Durable Medical Equipment: U.S. Market Size, Segments, Growth and Trends
2nd edition
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Abstract

Durable medical equipment (DME) is defined as instruments and products used for medical purposes and that can withstand repeated usage. DME is used primarily to help improve the quality of life of patients with injuries or illnesses.

Different stakeholders segment DME in different ways, making the market more or less inclusive. For the purpose of this report, we divided the DME market in six therapeutic segments:

- Home respiratory therapy
- Home infusions
- Diabetes supplies
- Patient positioning
- Patient mobility
- Other equipment

Using this segmentation, we estimate that the U.S. DME market reached ~$26B in 2010. We expect this market to grow 6% per annum (p.a.) to reach $31B by 2013, with various segments growing in the mid- to high- single-digits. We review the factors that will be driving and moderating this growth, including demographic trends, patient preference, cost benefits and international imports.

DME products are distributed primarily by national and local providers; other channels, such as 3rd party distributors or mail-in orders exist for some channels.

The DME market is highly fragmented, and counts more than 100,000 players. We review the consequences of this fragmentation for manufacturers, providers and payors, and highlight specific segments that appear less fragmented. This report discusses each segment and provides a detailed analysis of home respiratory therapy and patient mobility. For these two segments, we review key products, specific growth drivers and moderators, value chain, as well as manufacturer and provider economics in more details. We examine how reimbursement for oxygen tanks and standard wheelchairs spreads between manufacturers and providers.

Finally, we provide an analysis of six key events that may transform the industry. 1) We examine the implications of the Round 2 of the Medicare DMEPOS competitive bidding program aimed at replacing the existing fee schedule amounts with more market-based prices. 2) We discuss the entry of large new players in new therapeutic segments. 3) We analyze recent industry consolidation triggered by increased reimbursement pressure and Round 1 of DEMPOS competitive bidding. 4) We evaluate potential levers for private payors, given their increased scrutiny in this industry, and how they may control costs by negotiating with patients, physicians / hospitals and manufacturers. 5) We assess the potential impact of value chain disintermediation. 6) We discuss the status of patient discharge and referral laws.
Introduction

Context
This report provides an analysis of the durable medical equipment (DME) market from 2007-13. We analyze two segments, respiratory equipment and patient mobility in more details, given their significant contribution to this market, difference in business model and interesting trends. Key stakeholder economics are reviewed, along with potential future market trends.

All market data in this report are based on provider sales unless stated otherwise.

Definitions
DME refers to medical equipment present at home or medical institutions that is being used by a patient over a prolonged period of time to improve his/her quality of life. As such, DME has predominant applications in rehabilitation and post-operative care. DME products include oxygen tanks, wheelchairs, and glucose test strips.

Importantly, various stakeholders or competitors define the term DME to include or exclude different products and services. For instance, CMS\(^1\) includes ophthalmic products (e.g., glasses, contact lenses) as DME in their yearly national health expenditure releases; many insurance companies categorize these products separately. The DME segments included and excluded in this report are outlined in Exhibit 1.

<table>
<thead>
<tr>
<th>Included</th>
<th>Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home respiratory therapy</td>
<td>Ophthalmic products</td>
</tr>
<tr>
<td>Home infusion therapy</td>
<td>Prosthetics</td>
</tr>
<tr>
<td>Diabetes supplies</td>
<td>Surgical products</td>
</tr>
<tr>
<td>Patient mobility</td>
<td>Kidney dialysis products</td>
</tr>
<tr>
<td>Patient positioning</td>
<td>Defibrillators</td>
</tr>
<tr>
<td>Other DME equipment</td>
<td></td>
</tr>
</tbody>
</table>

Exhibit 1: Definition of DME segments in this report

In addition, the term DME is not to be used interchangeably with Home Health Care, which covers medical care provided at home by private and public home health agencies (HHA). HHAs participate in a ~$xxB market (2010) forecasted to grow xx-xx% p.a.(2010-13F), in our estimates.

\(^1\) CMS: Centers for Medicare and Medicaid Services
Local and national DME providers account for xx% and xx% of the market, respectively.

Exhibit 4: DME sales by provider (2010)

The key characteristics of local and national providers that represent >xx% of sales are described in Exhibit 5.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>National providers</th>
<th>Local providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example company</td>
<td>• Apria</td>
<td>• New England Home Therapy</td>
</tr>
<tr>
<td></td>
<td>• Rotech</td>
<td>• Valleywide DME</td>
</tr>
<tr>
<td></td>
<td>• Praxair</td>
<td></td>
</tr>
<tr>
<td>Branches</td>
<td>&gt;xx</td>
<td>xx-xx</td>
</tr>
<tr>
<td>Annual sales</td>
<td>~$xx-xxB</td>
<td>~$xx-xxM</td>
</tr>
<tr>
<td>Operating margins</td>
<td>xx-xx%³</td>
<td>xx-xx%</td>
</tr>
<tr>
<td>Service</td>
<td>Offer a comprehensive menu of DME</td>
<td>Typically focus on one or a few segments (e.g., Respiratory)</td>
</tr>
</tbody>
</table>

Exhibit 5: Comparison of national and local DME providers

These retailers provide products and services that we segmented in six therapeutic segments (Exhibit 6).

³ Some companies (e.g., Lincare) support high margin driven by a high product mix of high-margin respiratory products
Respiratory therapy and home infusions account for $xx\%$ and $xx\%$ of the market, respectively.

**Exhibit 6: DME sales by therapeutic segment (2010)**

DME retailers market share vary significantly by DME therapeutic segments (Exhibit 7). For instance, respiratory therapy is offered almost exclusively by local and national providers. In contrast, diabetes supplies are offered primarily by chain pharmacies and mail-order providers. The DME retailer mix is dictated primarily by the type of products and potential for providers to add value (e.g., need for a nurse/technician).

Exhibit 7: DME retailer market share by retailer and therapeutic segment (2010)

*Includes Hospitals and VA
**DTC: manufacturer selling products directly to consumers (DTC)
***Patient positioning and mobility: Home Medical Equipment (HME)
**Market growth**

We expect the ~$xxB DME market to grow ~xx% p.a. over the next three years, and reach ~$xxB in 2013 (Exhibit 8).

All therapeutic segments are expected to grow between xx-xx% p.a. for the next three years.

**Exhibit 8: DME market size by therapeutic segments (2007-2013E)**

The slower growth in 2007-10 (xx% p.a.) reflects a slowdown in activity during the recent economic recession. For instance, Invacare revenues dropped from $1.76B in 2008 to $1.69B in 2009 (Exhibit 9).

**Exhibit 9: Invacare revenues (2006-2010)**
When considering reimbursement spent along the value chain manufacturers represent a small fraction of costs (Exhibit 20). The exhibit below is based on the 10-month rental of oxygen concentrator with a lifespan of x-x years, for a total payment of $xx / month\(^{23}\).

**Exhibit 20: Distribution of respiratory equipment spend among manufacturers and providers**

Respiratory equipment tends to be rented, not sold

Respiratory equipment tends to be rented along with its service rather than sold (<xx% of cases). Monthly rental fee includes equipment, oxygen, and service maintenance.

Because providers amortize capital expenditure over the lifetime of equipment (xx-xx years), the manufacturing total (Mfg., i.e., COGS) represents only xx-xx% of total reimbursement for oxygen concentrators\(^{24}\). The manufacturing total is especially low for national providers (e.g., Apria), since they can purchase equipment xx-xx% cheaper than local providers. Hence, many local providers do not offer respiratory services, but for those who do, it remains a high-margin business.

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\(^{23}\) The Eclipse portable concentrator (SeQual) receives a higher reimbursement rate of ~$xx, and does not need to be serviced on a regular basis by the provider

\(^{24}\) This could be even less for other respiratory therapy equipment
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Round 1 and Round 2 competitive bidding areas
The Round 1 Rebid occurred in the following metropolitan statistical areas (MSA):

- Cincinnati – Middletown (Ohio, Kentucky and Indiana)
- Cleveland – Elyria – Mentor (Ohio)
- Charlotte – Gastonia – Concord (North Carolina and South Carolina)
- Dallas – Fort Worth – Arlington (Texas)
- Kansas City (Missouri and Kansas)
- Miami – Fort Lauderdale – Pompano Beach (Florida)
- Orlando (Florida)
- Pittsburgh (Pennsylvania)
- Riverside – San Bernardino – Ontario (California)

On January 8, 2008, CMS announced the MSAs for Round 2. The delayed Round 2 will occur in these MSAs in 2011.

- **West**
  - Albuquerque, NM
  - Bakersfield, CA
  - Colorado Springs, CO
  - Denver-Aurora, CO
  - Fresno, CA
  - Las Vegas-Paradise, NV
  - Los Angeles-Long Beach-Santa Ana, CA
  - Sacramento--Arden-Arcade--Roseville, CA
  - Salt Lake City, UT
  - San Diego-Carlsbad-San Marcos, CA
  - San Francisco-Oakland-Fremont, CA
  - San Jose-Sunnyvale-Santa Clara, CA
  - Visalia-Porterville, CA

- **Midwest**
  - Akron, OH
  - Chicago-Naperville-Joliet, IL-IN-WI
  - Columbus, OH
  - Dayton, OH
  - Detroit-Warren-Livonia, MI
  - Flint, MI
  - Grand Rapids-Wyoming, MI
  - Huntington-Ashland, WV-KY-OH
  - Indianapolis-Carmel, IN
  - Milwaukee-Waukesha-West Allis, WI
  - Minneapolis-St. Paul-Bloomington, MN-WI
  - Omaha-Council Bluffs, NE-IA
  - Toledo, OH
  - Wichita, KS
  - Youngstown-Warren-Boardman, OH-PA
• South
  - Asheville, NC
  - Atlanta-Sandy Springs-Marietta, GA
  - Augusta-Richmond County, GA-SC
  - Austin-Round Rock, TX
  - Baton Rouge, LA
  - Beaumont-Port Arthur, TX
  - Birmingham-Hoover, AL
  - Cape Coral-Fort Myers, FL
  - Charleston-North Charleston, SC
  - Chattanooga, TN-GA
  - Columbia, SC
  - Deltona-Daytona Beach-Ormond Beach, FL
  - El Paso, TX
  - Greensboro-High Point, NC
  - Greenville-Mauldin-Easley, SC
  - Houston-Sugar Land-Baytown, TX
  - Jackson, MS
  - Jacksonville, FL
  - Knoxville, TN
  - Lakeland, FL
  - Little Rock-North Little Rock-Conway, AR
  - Louisville/Jefferson County, KY-IN
  - McAllen-Edinburg-Mission, TX
  - Memphis, TN-MS-AR
  - Nashville-Davidson--Murfreesboro--Franklin, TN
  - New Orleans-Metairie-Kenner, LA
  - Ocala, FL
  - Oklahoma City, OK
  - Palm Bay-Melbourne-Titusville, FL
  - Raleigh-Cary, NC
  - Richmond, VA
  - San Antonio, TX
  - Tampa-St. Petersburg-Clearwater, FL
  - Tulsa, OK
  - Virginia Beach-Norfolk-Newport News, VA-NC

• Northeast
  - Allentown-Bethlehem-Easton, PA-NJ
  - Bridgeport-Stamford-Norwalk, CT
  - Hartford-West Hartford-East Hartford, CT
  - New Haven-Milford, CT
  - New York-Northern New Jersey-Long Island, NY-NJ-PA
  - Scranton--Wilkes-Barre, PA
  - Syracuse, NY
Abbreviations
AACN: American Association of Critical-Care Nurses
ASP: Average selling price
AWP: Average wholesale price
BBA: Balanced Budget Act
CMS: Centers for Medicare & Medicaid Services
CPAP: Continuous positive airway pressure
CPT: current procedural terminology
DTC: Direct-to-consumer
DM1: Diabetes Mellitus type 1
DM2: Diabetes Mellitus type 2
DME: Durable medical equipment
DMEPSO: Durable medical equipment, prosthetics, orthotics, and supplies
Dx: Diagnostics
IV: intravenous
MDx: Molecular diagnostics
MIPPA: Medicare Improvements for Patients and Providers Act
MSA: Metropolitan statistical areas
O2: Oxygen
OSA: Obstructive sleep apnea
Pa: per annum
POC: Point-of-care
PPS: Prospective payment system
RAD: Respiratory Assist Devices
Rx: Research
Tx: Therapy / Therapeutic
VA: Veterans affairs
WW: Worldwide