where to expect growth in healthcare?
The rise of the private sector

As public budgets tighten, the private sector is expected to expand

The rise of the “middle market”

- Public sector budgets will remain tight through 2018.
  - Governments struggle with the trade-offs associated between accessibility and quality of healthcare.
- The private sector will play a greater role in servicing care.
  - Private care targets <15% of the population region-wide, with “top of the line” institutions and services.
  - Private care will expand to include the middle-market consumer who is willing to pay a fee (albeit small) to have access to better, faster care.
  - Private, specialized clinics will continue to grow (example Salud Digna in Mexico).
- Home care will become more common, playing into the cultural context of keeping the elderly and sick nearby.

Private healthcare expenditure

As a % of total healthcare spending

Source: AMI based on data from The World Bank
Falling currencies across the region
Currency depreciation impacts dollarized budgets and shifts sourcing alternatives

The search for economical solutions
- >90% of the medical devices and equipment sold in Latin America are imported and dollar denominated.
  - Even in the case of products being manufactured locally, parts and components are often imported.
  - Brazil is the only production hub in the region, with Mexico focusing on export manufacturing and Argentina, Costa Rica and other countries having small production facilities.
- Latin American currencies witnessed a 35% depreciation to the dollar within a one-year period.
- With revenue in local currency, public and private institutions will seek creative ways to reduce budgets, including:
  - Moving towards greater use of refurbished or pre-owned equipment
  - Increasing the presence of pay-per-use models
  - Extension of maintenance contracts
  - Sourcing from local providers / more economical production bases (i.e. not dollarized)
  - Shifting some of the financial burden to private payers through models such as home care
Growth in US$ is expected to taper off
Opportunities reside in niche products

Chronic diseases to be more prevalent

- In 2015, the import of capital equipment into Latin America reached $5.1 billion, down from $5.2 billion in 2014.
  - Brazil, Mexico and Colombia represent over 80% of the region’s imports
- By 2030, 84% of deaths will be a result of chronic diseases.
  - There is a clear shift towards importing diagnostics and treatment equipment for non-communicable and chronic diseases, especially those related to aging and obesity.
  - Breath enhancing machines (ventilators, nebulizers), as well as defibrillators, demonstrated 20% growth year-over-year; Electrocardiographs demonstrated a 28% growth in Brazil.
  - Features such as portability and interconnectivity will be key in upcoming years.

Leading modalities – Value and Growth

<table>
<thead>
<tr>
<th>Equipment</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRI</td>
<td>$15</td>
<td>$25</td>
</tr>
<tr>
<td>X-ray</td>
<td>$31</td>
<td>$65</td>
</tr>
<tr>
<td>Vital Sign</td>
<td>$181</td>
<td></td>
</tr>
<tr>
<td>Breathing Aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>$6</td>
<td>$5</td>
</tr>
<tr>
<td>Defibrillators</td>
<td>$16</td>
<td>$6</td>
</tr>
<tr>
<td>Infusion Pumps</td>
<td></td>
<td>$81</td>
</tr>
<tr>
<td>Ultrasound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECG</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Currency: US$ millions

Source: AMI based on import data from select countries
Demographics to consider
Aging Latin America

The region is the fastest aging in the world, representing both challenge & opportunity

**Home care solutions to grow**

- In 2010, 10% of Latin Americans were over 60 years old; by 2020, this number will reach 21%.
- Healthcare expenditure is expected to rise at 5% per year through 2018, and possibly faster after that.
  - The elderly are the greatest burden to healthcare budgets – over 80% of adults over 60 have at least one chronic disease.
- Home care solutions are expected to demonstrate a CAGR of 8.7% from 2015-2020.
- The best suited home equipment for home care include ventilators, oximeters, blood pressure, arthritis care, and glucose monitors.
- The combination of mobile technologies and home healthcare will allow for patients and family members to remain connected to their point-of-care.

**130 million more elderly**

Source – Center for Strategic & International Studies
The obesity epidemic continues
Latin America is the most obese region in the world

A shift to managing population health

- Obesity is the fastest rising non-communicable disease in the world, resulting in over 56% of adults in Latin America to be overweight.
  - Eating habits, globalization, stress, and sedentary lifestyles are the root causes for the prevalence of obesity in Latin America.
  - Obesity is a precursor to more severe health issues, such as diabetes, clots, strokes and back pain.
- Healthcare will shift from caring for patients to managing population health.
- Products that monitor, record and display health statistics (such as blood pressure, glucose levels, calories and weight) influence behavior on a micro level and present strong mid-term growth prospects.
- Healthcare mobility solutions are expected to grow at a CAGR of 20%-25% through 2020, particularly in the realm of wearables and smartphone apps.

Prevalence of adult obesity

As a % of adult population
Period: 2014
Source: AMI based on import data from the WHO Infobase, OECD Health 2014 and foreignpolicy.com
LSH go-to-market structure
Regional HQ as part of the expansion strategy
Connectivity becomes more important when choosing a regional HQ

Connectivity is of the era

- >85% of companies manage their regional operations from within the region (incl. Miami).
  - <10% manage the region from their US HQ.
- Brazil has traditionally been a location of choice, being the largest market in the region.
  - Disproportionately high local costs combined with cultural differences from the rest of the region (notably language) has made certain companies reconsider this choice.
- Alternatives such as Miami and Panama are becoming more attractive.
  - Highly connected to the whole of the Americas, these cities have the benefit of a having regional labor pools and a controlled cost structure.
  - Certain companies use Costa Rica as a low-cost back office.
- Choosing a regional HQ must be aligned with the expansion and distribution strategies, particularly in a time when Brazil is experiencing economic and political woes.

Location of regional headquarters

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>40%</td>
</tr>
<tr>
<td>Miami</td>
<td>30%</td>
</tr>
<tr>
<td>Mexico</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: AMI analysis based on pool of clients and experience in sector.
Setting up a distribution structure
Distribution strategy is tied to the stage of development

**Evolution of distribution structures**

<table>
<thead>
<tr>
<th>Exclusive distribution</th>
<th>Partial exclusivity (product line, client type, geography)</th>
<th>Multiple distributors + internal distribution capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of manufacturers</td>
<td>% of manufacturers</td>
<td>% of manufacturers</td>
</tr>
<tr>
<td>10%-20%</td>
<td>70%-80%</td>
<td>5%-10%</td>
</tr>
<tr>
<td>Stage of development</td>
<td>When penetrating a market (growth) or market size is small</td>
<td>When operating and expanding in a market (topline growth)</td>
</tr>
<tr>
<td>Duration</td>
<td>2-3 years</td>
<td>Beyond 2 years</td>
</tr>
<tr>
<td>Examples</td>
<td>Mexico: Bemis, Pennine, Nihon Kohden</td>
<td>Mexico: Medline, CareFusion</td>
</tr>
<tr>
<td>Market examples</td>
<td>Caribbean, Central America, Peru, Chile</td>
<td>Brazil, Mexico, Colombia, Chile, Argentina, Peru, Caribbean, Central America</td>
</tr>
</tbody>
</table>

- In Tier 1 and Tier 2 markets, such as Brazil, Mexico, Colombia, Argentina, Venezuela and Peru, no distributor has full, independent national coverage.
  - Distributors in these markets rely on second tier distributors to reach more remote areas.
  - Manufacturer take on this activity as they grow in the market.

Source: AMI analysis based on experience in sector.
Distributors are essential in the Latin American context
Manufacturers and distributors adapt together to local context

**Connectivity is of the era**

- Exclusivity is managed along 3 lines: Product line, Client type, and Geography.
- Manufacturers impose sales quotas, with a certain degree of flexibility.
  - In light of the currency depreciation of the past year, manufacturers and distributors have had to work in concert to adjust pricing and maintain sales.
  - Approximately 60% of the currency depreciation has been absorbed by distributors and manufacturers. The rest has been passed along to the client.
- Master distributors aim to make ~30% margin when selling to hospitals.
  - ~20% margin when selling to a sub-distributor.

**Hospital purchases**

- **Manufacturers** 25%
- **Distributors** 75%

*Source: AMI analysis based on experience in sector.*