At the start of 2014, the medical device industry finds itself in familiar territory, battling many of the same issues it has faced for several years now. The challenges facing the industry include the following:

- Pricing pressures from OEMs brought on by hospital spending cutbacks, changes in reimbursement rates and healthcare reform.
- A regulatory environment that continues to intensify and scrutinize the medical device industry. This regulatory pressure is driving up both the cost and time-to-market for new products introduced by OEMs.
- The 2.3% medical device excise tax which was implemented at the beginning of 2013. Although there is now public and congressional support to repeal the tax, it remains in effect. It appears that a repeal would require Congress to first find a way to replace the lost income generated by the tax — estimated at $30 billion — a difficult task.
- Product innovation pressures that are requiring medical device firms to redefine their business models to emphasize efficiency and improved outcomes in all phases of their businesses: product development, manufacturing and marketing. Medical device manufacturers are no longer catering only to physicians, but are now also required to satisfy patients and payers, demonstrating that their products do indeed result in improved clinical outcomes and/or lower costs.

Despite perennial pressures, the outlook for the medical device industry is positive. While recent market demand was limited by the recession which began in the U.S. and eventually reverberated throughout world economies, the outlook for 2014 calls for improved economic conditions both at home and abroad. This expected improvement should help revive demand for elective surgeries and also provide previously unemployed workers with healthcare coverage. Furthermore, as provisions of the Affordable Care Act are finalized and implemented, the number of insured patients in the U.S., and their associated medical procedures, is expected to rise significantly.

In the long-term, medical device firms expect growth opportunities to be driven by aging populations around the world. This fundamental change in population demographics will increase the need for healthcare and medical procedures, as people are living longer and are demanding a higher quality of life. Furthermore, although overall growth in more established markets in the U.S. and Europe has slowed, the emerging 'BRIC' countries of Brazil, Russia, India and China, and their growing numbers of middle-class, are now ramping up demand for med-tech products and services. All of these factors are contributing to a positive outlook for the medical device industry.
OUTSOURCING CONTINUES TO EXPAND

The issues and concerns faced by medical device OEMs have in many ways proven beneficial to the medical device outsourcing industry. Medical device OEMs have turned to outsourcing to help lower costs, increase agility, accelerate time-to-market and boost their returns on investment, all critical success factors in today’s environment. In fact, it is estimated that outsourcing has allowed OEMs to reduce costs by an estimated 10-30%. Outsourcing can offer many advantages to OEMs, including access to dedicated product design expertise and talent, manufacturing cost reductions, elimination of capital outlays for manufacturing equipment, ability to focus more on core competencies such as R&D and sales and marketing, and shortening time to market. Contract manufacturers have also pointed out that even the excise tax, while clearly not ideal, might actually represent another opportunity to help OEM partners who will need to offset additional tax payments with more cost savings, likely resulting in increased business for contract providers.

Many years ago, the medical device industry maintained a low level of outsourcing due to concerns over quality, delays and regulatory compliance. As OEMs have adopted the use of contract manufacturers, and found them to be reliable and of high quality, the acceptance of outsourcing has grown. As a result, the outsourcing industry has experienced healthy demand and medical device outsourcing service providers are expanding their capabilities and expertise in an effort to build end-to-end, full-service offerings. These services can include product design, engineering services, prototyping, production, packaging and supply chain management. Going forward, companies with a full offering of services are expected to be best positioned to offer the cost savings, simpler supply chain processes, and time to market advantages that OEMs desperately need.

According to TechNavio, the global medical device manufacturing services outsourcing market is projected to grow at a compound annual growth rate of nearly 12% over the 2013-2018 period. The industry is highly fragmented with thousands of companies competing for a share of the market. Some of the key factors contributing to market growth are the advancement in healthcare technologies and a growing medical devices market, both domestically and abroad.

Because of its quality standards and business practices, the U.S. currently accounts for a major share of the global medical device outsourcing market. In a recent survey of medical device OEMs, “quality” was cited as the top priority in evaluating manufacturing outsourcing vendors, followed (in descending order) by “product cost,” “delivery,” and “technical support.” When asked what advantages were gained from outsourcing domestically, respondents answered: superior quality, better communication and supervision, reliable delivery, the ability to schedule shorter production runs and “Made in America” pride.

By all accounts, the medical device outsourcing industry is poised for solid growth in the coming years. The industry is expected to benefit from both an increased worldwide demand for medical devices as well as a continued shift in manufacturing and support services towards contract providers.
**MERGERS AND ACQUISITIONS**

2013 proved to be a very robust year for M&A activity in the medical device outsourcing industry. Capstone has been tracking this industry for several years and the increase in the number of industry transactions last year was notable.

Most of the transactions originated by corporate buyers have been motivated primarily by a desire to add new services and capabilities to the portfolio. In other cases, buyers have been attracted to the target’s specific customer accounts and geographic markets. And in certain instances the buyer completed the acquisition as an entry point to the medical device sector. We believe M&A activity also saw a boost in 2013 as domestic and world economies improved, overseas austerity measures came to an end and companies gained improved visibility regarding the impact of the new medical device tax.

The rise in industry transactions occurred against a 2013 backdrop that proved to be an unusual year for mergers & acquisitions in general. A huge spike in activity was recorded near the end of 2012, as buyers and sellers worked to complete transactions ahead of the capital gains tax rate increase that went into effect in January. As a result, deal pipelines and transaction activity were at abnormally low levels in the first half of the year. As expected, activity picked up in the third quarter, as transactions that started after December 31st began to mature and close. In the end, sellers have recognized that the new capital gains tax rate of 20% is still low by historical standards and M&A activity is again on the rise.

Most of the medical device outsourcing transactions in 2013 were completed by corporate buyers. However, private equity groups do remain interested and continue to have an abundance of capital to invest. With the fragmented nature and positive growth prospects of the medical device outsourcing industry, we expect private equity buyers to remain interested in the space in 2014 and beyond.

Industry transactions in 2013 included a variety of companies such as those specializing in EMS, precision machining, stamping and plastic injection molding and extrusions. We also noted a number of transactions involving service providers, including those related to product design, product launch & marketing, regulatory affairs, product quality and safety, and supply chain management.

For 2014, we expect contract manufacturers to continue to use mergers & acquisitions to better position themselves with a broader offering of manufacturing capabilities and services in a market that will become increasingly competitive. As larger companies in the industry morph into multi-disciplined service providers, many will become preferred partners of OEMs looking for a “one stop shopping” solution. Smaller contract manufacturers will feel the effects of these dominating providers, and many will look to sell to a larger entity rather than be left behind. Backed by healthy transaction valuations, 2014 could be a year of consolidation for the industry and Capstone expects M&A activity in the industry to continue at a healthy pace.
### SELECTED MEDICAL DEVICE OUTSOURCING TRANSACTIONS

<table>
<thead>
<tr>
<th>Date</th>
<th>Target</th>
<th>Acquirer</th>
<th>Target Business Description</th>
<th>Enterprise Value ($mm)</th>
<th>EV / LTM Revenue</th>
<th>EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-13</td>
<td>Beckwood Services, Inc.</td>
<td>Sparten Corp. (NYSE:SPA)</td>
<td>A contract manufacturer of controls and equipment for a variety of markets including medical equipment.</td>
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<tr>
<td>Dec-13</td>
<td>Molex Incorporated</td>
<td>Koch Industries, Inc.</td>
<td>Designs and manufactures electronic components for use in medical electronics and other applications.</td>
<td>$6,506.6</td>
<td>1.8x</td>
<td>10.8x</td>
</tr>
<tr>
<td>Nov-13</td>
<td>Maysteel LLC</td>
<td>Revolution Capital Group, LLC</td>
<td>Manufactures custom sheet metal enclosures and fabricated assemblies for the medical equipment and other markets.</td>
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</tr>
<tr>
<td>Nov-13</td>
<td>Advanced Thermoforming Ent.</td>
<td>InterTrade Industries Ltd.</td>
<td>Manufactures custom design thermoformed parts for the medical, pharma and bio-pharma industries.</td>
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<tr>
<td>Oct-13</td>
<td>Endicott Interconnect Technologies</td>
<td>i3 Electronics, Inc.</td>
<td>Designs, fabricates and assembles critical components and solutions for medical technology OEMs.</td>
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<tr>
<td>Sep-13</td>
<td>ReSearch Pharmaceutical Svc.s</td>
<td>Kohlberg Kravis Roberts (NYSE:KKR)</td>
<td>Provides clinical product development, regulatory affairs and quality management services to pharma, biotech and medical device industries.</td>
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<tr>
<td>Sep-13</td>
<td>Terry’s Machine &amp; Mfg., Inc.</td>
<td>Loar Group</td>
<td>Manufactures precision machined components and assemblies for various markets including medical.</td>
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</tr>
<tr>
<td>Sep-13</td>
<td>Imds, Inc.</td>
<td>CoorsTek, Inc.; Golden Equity Investments</td>
<td>A medical device outsourcing company, provides medical device development and manufacturing services for the orthopedic industry.</td>
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</tr>
<tr>
<td>Sep-13</td>
<td>Spectrum Plastics Group, Inc.</td>
<td>Pexco LLC</td>
<td>Provides product development, rapid prototyping, injection molding and contract manufacturing services for medical products.</td>
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<tr>
<td>Jul-13</td>
<td>Synectic Engineering, Inc.</td>
<td>Mack Molding Company, Inc.</td>
<td>A medical product development company, designs, manufactures and markets medical products for clients on a contract basis.</td>
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<tr>
<td>Jul-13</td>
<td>Acro Associates, Inc.</td>
<td>Bimba Manufacturing Company, Inc.</td>
<td>Designs, tests and manufactures fluid control systems for the OEM medical device and bioprocessing markets.</td>
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<tr>
<td>Jul-13</td>
<td>IMAGE Molding Inc.</td>
<td>Intertech Plastics, Inc.</td>
<td>Operates as an injection molder, contract manufacturer and service provider of medical devices and components.</td>
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<tr>
<td>Jul-13</td>
<td>Nypro, Inc.</td>
<td>Jabil Circuit Inc. (NYSE:JBL)</td>
<td>Manufactures precision plastic products including assembly and contract manufacturing for the medical device and other markets.</td>
<td>$665.0</td>
<td>0.6x</td>
<td>-</td>
</tr>
<tr>
<td>Jun-13</td>
<td>Suncoast Digital Technologies, Inc.</td>
<td>Epec, LLC</td>
<td>Designs and manufactures user interface keyboard and display assemblies and control panels for OEMs in medical and other markets.</td>
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<tr>
<td>May-13</td>
<td>Product Development Technologies, Inc.</td>
<td>Teledonia, Inc.</td>
<td>Provides product development services to the medical device and other industries.</td>
<td>$5.0</td>
<td>0.3x</td>
<td>-</td>
</tr>
<tr>
<td>May-13</td>
<td>Gist Design, Inc.</td>
<td>TrueIt Solutions, Inc.</td>
<td>Provides research and design services for product evaluation and innovation to consumer electronic and medical device manufacturers.</td>
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<tr>
<td>May-13</td>
<td>EDAC Technologies Corp.</td>
<td>Greenbriar Equity Group LLC</td>
<td>Provides design &amp; manufacturing services to medical device and other OEMs.</td>
<td>$141.7</td>
<td>1.3x</td>
<td>9.9x</td>
</tr>
<tr>
<td>May-13</td>
<td>Smart Electronics &amp; Assembly, Inc.</td>
<td>Secure Communication Systems, Inc.</td>
<td>Provides electronic manufacturing services to aerospace and medical device OEMs.</td>
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<tr>
<td>Apr-13</td>
<td>Sentrx Safety Solutions</td>
<td>Telrx Marketing Inc.</td>
<td>Provides device safety outsourcing services to the medical device industry.</td>
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<tr>
<td>Mar-13</td>
<td>Maxiom Consulting Group, Inc.</td>
<td>Collaborative Consulting, LLC</td>
<td>Provides medical device consulting including strategic decision support, commercial launch &amp; marketing and supply chain management.</td>
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<tr>
<td>Mar-13</td>
<td>Astro Manufacturing &amp; Design Corporation</td>
<td>Jefferson Rubber Works, Inc.</td>
<td>Provides manufacturing services for businesses in medical, aerospace, automotive and other industrial and technology related industries.</td>
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<tr>
<td>Mar-13</td>
<td>BioClinica, Inc.</td>
<td>JLL Partners</td>
<td>Provides integrated, technology-enhanced clinical trial management solutions in support of medical device innovation.</td>
<td>$108.2</td>
<td>1.4x</td>
<td>10.5x</td>
</tr>
<tr>
<td>Mar-13</td>
<td>Trident Manufacturing, Inc.</td>
<td>Probe Manufacturing Inc. (OTC:PMFI)</td>
<td>Provides electronics contract manufacturing services to medical devices and other OEMs.</td>
<td>-0.1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Feb-13</td>
<td>Biomedical Structures, LLC</td>
<td>Modified Polymer Components, Inc.</td>
<td>Designs and manufactures biomedical textiles and custom plastic components for device manufacturers.</td>
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<tr>
<td>Feb-13</td>
<td>Pacifica Engineering, Inc.</td>
<td>M.Torres Diseños Industriales S.A.U</td>
<td>Provides engineering services including medical components/equipment design &amp; manufacturing.</td>
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</tr>
<tr>
<td>Jan-13</td>
<td>Source Scientific, LLC</td>
<td>BIT Analytical Instruments GmbH</td>
<td>A contract manufacturer for medical device and other OEMs.</td>
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</tr>
<tr>
<td>Jan-13</td>
<td>Mountain Molding LLC</td>
<td>Arcady Capital, Inc.</td>
<td>Provides contract manufacturing for the medical device and other markets.</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>Jan-13</td>
<td>Accu-Mold, LLC</td>
<td>Mno-Bmadsen</td>
<td>Produces plastic parts for a variety of OEMs, including medical device manufacturers.</td>
<td>-</td>
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<td>-</td>
</tr>
</tbody>
</table>

LTM = last twelve months; EV = enterprise value

Sources: Capstone Partners LLC research; Capital IQ; public filings and press releases
Capstone Partners won the 2013 M&A Deal of the Year award for its work on the sale of Invo Healthcare to Post Capital Partners. Invo HealthCare is a premier provider of outsourced clinical services to schools, school districts and early intervention agencies throughout the U.S. It was acquired by Post Capital Partners, a New York based private investment firm that invests in lower middle-market businesses. Post Capital was attracted to Invo HealthCare’s solid fundamentals and attractive growth prospects, and acquired the company as a platform investment, with plans to make future add-on acquisitions in the sector.

Capstone Partners has successfully advised on a number of transactions related to the sale of medical device contract manufacturers and OEMs. These and other health & medical transactions are shown below.
CAPSTONE’S LEADERSHIP TEAM

NATIONAL
John Ferrara
Founder, President
(617) 619-3325
jferrara@capstonellc.com

CHICAGO
Ted Polk
Managing Director
(312) 674-4531
tpolk@capstonellc.com

LOS ANGELES
David Bench
Managing Director
(949) 460-6431
dbench@capstonellc.com

SAN DIEGO & SILICON VALLEY
David Michaels
Managing Director
(858) 926-5950
dmichaels@capstonellc.com

BOSTON
Jacob Voorhees
Managing Director
(617) 619-3323
jvoorhees@capstonellc.com

LONDON
John Snead
Managing Director
+44 7979 704302
jsnead@capstonellc.com

PHILADELPHIA
Eric Williams
Managing Director
(215) 854-4065
ewilliams@capstonellc.com

CORPORATE RESTRUCTURING
Brian Davies
Managing Director
(617) 619-3328
bdavies@capstonellc.com

ABOUT CAPSTONE PARTNERS

Capstone Partners LLC is a premier investment banking firm dedicated to serving the corporate finance needs of middle market business owners, investors and creditors. The firm provides corporate sale & divestiture, merger & acquisition, private placement, corporate restructuring, valuation and financial advisory services. Capstone maintains various industry specialties including one in the Health & Medical sector. The firm also has a merchant banking capability to actively co-invest in transactions. Headquartered in Boston, Capstone has offices in Chicago, London, Los Angeles, Philadelphia, San Diego and Silicon Valley.

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