Zacks Equity Research

December 14, 2010

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Electromed Inc (ELMD-NASDAQ)

ELMD: Initiating on ELMD. Expecting Robust Revenue Growth!

Current Recommendation	**Hold**
Prior Recommendation	N/A
Date of Last Change	12/13/2010
Current Price (12/14/10)	$3.40
Six- Month Target Price	**$4.00**

OUTLOOK

$6 million raised through an August 2010 IPO is being put to work expanding the size of the sales force and increasing marketing. The impact has been immediate with Q1 2011 sales up 29%. Revenue growth should remain strong as ELMD continues this strategy, benefitting from increased adoption of HFCWO therapy in the U.S. Gaining operating leverage will be key to accelerated EPS growth, although we think this may not materialize until 2012. Expanding into new indications and international markets may provide fuel for long-term growth. We are initiating on ELMD with a Hold recommendation and $4.00 price target.

SUMMARY DATA

52-Week High	**$3.98**
52-Week Low	**$3.25**
One-Year Return (%)	**N/A**
Beta	**-0.03**
Average Daily Volume (sh)	**2,346**
Shares Outstanding (mil)	**8**
Market Capitalization ($mil)	**$28**
Short Interest Ratio (days)	**0.70**
Institutional Ownership (%)	**N/A**
Insider Ownership (%)	**42**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**22.7**
P/E using 2011 Estimate	**26.2**
P/E using 2012 Estimate	**16.2**
Zacks Rank	**N/A**

Risk Level	**N/A,**
Type of Stock	**N/A**
Industry	**Med Instruments**
Zacks Rank in Industry	**N/A**

ZACKS ESTIMATES

Revenue
(in '000 of $)

	Q1 (Sep)	Q2 (Dec)	Q3 (Mar)	Q4 (Jun)	Year (Jun)
2010	3,228 A	3,223 A	4,229 A	3,624 A	14,304 A
2011	4,165 A	4,546 E	4,857 E	4,528 E	18,096 E
2012					21,679 E
2013					25,004 E

Earnings per Share

	Q1 (Sep)	Q2 (Dec)	Q3 (Mar)	Q4 (Jun)	Year (Jun)
2010	$0.05 A	$0.01 A	$0.08 A	$0.01 A	$0.15 A
2011	$0.02 A	$0.03 E	$0.05 E	$0.04 E	$0.13 E
2012					$0.21 E
2013					$0.30 E

Zacks Projected EPS Growth Rate - Next 5 Years % **26**

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INITIATING COVERAGE

Summary Outlook

The $6 million raised from the August IPO has allowed Electromed to accelerate its growth trajectory through increasing the size of its sales force and supplemental advertising and marketing. We expect revenue in the near term to benefit from adding headcount at a regular pace over at least the next 12 to 18 months. Near term revenue growth is most likely to largely come from deeper penetration of HFCWO therapy into already well-established (CF, bronchiectasis) indications in the U.S. Electromed also continues to pump money into R&D which might mean an improvement to the SmartVest® or even an altogether new product launch is on the horizon. This could be another catalyst to near term sales growth.

We look for home care sales to grow by 26% in 2011 on what we believe will be about a 35% increase in the number of sales reps. International sales, which have been highly variable, may show some improvement throughout the current year as the company looks to add new distributors in Europe. Institutional revenue has also been somewhat erratic but may experience more stability due to the recent growth in SmartVest Wrap® sales seen in Q1. We model SG&A to remain elevated throughout the year as the newly hired sales reps dilute overall productivity and weigh down operating margins. Despite our forecast for net sales to grow 26.5%, we model EPS in 2011 to fall to $0.13 (from $0.15 in 2010) mostly as a result of the increase in SG&A. Upside to this figure could come from a stronger than modeled (73.1%) gross margin or lower operating expenses.

We think Electromed can begin to see some leverage in both gross as well as operating margins starting in 2012 which will push a greater percentage of revenue to the bottom line. Incrementally adding new sales reps to a larger established base sales force will have a less dilutive effect on sales productivity. Gross margins should also benefit from economies of scale as a result of greater production volumes. Our assumption is that margins continue to benefit over the next several years as revenue grows and Electromed has more opportunity to squeeze additional leverage from SG&A.

The prospects for longer term growth, while somewhat less certain, may be fueled by tapping “newer” (neuro-muscular, COPD) indications, taking market share from Hill Rom/RespirTech and greater uptake of HFCWO in international markets.

Valuation and Recommendation

Given that Electromed has only a few months of history of operating as a public company and is in a transition mode, valuation is somewhat tricky. A quick and easy method is to use an industry average P/E multiple of current-year EPS. As we detail in our report, we model current year (fiscal 2011) EPS to fall from 2010 due to investments in headcount and marketing. We characterize these expenses as investments as they should result in accelerated EPS growth in subsequent years. Therefore, using a P/E multiple of current-year expected EPS clearly fails to account for the higher rate of growth that we expect to materialize beginning in 2012 and, hence, results in an undervaluation.

To account for this delayed growth we use an industry average five year PE/G ratio, which currently stands at 1.17. Applying this to our 26.4% estimated four-year annual EPS growth rate for Electromed results in a current-year EPS multiple of 30.9, which values Electromed at $4.00 per share. We acknowledge the difference in the terms (five versus four years) but an industry average four-year PE/G is not readily available and (as is typical with all of our company models) we only model out four years. We think the difference in the terms is relatively insignificant.

We also believe there is some value in using a 2012 (i.e. – front-end of ELMD’s growth spurt) P/E comparable as somewhat of a litmus test (double- check) for valuation. Hill-Rom Holdings (HRC), despite being significantly larger than ELMD and HFCWO products encompassing only a small portion of their total business, is still probably the most appropriate comparable to Electromed. Consensus 2012 EPS estimate for HRC is $2.40 which, based on HRC’s current share price, implies a P/E of about 18x. Applying this to our 2012 EPS estimate for ELMD of $0.21 results in a value of $3.80. We think this provides a general guideline to valuation for ELMD but feel our $4.00 estimate is more representative of the longer-term growth (and, therefore, true value) of the company.

ELMD currently trades at $3.40, representing a slight discount to what we believe is fair value. We are initiating coverage of Electromed with a Hold recommendation and a near-term price target is $4.00. Catalysts that could prompt us to raise our price target and recommendation include expansion of the industry multiple as well as ELMD posting a higher rate of revenue growth and/or more rapid expense control relative to our forecasts. Risks to our recommendation include; operating and/or gross margin leverage does not materialize as we expect, revenues fall

short, government healthcare cost containment measures result in lower reimbursement for HFCWO, ELMD loses domestic market share to competitors, international revenues fail to rebound from FY2010 levels.

BUSINESS

Electromed, Inc. was founded in 1992 by two brothers, Robert and Craig Hansen. The New Prague, Minnesota-based company went public in August 2010.

Electromed manufactures and sells airway clearance products using High Frequency Chest Wall Oscillation (HFCWO) technology for the treatment of patients with pulmonary infection risks. Sufferers of cystic fibrosis, a disease characterized by the accumulation of thick mucus in the lungs, was Electromed's largest target patient population. The target market has quickly expanded into other diseases with bronchiectasis now responsible for the majority of prescriptions written for Electromed's products. Traditional airway clearance methods consist of a caregiver pounding on the chest and back of the patient for up to 30 minutes, two to four times per day. Electromed's products have been shown to be as effective as this traditional therapy, while also providing certain other benefits such as increased patient-independence and lower cost of treatment.

The company's first product, MedPulse®, was launched in 2000 as the first portable HFCWO system. Since that time Electromed has improved on the product and in 2004 gained FDA regulatory clearance and launched their SmartVest Airway Clearance System®, the company's current flagship device. SmartVest® competes with two other HFCWO products currently on the market along with several other lower cost, less sophisticated and technique-dependent airway clearance devices.

Electromed is seeking to expand greater use of SmartVest beyond cystic fibrosis into other diseases and markets including chronic obstructive pulmonary disease (COPD), neuromuscular disorders and acute care. Recently implemented growth initiatives, stoked by the IPO capital, include ramped-up marketing strategies and a significantly beefed-up (and still growing) domestic sales force. The company is also actively looking to grow their international presence through expansion of their international distribution network.

Electromed breaks out their product revenue into three separate segments; home care, institutional (hospitals, clinics, pulmonary rehabilitation centers) and international (includes both home care and institutional). Segment sales as a percent of total revenue in fiscal 2010 were; home care 91%, institutional 4% and international 5%.

PRODUCTS

High Frequency Chest Wall Oscillation was developed at the University of Minnesota in the 1980s as a way to loosen mucus accumulated in the lungs of cystic fibrosis (CF) patients. It allowed CF patients to forego traditional Chest Physical Therapy (CPT) which has to be performed by a caregiver, thereby affording the patient significantly greater independence.

CPT has long been considered the gold-standard for clearing mucus from the lungs of CF sufferers. CF patients typically need CPT performed between one and four times per day for 30 to 45 minutes per session. The treatment consists of the patient lying in several different positions with their head facing downward as the caregiver pounds on the chest and back in order to loosen mucus from each lobe of the lungs. As it is loosened from the lungs, the CF patient is then able to excrete the mucus through normal coughing.

HFCWO works by rapidly squeezing and releasing the chest and torso of a patient wearing a vest garment that quickly inflates and then pulses as the vest garment receives short bursts of air. This pulsing action breaks the mucus away from the walls of the lungs' airways and moves the secretions towards larger airways where the patient is then able to cough it free. In clinical trials HFCWO has been shown to clear airways, enhance mucus transport and improve bronchial drainage. Several studies have been done comparing the effectiveness of CPT treatment with HFCWO in CF patients. These have generally concluded that HFCWO is at least as effective as CPT in clearing mucus secretions from the patients' airways. While no large, long-term study has been conducted to compare the effectiveness of each treatment, we believe, based on the compilation of the currently available data,

that it is reasonable to conclude that HFCWO has largely been acknowledged and accepted as an effective alternative to CPT. We also note several ancillary advantages of HFCWO therapy over CPT later in our report.

Electromed launched their HFCWO SmartVest product in 2004. SmartVest is FDA approved for the treatment of excess lung secretions and must be prescribed by a physician. Use of the device is not disease-specific, however, and can be prescribed for any patient where the physician believes mucus transport will be enhanced through external chest manipulation (we note that while the device can be prescribed for any number of diseases, currently third-party reimbursement is generally restricted to only a few). SmartVest has been prescribed to patients with CF, COPD, bronchiectasis and neuro-muscular disorders such as muscular dystrophy, spinal muscular atrophy and multiple sclerosis. It has also been used with post-surgical and intensive care patients as well as those dependent on a ventilator.

The SmartVest System consists of a portable air generator which delivers bursts or air through a single hose to a pneumatic vest which is worn by the patient. The generator can be programmed to deliver pulses at various frequencies ranging from 5 to 20 cycles per second, depending on the needs of the patient. The action of the air pulses and coverage of the vest garment delivers simultaneous treatment to the patient's chest, back and entire lung region. The company's vests are washable and offered in eight sizes for use with adults as well as children. The system is portable, fits into a custom roller-bag and complies with airline carry-on size limits.

Electromed also offers a Single Patient Use Vest® (SPUV) and SmartVest Wrap® which are marketed to the institutional segment, particularly intensive care units. Both products are for single patient use and are disposed of following the patient's discharge, which avoids contamination of the home-use vest. Electromed cites the ability to transition patients from the single-use products to the home care products as a way to facilitate long-term use of the SmartVest by chronic-care patients. The SPUV is a full-sized vest, essentially similar to the home care vest, used with patients which already have experience with home care model. The SmartVest Wrap (also offered in a home care model), which was launched in 2007, is primarily used with patients that are recovering from surgery or stroke which have limited mobility and may have difficulty using the larger vest garment.

The SmartVest System®



Home Care use model



Institutional SmartVest Wrap®

Electromed provides a lifetime warranty for SmartVest Systems purchased by individuals in the United States and Canada which includes the cost of parts and labor. For sales to institutions in the U.S. and Canada and sales to individuals outside these territories (ex-Greece), a three-year warranty applies.

TARGETED THERAPEUTIC AREAS

When Electromed entered the market in 2000 with its MedPulse product they focused their attention on the treatment of cystic fibrosis as this is essentially where the low hanging fruit was. Reimbursement was already in place and the technology had shown some significant benefit for this indication. Although Electromed is looking to

diversify its revenue base, cystic fibrosis will likely remain a significant but minority portion of the company's business for the foreseeable future.

Cystic Fibrosis

According to the Cystic Fibrosis Foundation (CFF), CF is "an inherited chronic disease that affects the lungs and digestive system of about 30,000 children and adults in the United States (70,000 worldwide). A defective gene and its protein product cause the body to produce unusually thick, sticky mucus that clogs the lungs and leads to life-threatening lung infections and obstructs the pancreas and stops natural enzymes from helping the body break down and absorb food." The CFF notes that approximately 1,000 new cases of CF are diagnosed each year and the predicted median age of survival of someone with the affliction is the mid-30's. People with CF routinely take medication and must continually clear their airways in order to reduce the risk of lung infections and improve lung function.

Electromed estimates that approximately 19% of total revenue in fiscal 2010 was attributed to sales to CF patients – although the company notes that due to overlap in patient populations, it is difficult to attribute revenue to particular indications.

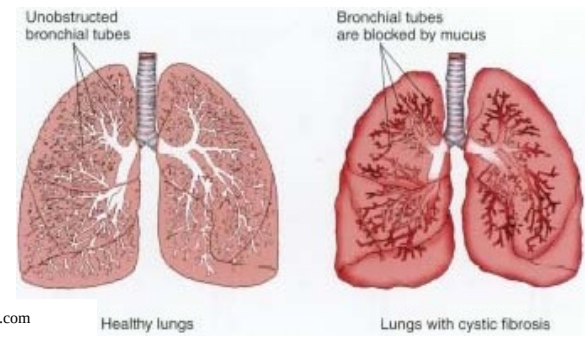
While HFCWO is already well penetrated within the U.S. CF market (with approximately 80% of all CF patients currently using HFCWO therapy), we think it remains an attractive growth segment for Electromed. Assuming the aggregate U.S. market for HFCWO in CF is ~ $300MM (30,000 CF population x $10k reimbursement per unit), this leaves approximately $60MM of CF market share yet unclaimed by any of the HFCWO manufacturers. Add the roughly 1,000 new cases every year and the untapped CF market is worth about $70MM. So while the U.S. CF market is already well penetrated with HFCWO therapy, there remains a lot of meat on the bone for a company of Electromed's relatively small but rapidly growing size.

While HFCWO has quickly become the standard of care for CF patients in the U.S., it has only just recently been introduced in Europe where other airway clearance methods such as active cycle of breathing techniques, autogenic drainage and the use of smaller, more rudimentary devices remains most common.

The authors of a short-term study titled *Short-term Comparative Study of HFCWO and European Airway Clearance Techniques in Patients with CF* published in the August 2009 edition of *Thorax: An International Journal of Respiratory Medicine* concluded that, "Considering the cost benefit of HFCWO compared with other ACTs (airway clearance techniques) and the differing healthcare systems in the USA and the UK, it is unlikely that HFCWO will become the first choice ACT for most individuals in the UK. Further work needs to be undertaken to identify the place of HFCWO in Europe. Patient preference for a treatment regimen may positively influence adherence to treatment in the short term, and nearly half the patients who participated in this study preferred HFCWO to their usual ACT. HFCWO is a safe treatment that facilitates airway clearance in CF but, when compared with patients' usual ACTs, HFCWO led to the clearance of significantly less sputum during a single treatment session and over a 24 h period."

Physician acceptance of HFCWO in many parts of Europe has been slow-going. This is mostly attributable to lack of reimbursement from Europe's public healthcare system and the continued reliance of CPT. While reimbursement decisions (whether to offer reimbursement at all and/or the level of reimbursement) in the U.S. are often left up to the discretion of the multitude of various public and private providers, most of Europe relies on the state healthcare system – this essentially results in a broad "yes" or "no" coverage policy. Despite this, we believe the international market remains a highly attractive growth opportunity for Electromed. Assuming public healthcare policy evolves in different parts of Western Europe and the benefits of HFCWO therapy over CPT are embraced as they have been in the U.S., this could be a boon for Electromed.

Healthy Versus CF Afflicted Lungs



www.humanillness.com

Bronchiectasis

Bronchiectasis, according to the National Heart Lung and Blood Institute (NHLBI) is "a condition in which damage to the airways causes them to widen and become flabby and scarred. It is usually the result of an infection or other condition that injures the walls of your airways or prevents the airways from clearing mucus. In bronchiectasis, your airways slowly lose their ability to clear out mucus. When mucus can't be cleared, it builds up and creates an environment in which bacteria can grow. This leads to repeated, serious lung infections. Each infection causes more damage to your airways. Over time, the airways lose their ability to move air in and out. This can prevent enough oxygen from reaching your vital organs."

Typical symptoms of bronchiectasis are shortness of breath, wheezing, and daily cough and production of large amounts of sputum/mucus. Severe cases can lead to other more serious conditions including respiratory and heart failure.

Bronchiectasis is typically caused by an underlying medical condition, such as cystic fibrosis and primary ciliary dyskinesia, which damage the walls of the airways and prevent the clearing of mucus. It is estimated that approximately 50% of bronchiectasis cases are a result of cystic fibrosis. Similar to CF, there is no cure for bronchiectasis and treatment consists of medication and some form of airway clearance.

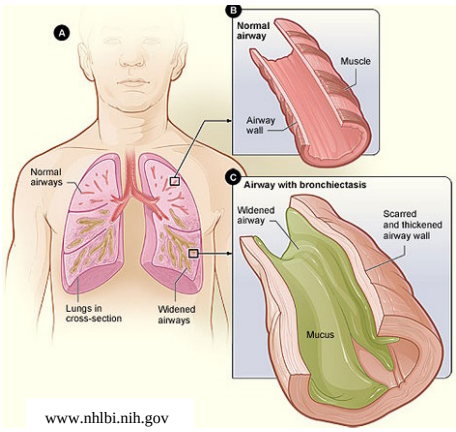
While both CF and bronchiectasis are both chronic conditions that produce excess mucus, techniques used to clear the airways of bronchiectasis patients can often differ from those used with CF. In general, bronchiectasis patients have less physical deterioration than CF sufferers and mucus accumulation may not be as severe or entrenched. As a result respiratory therapists will often use positive expiratory pressure (PEP) devices (which require some physical exertion on the part of the patient) as the first line of therapy. PEP devices such as the *Flutter* or *Acapella* are significantly less expensive than an HFCWO device, only take minutes to use (compared to 30 mins with HFCWO) and are generally considered effective in airway clearance with bronchiectasis.

HFCWO can be an effective treatment for some bronchiectasis patients, however. Bronchiectasis sufferers which can not find adequate relief with the aforementioned devices and/or have severe physical limitations (these devices are technique-dependent and rely on physical effort from the patient which can limit their use in frail and weak individuals) would be likely candidates for HFCWO therapy. While this may only be roughly 25% of the bronchiectasis population, based on the relatively high incidence of the disease, the market for Electromed in the treatment of bronchiectasis is potentially very significant.

Despite HFCWO devices qualifying for federal Medicaid reimbursement for the treatment of bronchiectasis just five years ago, aggregate sales to this segment have been significant. Electromed estimates that approximately 39% of total revenue in fiscal 2010 was attributed to sales to bronchiectasis patients. We estimate the penetration rate for HFCWO in bronchiectasis still remains low relative to CF, however, and believe only about 10% or less of the market has been tapped.

With an estimated 110,000 people in the U.S. and 600,000 worldwide afflicted with non-cystic fibrosis bronchiectasis, the market is very attractive, especially when considering the relatively low penetration rate. While HFCWO therapy may be appropriate for only 25% of all bronchiectasis patients, this still equates to a market size of about $165 million.

Healthy Versus Bronchiectasis Afflicted Airways



Chronic Obstructive Pulmonary Disease

Chronic obstructive pulmonary disease encompasses both chronic bronchitis and emphysema. COPD is a disease in which the air sacs of the lungs are damaged to the point where their ability to perform gas exchange (transfer oxygen and carbon dioxide from/to the blood) has been compromised. COPD is typically caused by smoking, which can cause the airways and air sacs to lose their elasticity, destroy the walls between air sacs and inflame the airway walls. The immune system reacts by increasing secretions which become clogged in the airways. COPD is progressive and gets worse over time, making breathing ever more difficult. Sufferers find exhaling and the clearing of mucus particularly difficult.

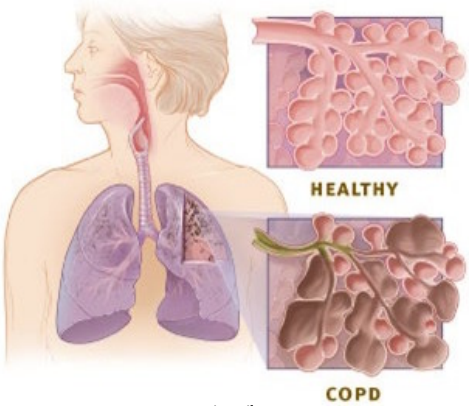
Typical symptoms include an ongoing cough which produces large amounts of mucus ("smoker's cough"), shortness of breathe, difficulty breathing and tightness of the chest.

Aside from quitting smoking, treatment of COPD typically involves medication, vaccines, oxygen therapy and pulmonary rehabilitation. Bronchodilators and steroids are commonly used to relax the muscles around the airways in order to aid in breathing. Vaccines are also commonly administered to reduce the risk of infections, which can cause severe problems for people with COPD. Pulmonary rehabilitation typically involves exercise programs, disease management training and counseling. CPT or some other form of airway clearance therapy is not routinely administered or prescribed to COPD patients, however.

Opinions are somewhat mixed relative to the effectiveness of HFCWO in COPD patients. While some smaller studies have indicated that HFCWO therapy can aid in sputum clearance and benefit quality of life, no large long-term clinical data is available. Indranil Chakravatory, PhD, FRCP, is a consultant and respiratory physician at Lister Hospital and senior fellow at the University of Hertfordshire in London. Dr. Chakravatory, in a recent article published in *Respiratory Care & Sleep Medicine*, writes "While it is unlikely these techniques would be universally beneficial in COPD, they could be useful in certain subsets. Patients with mucus hypersecretion, impaired mucociliary clearance with sputum retention, and frequent exacerbations are likely the best candidates for HFCWO or chest physiotherapy." Our due diligence also included speaking with a respiratory therapist with 20 years of experience in treating pediatric and adult patients with a variety of conditions. Her comments were that HFCWO therapy is rarely prescribed to COPD patients. Whether the reason for this is due to the lack of reimbursement or due to that it is believed HFCWO therapy has little utility in COPD may be debatable (i.e. – "chicken or the egg"?). But, until reimbursement becomes more commonplace, there will almost certainly be little uptake of HFCWO in COPD.

It is estimated that as many as 24 million people have COPD in the United States and 210 million are afflicted worldwide. Approximately 130k and 3 million people die every year from the disease in the U.S. and worldwide, respectively. While this is a huge target population for Electromed, based on little evidence to support the use of HFCWO in COPD patients, we believe the "realistic" COPD target market is only a fraction of this. We also note that reimbursement for HFCWO in COPD is largely not in place. If and when a target COPD population emerges for HFCWO therapy and reimbursement becomes more available this could be huge opportunity for Electromed. Until then, we view the COPD market as somewhat of a wildcard.

Healthy Versus COPD Afflicted Lung



www.nursingcrib.com

Neuro-Muscular Diseases
Approximately 400k people in the United States suffer from neuro-muscular diseases. Neuro-muscular diseases can restrict the ability to breathe and can cause infection of the respiratory tract due to the accumulation of mucus in the airways. Electromed believes that people with muscular dystrophy, amyotrophic lateral sclerosis (ALS), spinal muscular atrophy and multiple sclerosis all are potential target areas for HFCWO therapy. These diseases can cause muscle weakness throughout the body and are often associated with spinal deformity. Weakness in the diaphragm in young children with these diseases can lead to underdeveloped lungs and the inability to take deep breaths. Of even greater severity is the inability to fully exhale or produce productive coughs.

However, unlike CF and bronchiectasis where production of abnormally high levels of thick mucus and/or damage to the airway and lungs results in clogging of the lower airways, neuro-muscular weakness by itself does not impair the mucociliary system's ability to clear mucus (at least initially anyway). Instead, the greatest impediment to airway clearance in neuro-muscular patients is a weak cough. In other words, the healthy mucociliary system is able to move mucus out of the lungs and into the larger airways, but the neuro-muscular disease patient is unable to clear the mucus from their throat due to a weak cough.

As a result, standard protocol to clear the airways of these patients is some form of cough augmentation therapy. Typical forms of cough augmentation are "manually assisted cough" or MAC (caregiver pushes on the patient's chest and abdomen) and "breath-stacking" (sequential inhalation from a ventilator followed by coughing). Mechanical insufflation-exsufflation, a machine that applies positive air pressure to the airway through a mask and then quickly shifts to negative pressure, has also been shown to improve cough clearance in neuro-muscular disease patients. Mechanical insufflation-exsufflation is commonly used in severely weak patients where MAC and breath-stacking have proven ineffective.

These techniques have proven effective in clearing the upper airways. They, however, do not address mucus clearance in the lungs. While neuro-muscular disease does not directly impair mucus clearance in the lungs, it can lead to respiratory infection such as pneumonia (due to the accumulation of mucus as a result of a weak cough). This can result in damage to the body's mucociliary clearance system, inflammation of the respiratory tree and impairment of the clearance of mucus from respiratory system – which can ultimately lead to death if left untreated.

Patients that are especially immobile and sedentary such as paraplegics and those with advanced ALS is where Electromed sees a sweet-spot for the SmartVest. These patients, especially prone to mucus accumulation and lower airway infections due to their severely compromised physical state, are also the most likely to have difficulty with the positioning and fatigue associated with CPT. HFCWO, which has been shown to be as effective as CPT (in CF patients) and requires very little physical effort on the part of the patient, could be a very effective and better alternative to CPT for these patients. In addition, as we discuss below, HFCWO provides other ancillary benefits such as patient independence and shorter treatment time compared to CPT. HFCWO can also be used simultaneous with cough augmentation therapy.

Despite the potential benefits of HFCWO, its use in neuro-muscular disease remains relatively low based on our research. Reimbursement from private insurance is spotty and treatment of this population remains largely confined to cough augmentation therapy. And while the total U.S. neuro-muscular disease population is estimated at approximately 400k, we think the size of the market most likely to benefit from HFCWO therapy (Electromed's sweet-spot) is about 10% of this, or roughly 40k.

While there has been some debate in the medical community relative to HFCWO's place in the treatment of neuro-muscular disease patients, Medicare recently (late 2008) expanded coverage of HFCWO devices for this patient population. Private insurance reimbursement decisions often follow that of Medicare although this has been slow-going with for HFCWO in neuro-muscular disease. Despite these hurdles, based on the still relatively attractive market size (~40k), coupled with the recent expanded Medicare coverage, we believe neuro-muscular disease may offer a very attractive opportunity for Electromed. Broader reimbursement at the private level will likely be the first step in seeing some meaningful penetration in this segment. Until that happens, however, increased use of HFCWO in neuro-muscular disease may face slow progress.

MARKETS

By far **home care** represents Electromed's largest single market, representing 87% of the company's total revenue in 2009 and 92% in fiscal 2010. Systems sold to the home care market (i.e. – for at home, individual use) must be

prescribed by a physician but are marketed by Electromed at both the physician and individual patient level. Electromed utilizes an in-house sales force to market its products in the U.S.

Electromed saw home care revenue grow by almost 13% in 2010 (to $13.1 million) as a result of a 17% increase in referrals (from 1,773 in 2009 to 2,006 in 2010) and a 19% increase in approvals from (1,108 in 2009 to 1,323 in 2010). The company attributed the increases to their beefed-up sales force (36% more sales reps in 2010) and greater productivity of their sales staff.

"Referrals" represent prescriptions written by physicians for the SmartVest while "approvals" occur when the insurance company agrees to cover the cost of the product. The distinction is important as there is often a lag between when a prescription is written and when Electromed finally receives full payment. This, along with the potential for price adjustments based on reimbursement levels of various insurance carriers, may result in a less-than-exact correlation between referral and revenue growth.

The infusion of capital from the IPO has allowed Electromed to significantly expand their sales force and marketing efforts over the last few months. We expect these efforts to shift into higher gear going into fiscal 2011 and for the performance of the home care segment to be very strong and highly correlated to the number of sales reps. Electromed expects to continue adding sales staff throughout the end of the current fiscal year (ending June 30, 2011) and potentially well into the next. This, along with market share gains, use in expanded indications and further penetration of the CF and bronchiectasis populations should result in robust double-digit home care revenue growth over the next several years.

International revenues accounted for 7% and 5% of total sales in fiscal 2009 and 2010, respectively. The SmartVest System has obtained CE Marking and Electromed contracts with various distributors to market the SmartVest System outside of the U.S. Italy, Spain and Japan comprise the majority of international revenue although Electromed notes in their public filings that they have made sales in more than 10 countries outside the U.S. Sales to Canada are largely handled by Electromed's in-house sales force.

Increasing their international presence is one of Electromed's major growth objectives. The company notes that they are actively engaged in discussions with new potential distributors who have experience with serving their targeted end-user markets. Electromed sells to their international distributors at a consistent price and is paid directly from each distributor (i.e. – the distributors take the accounts receivable and inventory risk).

Electromed attributed the 30% drop (from $919k to $647k) in international sales in 2010 to a recent reduction in government health care spending on medical devices in Spain and Greece and a sharp decrease in sales to Japan. Revenue from sales in Spain fell 48% (to $64k) and was down 94% in Greece (to $13k). Meanwhile, sales to Japan fell 41% (to $128k) but were up by a similar 41% (to $315k) in Italy.

The variability in government spending in Electromed's overseas markets presents a challenge for us in forecasting the company's international revenue. We expect contributions from international sales to continue to be inconsistent on a quarterly basis but for this to exhibit a more regular positive growth pattern annually as new distributors come onboard.

Government and institutional sales accounted for 2% and 4% of total revenue in fiscal 2009 and 2010, respectively. Segment revenue increased by 28% to $548k. Electromed attributed the majority of the revenue growth to increased sales to hospital purchasing organizations. This market is largely served by sales of the Single Patient Use Vest and Wrap products to hospitals and clinics, particularly for use in intensive care units and offers potential synergies with sales to the home care segment. Initial introduction of the SmartVest in the hospital setting can translate into long-term use of the home care SmartVest product with chronic-care patients.

This acute-care market is another targeted area of growth for Electromed. Particularly, ventilator-dependent individuals and post-surgical patients at risk for pulmonary complications (i.e. – smokers, people with a history of lung disease, asthma, chronic bronchitis, at-risk of pneumonia, respiratory failure, overweight individuals, etc).

While the institutional population represents a huge potential market for the SmartVest / SmartVest Wrap, we do not expect revenue from this segment to offer nearly the same opportunities for growth as either the home care or international markets. As the SmartVest's sweet-spot are patients with chronic airway clearance difficulty seeking greater independence, we view the acute, hospital setting as somewhat more of an ancillary market for Electromed. Manual CPT is always an available option in hospitals and clinics (as opposed to home care patients which may not always have a caretaker present) where it continues to be used regularly. Tracy Grindo, a respiratory therapist working at a 120-bed hospital in Charlotte, NC told us that they have one *The Vest* on hand as their sole HFCWO

device. She commented that while she feels it is as efficacious as manual CPT, that manual CPT is used significantly more often than their HFCWO device.

However, as we noted, the institutional business can be important from a synergistic standpoint as it may offer the opportunity to introduce the product to chronic patients while hospitalized and result in long-term home care use.

MANUFACTURING

Manufacturing of the various components of Electromed's products is outsourced with assembly and testing handled in-house at the company's Minnesota headquarters. Electromed notes in their 10-K that, "our manufacturing processes emphasize simplicity, cost-effectiveness, and a capacity to realize increases in production volume with escalation in demand." We expect this to translate into some economies of scale and resulting margin expansion over the next several years as production volume increase. Electromed also continues to look to make improvements in the design of the SmartVest with an eye on lowering the cost of manufacturing which could further benefit margins and profitability.

SALES / MARKETING

Domestic sales are handled by a sales staff of 19 (as of 9/20/2010, up from 14 at 9/30/2009), which cover the entire U.S. and portions of Canada. The vast majority of the sales staff are respiratory therapists. Each sales rep has a designated geographic territory in which they market the SmartVest, mostly to hospitals and clinics. The sales staff is also responsible for providing training and support for the products. Electromed has also contracted with over 300 outside respiratory therapists and health care professionals across the country to aid with training patients on the use of the SmartVest System. The company feels that this additional customer support facilitates sales and helps build customer loyalty.

Increasing the number of sales reps as well as expanding into other geographic territories is another of Electromed's strategies to grow revenue. As we note throughout this report, this strategy, which has been recently fueled by the IPO capital, has been highly effective. Based on discussions with management, we believe the company is taking a very discerning approach to finding areas of the country that offer the most opportunity for growth (i.e. – the most bang for the buck). Population density as well as the local insurance reimbursement environment are both likely important components in guiding their domestic expansion strategy. Electromed has been similarly discriminating relative to experience, ability and certification (i.e. – most are respiratory therapists) when it comes to hiring its sales staff. We believe the company will continue to incrementally add headcount throughout fiscal 2011 and into 2012.

Electromed supplements their sales effort through actively promoting their products through participation in medical conferences and through advertisements in medical journals and magazines.

International sales are handled by various distributors with which Electromed has contracted. Electromed is actively engaged in international expansion through the recruitment of additional distributors.

REIMBURSEMENT

Sales through private and public (Medicare and Medicaid) insurance comprise the vast majority of Electromed's domestic business. While the rate of reimbursement can vary between third party payers, most patients seeking to obtain the SmartVest are able to qualify for reimbursement from Medicare, Medicaid and/or private insurance.

Electromed has a dedicated "Reimbursement Department" which acts as a advocates between the patient and their insurance company in order to ease the burden on the patient and facilitate the reimbursement process. Electromed's payment terms allow the home care patient to acquire the SmartVest over a period of 1 to 15 months, consistent with reimbursement guidelines of third-party payers.

It's likely too early to tell what effects "Obamacare" and the government's aim to reduce healthcare costs may have on third-party reimbursement for Electromed's products. While reimbursement for an HFCWO device, at approximately $10k, is considerably more expensive than traditional CPT therapy or the myriad of less sophisticated airway clearance devices, Electromed believes that HFCWO therapy can actually lower overall treatment costs. This claim is supported by a study done in 1994 by BlueCross that showed HFCWO can reduce total health care costs of cystic fibrosis patients by 50%. Chronic patients requiring airway clearance are typically very susceptible to pneumonia, which is oftentimes fatal. HFCWO therapy can reduce the incidence of pneumonia, the cost of treatment (when considering hospitalization, medication, etc) of which has been estimated at upwards of $20k for each pneumonia-driven hospitalization.

In the institutional setting HFCWO therapy can allow respiratory therapists to forego manual CPT in certain patients, thereby freeing them to treat more patients, increasing their productivity and potentially lowering overall cost.

These reasons alone could provide significant support to at least maintain reimbursement of HFCWO at the current levels by Medicaid/Medicare.

Electromed is not directly involved in the reimbursement process to international markets where sales are made directly to its distributors. However, the company's international business has been negatively impacted due to recent health care cost containment measures being undertaken in certain parts of Europe.

REVENUE RECOGNITION

Electromed books revenue based on the reimbursement expected to be made by various insurers. Selling price adjustments are made when necessary – which can arise from changes in a patient's insurance coverage or state of domicile, insurance coverage limitations, or a patient's death.

While payment for the bulk of Electromed's sales is expected to be collected within one-year, certain insurance coverage reimburses through monthly installments which is typically paid out over 18 to 60 months. Medicaid in Wisconsin, New York and Texas comprise the majority of reimbursement made through longer-term installments. Due to the extended time period until full payment is received and uncertainty whether collection of the full amount billed will eventually be collected (due to the selling price adjustment factors noted above), Electromed books revenue related to these sales under the installment method. This dictates that revenue is booked as installment payments are received (associated COGS and related costs are booked in the same manner), as opposed to at the time of sale.

All international sales (ex-Canada), which are made to distributors, are booked as revenue when the products are shipped.

MANAGEMENT

We have had several conversations with Bob Hansen, Electromed's CEO. Noteworthy was that Mr. Hansen comes across as genuinely interested in improving the quality of life of people that can benefit from his products. Professions of high moral standards, honesty and social responsibility, while not uncommon among publicly traded companies, are often revealed to be only hollow rhetoric. And while we acknowledge that we are likely no better a judge of character than anyone else, based on several things that Mr. Hansen said, we feel comfortable that management is driven as much by the opportunity to help people as it is to create shareholder value.

As we hypothesize, efficacy between the different HFCWO devices is largely similar – this means that a large portion of competitive advantage may lie in forming long-lasting relationships with the customer. Electromed has significant interaction with customers through their customer-care department (initial contact), product training (post-initial contact) and lifetime service. So trustworthiness and genuine concern for the well-being of the patient are natural aspects of fostering these relationships which could be critical components to maximize the long-term success of the company.

We are in no way implying that management of Electromed's competitors (HFCWO devices or otherwise) do not have similar qualities – only that we feel comfortable of the intentions of Electromed's management.

COMPETITION

The majority of the direct competition to the SmartVest is from manual CPT and the other two HFCWO products currently on the market. There are also several other devices used for airway clearance which are more simple and are reimbursed at a significantly lower price point than HFCWO devices. SmartVest has advantages over some of the competing techniques and products that are clearly tangible – other benefits that are claimed by Electromed may be somewhat more subjective, but nonetheless in our opinion have merit.

Chest Physical Therapy

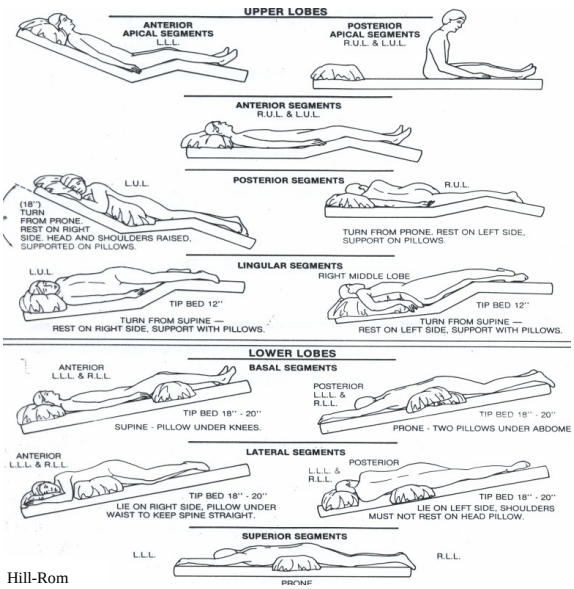
CPT has long been considered the gold-standard for clearing mucus from the lungs of CF sufferers. CF patients typically need CPT performed between one and four times per day for 30 to 45 minutes per session. The treatment consists of the patient lying in several different positions with their head facing downward as the caregiver pounds on the chest and back in order to loosen mucus from each lobe of the lungs. As it is loosened from the lungs, the CF patient is then able to excrete the mucus through normal coughing.

As we noted earlier in the report, the compilation of trial data taken from studies comparing the effectiveness of CPT with that of HFCWO points to HFCWO being at least as effective as CPT in CF airway clearance. Our due diligence has also supported this conclusion. Based on this we think HFCWO has clearly been accepted as an effective alternative to CPT in the respiratory therapy medical community.

Other benefits of HFCWO over CPT which are not debatable are that HFCWO is less fatiguing on the patient, does not require the patient to move into awkward positions, requires less time (twice per day for 15-30mins versus 1-4 times/day for 30-45 mins), does not require administration by a caregiver (and therefore can increase patient independence and compliance) and can lower overall healthcare costs. Benefits that may be somewhat more subjective (and based more on patient preference) are that it can improve self-image (through greater independence), is more comfortable than CPT and provides a more consistent level of treatment.

The SmartVest System, along with the other competing HFCWO products, is ideally positioned for patients that can benefit from this type of therapy and that are seeking greater independence. Arguably the largest drawback of CPT compared to HFCWO is that it requires a caretaker to perform percussions. As HFCWO therapy can be administered while the individual goes about their daily routine, it can also afford a more productive and fulfilling existence without frequent interruptions for treatment. This has been a catalyst to adoption of the technology, with patient testimonials and the rapid uptake of HFCWO providing a clear indication that HFCWO is being widely embraced as a superior overall alternative to CPT.

Traditional CPT is performed 1 to 4 times/day and requires the patient to lie in 1 of 12 positions for 30 to 45 minutes per session.



Hill-Rom

Competing HFCWO Products

Two other manufacturers offer HFCWO products that compete with the SmartVest. Market share figures are not readily available but based on our research we feel comfortable that our estimates are reasonably close. Hill Rom's *The Vest* was the original HFCWO product on the market (launched in 1988) and claims roughly 75% share of the approximate $90 million annual HFCWO market. RespirTech's *inCourage*, we estimate has about 9% share while Electromed holds the remaining 16% of the market.

There is little available data relative to performance and efficacy between the three products. We are aware of two short, small studies comparing the effectiveness of *The Vest* with that of i*nCourage.* The first of the two trials showed *inCourage* (which uses triangular waveform) produced more sputum than *The Vest* (which uses sine waveform – similar to the SmartVest). The second trial, showed no differences in sputum production. The trial authors of the second study concluded that longer term studies would be required to determine whether triangular waveform offers efficacy benefits over that of sine waveform HFCWO devices.

FDA approval of these devices (through 510k) only requires that they demonstrate substantial equivalence to a device already on the market. This is a relatively simple hurdle to meet and does not require head-to-head efficacy data. Because of this there are no comparability studies done through FDA-dictated protocol (i.e. – any studies done comparing efficacy between HFCWO devices were done without requiring that the study protocol be approved by the FDA) and therefore public claims of superior efficacy of one device over another is prohibited.

There have been no head-to-head studies that have been performed versus SmartVest to our knowledge. We also note that comparability between various airway clearance devices based on these (non-FDA) clinical studies may be somewhat unreliable due differences in the background of trial participants and the relatively short nature of the studies. This may deem the various trials unreliable to base any concrete conclusions. We think it is fair to assume (as there is no conclusive data to suggest otherwise) that efficacy between the three HFCWO products is generally equal. We believe the bulk of the differences between the three lies with features, patient preference and customer support, as opposed to efficacy.

Electromed's marketing message is largely predicated on greater patient comfort compared to the other HFCWO products. The SmartVest uses a one-hose, "flow through system" which connects at the base of the vest garment as opposed to a two-hose, "closed system" design used by both competing HFCWO devices. The one-hose, connected at the base of the vest is beneficial, according to Electromed, as it delivers pulses from the base of the vest upwards (i.e. – following the flow of air) and is less obtrusive (less hoses to contend with). From Electromed's 10-K, the flow-through system is advantageous as it "provides a continuous accommodation grid of air release holes in the vest air bladder. No matter what resistance a patient's chest may be creating in normal aspiration (breathing), air release adjusts accordingly in the bladder. This can prevent lags in pulse pressure accommodation as compared to a closed system, in which electronic signal generators must continuously send changes in air fill instruction to the air pump. We believe greater patient comfort is realized in our flow-through system design."

Hill Rom's *The Vest*



Hill Rom

RespirTech's *inCourage*



RespirTech

Privately-held RespirTech's website notes what it believes are advantages of *inCourage*'s triangular waveform (as compared to sine waveform used in *The Vest* and SmartVest) including increased mucus clearance and increased comfort due to shorter duration of peak pressure. RespirTech's website also mentions certain features of their jacket including "active venting improves tolerance and comfort", "precise fit ensures consistent therapy" and "widest range of standard jacket sizes".

Hill Rom's touts that their product has been prescribed to more than 80k patients and recently received awards for engineering, design and influence on the respiratory therapy profession. We also reiterate that Hill Rom's product

was the first on the market and is supported by a significantly larger organization than either the SmartVest or *inCourage.*

We think, at the patient level, that Electromed's assertion that patient comfort is one of the most critical aspects is a reasonable assumption. While several studies have shown a significant preference for HFCWO over traditional CPT, there's no reliable information relative to head-to-head patient preference of one HFCWO device over another. This makes it difficult to determine whether Electromed's product is being preferred over the others for this reason. We believe the majority of Electromed's recent revenue growth is attributed to overall expansion of the HFCWO market, although gains in market share may have also been a contributor. As we explain below, we think greater use of HFCWO therapy will be the catalyst to Electromed's near-term revenue growth. Longer-term, the company may need to rely heavier on gaining share against HFCWO competitors in order to maintain outsized revenue growth. At that point patient preference of one HFCWO product over another will likely become much more evident.

Other Airway Clearance Devices
There are several other airway clearance devices available, all of which are reimbursed at considerably lower levels as compared to HFCWO products. Unlike HFCWO, however, most of these devices are technique-dependent and require some effort on the part of the patient in order to be effective. This can be of significant difficulty for many patients including those with CF and many neuro-muscular diseases. As we noted earlier, the use of PEP devices is considered standard of care for airway clearance associated with bronchiectasis – HFCWO is generally used as a second line of therapy in these patients (or when physical limitations precludes the use of PEP). We limit our discussion of these devices to a quick description taken from Electromed's 10-K;

- Positive Expiratory Pressure ("PEP") mask, which provides backpressure into the lungs on expiration to keep respiratory tracts open longer to drain
- The Flutter (Scandipharm), a tube which vibrates on expiration
- Acapella Vibratory PEP Therapy System (Smiths Medical), a handheld device that combines PEP with oscillations;
- Intrapulmonary Percussive Ventilation Device, generally comprised of a ventilator that combines positive air pressure with nebulisation as appropriate

PEP Mask



Astratech Healthcare

The Flutter



www.westons.com

Acapella



www.smiths-medical.com

IPV Device by VORTRAN



www.tmml.com

FINANCIALS

HIGHLIGHTS

FY 2010 – Revenue Up But So Are Expenses
Revenue for the fiscal year ending June 30, 2010 came in at $14.3 million, up 10% y-o-y. Revenue growth was driven by 12.5% and 27.7% increases in home care and institutional sales, respectively. This was partially offset by a 29.6% drop in international revenue. Our explanation behind the figures is detailed earlier in the report under our "Markets" discussion.

While revenue posted positive growth, FY 2010 net income and EPS fell to $0.15 and $916k, from $0.22 and $1,333k the prior year. The 10% revenue growth for the year was more than offset by a 22% spike (SG&A +20% and R&D +68%) in operating expenses. This resulted in operating margin falling from 18.9% in 2009 to 12.6% in 2010. SG&A comprises about 95% of total operating expenses so the jump in SG&A (from 52.7% of revenue in 2009 to 57.3% of revenue in 2010) was the main culprit behind the drop in net income in 2010. Gross margin stayed relatively stable at slightly better than 74%.

Electromed does a great job of breaking down their SG&A expenses into various sub-categories (compensation, health insurance, advertising, etc) which allows for greater insight into where expenses are going. While every sub-category increased (on an absolute as well as % of sales basis) y-o-y, "payroll & compensation" which accounts for the largest % of total SG&A (~45%), grew 21% and had the most significant impact on the rise in SG&A. Electromed attributes the growth in "payroll & compensation" to a 34% increase in total employees (from 44 to 59), which includes a 23% increase in the sales staff. The increase in the size of the sales staff also directly impacted other SG&A sub-categories such as "health insurance", "marketing" and "travel/meals".

We make special mention of the spike in SG&A as this is where we believe Electromed has the opportunity to gain some leverage in the coming years. It is typical that newly hired sales reps will be less productive than those that are more seasoned. This will result in relatively elevated SG&A as a % of sales as hiring is ramped up. It goes to follow that as a greater percentage of the entire sales force becomes more seasoned, that the company will realize more and more leverage from SG&A, operating margins will widen and a higher percentage of revenue will flow to the bottom line.

And while R&D expense can have an impact on profitability, given that it represents only about 5% of total operating expenses, even moderate spikes will be relatively immaterial to earnings.

Q1 2011 – Revenue Up 29%, Expenses Up 46%
Revenue through the first quarter 2011 came in at $4.2 million, up 29% y-o-y. Revenue and growth for the three individual segments was; home care $3.8 million +29.5%, international $159k -21.3% and government/institutional $203k +128.1%.

Electromed attributed the growth in home care revenue to a 40% increase (424 to 592) in referrals and a 36% increase in the sales staff (from 14 to 19 sales reps). Reductions in government healthcare spending continued to negatively impact the company's international business. Electromed noted that sales in Europe fell 37% (from $133k to $84k). Sales in Japan, which fell 41% (to $128k) for the full-year 2010, were not disclosed. Government/institutional revenue growth benefitted from a 170% jump in SmartVest Wrap sales (from $23k to $62k) as well as from the larger sales force.

EPS and net income were $0.02 and $112k in Q1 2011, down from $0.05 and $336k the prior year. Similar to 2010 annual results, Q1 2011 revenue growth was offset by elevated operating expenses, most notably SG&A as a result of bringing on additional sales staff. Electromed also moved their annual national sales meeting to the first quarter (prior year was in Q2) which likely contributed to the increase in SG&A. SG&A as a percent of sales was 61.4% in the most recent quarter, compared to 54.7% the prior year.

Also negatively impacting y-o-y comparisons was gross margin moving from 77.5% in Q1 2010 to 72.1% in Q1 2011. Management noted that while average reimbursement was lower than normal due to the unfavorable mix of referrals (not all insurance reimburses the same amount) in the most recent quarter, that they do not expect the gross margin to continue to drop going forward.

FINANCIAL CONDITION

Using our somewhat adjusted metrics (which we think is appropriate based on the nature of the business and in order to maintain consistency) Electromed is generating positive cash from operations as well as free cash flow. The company has a solid cash position and is well capitalized. Based on our financial model we expect Electromed to continue to generate positive cash flow and do not foresee any issues with liquidity.

Cash Flow
Electromed generated $608k in cash from operations (CFO) through the full fiscal year 2010. The nature of Electromed's business and the lag between when a product ships and when the company is eventually paid in full (as we noted earlier, this can be as long as 15 months) can cause spikes in working capital. Based on this we think it also valuable to look at CFO ex-changes in working capital. By this measure Electromed generated $1.39 million

in CFO during fiscal 2010 and was free cash flow positive (CFO ex-wc less CFI) by $481k. Stripping out cash for legal costs, this figure is $996k.

Cash used in investing activities (CFI) was $909k in 2010, including $515k in legal costs related to a trademark lawsuit brought by Hill Rom over Electromed's use of the SmartVest name.

CFO in Q1 2011 was negative $61k, ex-changes in working capital CFO was positive $275k. Free cash flow (CFO ex-wc) was negative $19k but is positive $177k pro forma for cash used for legal costs.

CFI was negative $294k, including $196k related to cash for legal costs. On October 1, 2010 Electromed reported that this lawsuit was settled (the terms of which have not been disclosed). This should eliminate most or all of any related costs in the future. Total capitalized costs related to the lawsuit were $880k as of September 30, 2010 – this will continue to be amortized over the useful life of the SmartVest trademark (12 – 15 years).

Cash Position
Electromed raised approximately $5.9 million (net) from their initial public offering in August 2010. At September 30, 2010 Electromed had $6.0 million in cash and $3.6 million in debt. Debt is comprised of a $3.5 million revolver ($1.3 million o/s at 9/30/2010), a $1.5 million term loan and a second $1.0 million term loan.

The revolver is due November 30, 2010 (we assume this has been rolled over since 9/30) and bears interest at LIBOR + 2.75%. The $1.5 million (due 12/2014) and $1.0 million (due 12/2012) term loans bear interest at 5.79% and 4.28%, respectively. The credit facility as well as both term loans require monthly interest payments. Net interest expense was $60k (~4.5x coverage) through the fiscal first quarter 2011 although we expect this come down to about $47k through Q2 due to higher interest income from a larger cash balance and lower average debt outstanding.

OUTLOOK

The $6 million raised from the August IPO has allowed Electromed to accelerate its growth trajectory through increasing the size of its sales force and supplemental advertising and marketing. We expect revenue in the near term to benefit from adding headcount at a regular pace over at least the next 12 to 18 months. Near term revenue growth is most likely to largely come from deeper penetration of HFCWO therapy into already well-established (CF, bronchiectasis) indications in the U.S. Electromed also continues to pump money into R&D which might mean an improvement to the SmartVest® or even an altogether new product launch is on the horizon. This could be another catalyst to near term sales growth.

The prospects for longer term growth, while somewhat less certain, may be fueled by tapping "newer" (neuro-muscular, COPD) indications, taking market share from Hill Rom/RespirTech and greater uptake of HFCWO in international markets.

Near-term….
At the end of Q1 2011 (September 30, 2010) Electromed had a sales force of 19, up from 14 at Q1 2010. We attribute the majority of the 29% y-o-y revenue growth (and more specifically, the 29.5% home care revenue growth) to the 35% increase in the number sales reps. We believe the majority of this sales growth is coming from deeper penetration into already well established (CF, bronchiectasis) indications. Based on the size of the open (i.e. - not currently using HFCWO therapy) domestic CF and bronchiectasis markets (which we ballpark at about $225 million annually), we believe there is ample low-hanging-fruit left to fuel double-digit sales growth for at least the next several years.

We expect Electromed to continue this domestic growth strategy of incrementally adding to their sales staff in parts of the country that hold the most opportunity for relatively easy growth. The company will likely be looking to add reps in those states with accommodating Medicare reimbursement and cities with attractive demographics.

Our financial model is predicated on the assumption that home care sales growth over the next several years (and therefore, total sales growth as home care sales make up ~92% of total revenue) is directly related to the growth in Electromed's sales force. Newly hired sales reps typically need a period of about six to eighteen months before they become more seasoned and near peak productivity. This not only causes a lag between hiring date and

resultant sales growth, but also results in SG&A expenses spiking as a percent of sales during the period of hiring, tailing off as the reps become more seasoned. This appears to be the reason SG&A as a percent of sales rose from about 53% in fiscal 2009 to 57% in fiscal 2010. This caused operating margin to drop from 19% to 13% over the same period. A similar pattern emerged with Q1 2011 results and we expect this to be a fairly regular recurring theme throughout fiscal 2011.

We model Electromed to post strong y-o-y quarterly and annual home care revenue growth throughout the current year. Q2 and Q3 are typically stronger quarters due to the higher incidence of lung infections so the sequential decline we model in Q4 is based on an expectation of some seasonality in the business. We look for home care sales to grow by 26% in 2011 on what we believe will be about a 35% increase in the number of sales reps. International sales, which have been highly variable, may show some improvement throughout the current year as the company looks to add new distributors in Europe. Institutional revenue has also been somewhat erratic but may experience more stability due to the recent growth in SmartVest Wrap® sales seen in Q1. We model SG&A to remain elevated throughout the year as the newly hired sales reps dilute overall productivity and weigh down operating margins. Despite our forecast for net sales to grow 26.5%, we model EPS in 2011 to fall to $0.13 (from $0.15 in 2010) mostly as a result of the increase in SG&A. Upside to this figure could come from a stronger than modeled (73.1%) gross margin or lower operating expenses.

We think Electromed can begin to see some leverage in both gross as well as operating margins starting in 2012 which will push a greater percentage of revenue to the bottom line. Incrementally adding new sales reps to a larger established base sales force will have a less dilutive effect on sales productivity. Gross margins should also benefit from economies of scale as a result of greater production volumes. Our assumption is that margins continue to benefit over the next several years as revenue grows and Electromed has more opportunity to squeeze additional leverage from SG&A.

Longer-term….
As HFCWO therapy becomes more saturated within CF and bronchiectasis, Electromed will need to increase sales to “newer” indications and possibly take market share from their direct competitors in order to maintain outsized revenue growth in the home care segment. Expansion of the international business, which has historically only accounted for about 4% - 5% of net sales, is another area that may hold significant promise for the longer term.

Successfully executing on these potential strategies presents challenges, however. While new markets such as neuro-muscular disease and COPD are very large in aggregate and potentially offer a tremendous opportunity for Electromed, they have yet to embrace HFCWO. Based on our due diligence, we believe there is currently only very limited use of HFCWO with these diseases and little to indicate that the respiratory healthcare community is finding significant utility for it in these patients. Although Medicare recently expanded reimbursement for neuro-muscular disease, this has yet to spark coverage by private insurance. Meanwhile, reimbursement for COPD is almost non-existent. Until reimbursement is more available for newer indications such as neuro-muscular disease and COPD, penetration of HFCWO in these target markets will remain low. This is not to imply that reimbursement for HFCWO therapy for these diseases will not or can not become more commonplace and widespread (which could be a tremendous boon to Electromed’s growth prospects), only that as it stands now, we do not see any significant progression in that direction.

We believe Electromed has a reasonable chance to take market share from the other two HFCWO manufacturers. If patients do indeed find the SmartVest more comfortable to use (as Electromed claims it does) compared to the competing HFCWO products on the market, it seems logical that they would prefer it over the others. Assuming similar efficacy, it makes sense that relatively small differences in comfort can result in a tremendous benefit to quality of life for someone that needs this therapy for 30 – 45 minutes, four times per day for the rest of their life. Electromed also promotes their customer service as a benefit – while difficult for us to determine whether it’s head-and-shoulders above the competition, we think this could be another positive differentiating factor for the company and aid in accelerating share gains.

International expansion is the final major area where we think Electromed has opportunity to accelerate long-term revenue growth. Revenue from this segment has been inconsistent due to changes in government healthcare reimbursement. Another challenge is that many European markets have yet to embrace HFCWO therapy, even with diseases that have shown great benefit from this therapy in the U.S. such as CF. We think it is logical to assume that most major developed European countries will eventually adopt HFCWO therapy for at least CF and bronchiectasis. And unlike the U.S. where there can be wide variability in reimbursement due to the multitude of third party payers, reimbursement in most of Europe is handled through national healthcare systems. This makes reimbursement more of a binary event in Europe and can result in the floodgates opening when this eventually happens (as we believe it will).

VALUATION / RECOMMENDATION

Given that Electromed has only a few months of history of operating as a public company and is in a transition mode, valuation is somewhat tricky. A quick and easy method is to use an industry average P/E multiple of current-year EPS. As we detailed above, we model current year (fiscal 2011) EPS to fall from 2010 due to investments in headcount and marketing. We characterize these expenses as investments as they should result in accelerated EPS growth in subsequent years. Therefore, using a P/E multiple of current-year expected EPS clearly fails to account for the higher rate of growth that we expect to materialize beginning in 2012 and, hence, results in an undervaluation.

To account for this delayed growth we use an industry average five year PE/G ratio, which currently stands at 1.17. Applying this to our 26.4% estimated four-year annual EPS growth rate for Electromed results in a current-year EPS multiple of 30.9, which values Electromed at $4.00. We acknowledge the difference in the terms (five versus four years) but an industry average four-year PE/G is not readily available and (as is typical with all of our company models) we only model out four years. We think the difference in the terms is relatively insignificant.

We also believe there is some value in using a 2012 (i.e. – front-end of ELMD's growth spurt) P/E comparable as somewhat of a litmus test (double- check) for valuation. Hill-Rom Holdings (HRC), despite being significantly larger than ELMD and HFCWO products encompassing only a small portion of their total business, is still probably the most appropriate comparable to Electromed. Consensus 2012 EPS estimate for HRC is $2.40 which, based on HRC's current share price, implies a P/E of about 18x. Applying this to our 2012 EPS estimate for ELMD of $0.21 results in a value of $3.80. We think this provides a general guideline to valuation for ELMD but feel our $4.00 estimate is more representative of the longer-term growth (and, therefore, true value) of the company.

ELMD currently trades at $3.40, representing a slight discount to what we believe is fair value. We are initiating coverage of Electromed with a Hold recommendation and a near-term price target is $4.00. Catalysts that could prompt us to raise our price target and recommendation include expansion of the industry multiple as well as ELMD posting a higher rate of revenue growth and/or more rapid expense control relative to our forecasts. Risks to our recommendation include; operating and/or gross margin leverage does not materialize as we expect, revenues fall short, government healthcare cost containment measures result in lower reimbursement for HFCWO, ELMD loses domestic market share to competitors, international revenues fail to rebound from FY2010 levels.

KEY MANAGEMENT PROFILES

Robert D. Hansen
Co-founder, Chairman and CEO
Robert Hansen co-founded Electromed, Inc. in 1992. He is responsible for the strategic direction, planning, financing, and development of the Company. Mr. Hansen has been a principal in several successful entrepreneurial ventures resulting in the issuance of more than 50 patents. He holds a Bachelor of Arts from Dana College and advanced degrees from the University of Cincinnati, the University of St. Thomas, and Luther Theological Seminary.

Terry M. Belford
CFO
Terry Belford's responsibilities include managing all facets of the Company's financial activities. Before joining Electromed, Inc., Mr. Belford was a successful accountant and consultant for companies in distribution, import, and manufacturing industries. Mr. Belford earned a B.S. degree from the University of Missouri and holds both CPA and CMA designations. He is a member of the American Institute of Certified Public Accountants, the Minnesota Society of Certified Public Accountants, and the Institute of Certified Management Accountants.

William J. George
Secretary
Bill George currently represents small businesses and is an arbitrator with the American Arbitration Association. Formerly he served as General Counsel and Secretary for Simplex Time Recorder and Josten's, Inc. and as Vice-President and Associate General Counsel of Honeywell, Inc. Mr. George has also served as chair of a committee of the Section of Litigation of the American Bar Association. He holds a B.A. degree from St. John's University and a J.D. from the University of Minnesota Law School.

FINANCIAL STATEMENTS

INCOME STATEMENT — Electromed Inc..

	2010 A	Q1A	Q2E	Q3E	Q4E	2011 E	2012 E	2013 E	2014 E
Home Care Revenue	$13,109.0	$3,803.0	$4,221.0	$4,432.0	$4,078.0	$16,534.0	$19,757.0	$22,755.0	$25,570.0
% of total revenue	*91.6%*	*91.3%*	*92.9%*	*91.2%*	*90.1%*	*91.4%*	*91.1%*	*91.0%*	*90.7%*
y-o-y growth	*12.5%*	*29.5%*	*38.7%*	*18.9%*	*19.9%*	*26.1%*	*19.5%*	*15.2%*	*12.4%*
International Revenue	$647.0	$159.0	$110.0	$205.0	$250.0	$724.0	$958.0	$1,180.0	$1,472.0
% of total revenue	*4.5%*	*3.8%*	*2.4%*	*4.2%*	*5.5%*	*4.0%*	*4.4%*	*4.7%*	*5.2%*
y-o-y growth	*-29.6%*	*-21.3%*	*50.7%*	*-23.2%*	*138.1%*	*11.9%*	*32.3%*	*23.2%*	*24.7%*
Gov't / Institutional Revenue	$548.0	$203.0	$215.0	$220.0	$200.0	$838.0	$964.0	$1,069.0	$1,152.0
% of total revenue	*3.8%*	*4.9%*	*4.7%*	*4.5%*	*4.4%*	*4.6%*	*4.4%*	*4.3%*	*4.1%*
y-o-y growth	*27.7%*	*128.1%*	*102.8%*	*-6.4%*	*69.5%*	*52.9%*	*15.0%*	*10.9%*	*7.8%*
Net Sales	$14,303.8	$4,165.4	$4,546.0	$4,857.0	$4,528.0	$18,096.4	$21,679.0	$25,004.0	$28,194.0
YOY Growth	*10.0%*	*29.0%*	*41.0%*	*14.9%*	*24.9%*	*26.5%*	*19.8%*	*15.3%*	*12.8%*
Cost of product sales	$3,707.5	$1,161.9	$1,245.0	$1,262.0	$1,198.0	$4,866.9	$5,702.0	$6,418.0	$6,980.0
Gross Income	$10,596.3	$3,003.5	$3,301.0	$3,595.0	$3,330.0	$13,229.5	$15,977.0	$18,586.0	$21,214.0
Gross Margin	*74.1%*	*72.1%*	*72.6%*	*74.0%*	*73.5%*	*73.1%*	*73.7%*	*74.3%*	*75.2%*
SG&A	$8,199.4	$2,557.3	$2,638.1	$2,738.0	$2,642.2	$10,575.6	$12,335.4	$13,702.2	$15,168.4
% SG&A	*57.3%*	*61.4%*	*58.0%*	*56.4%*	*58.4%*	*58.4%*	*56.9%*	*54.8%*	*53.8%*
R&D	$601.0	$198.4	$222.8	$228.3	$230.9	$880.3	$1,084.0	$1,250.2	$1,409.7
% R&D	*4.2%*	*4.8%*	*4.9%*	*4.7%*	*5.1%*	*4.9%*	*5.0%*	*5.0%*	*5.0%*
Operating Income	$1,796.0	$247.8	$440.2	$628.7	$456.8	$1,773.5	$2,557.7	$3,633.6	$4,635.9
Operating Margin	*12.6%*	*5.9%*	*9.7%*	*12.9%*	*10.1%*	*9.8%*	*11.8%*	*14.5%*	*16.4%*
Interest income, net	($263.4)	($59.7)	($47.0)	($46.0)	($45.0)	($197.7)	($80.0)	$0.0	$120.0
Pre-Tax Income	$1,532.5	$188.1	$393.2	$582.7	$411.8	$1,575.8	$2,477.7	$3,633.6	$4,755.9
Taxes (benefit)	$599.0	$76.0	$157.3	$233.1	$164.7	$631.1	$991.1	$1,453.4	$1,902.4
Tax Rate	*39.1%*	*40.4%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*
Income before non-control interest	$933.5	$112.1	235.9	349.6	247.1	$944.7	$1,486.6	$2,180.2	$2,853.6
Margin	*6.5%*	*2.7%*	*5.2%*	*7.2%*	*5.5%*	*5.2%*	*6.9%*	*8.7%*	*10.1%*
Income to non-controlling interest	$17.2	$0.0	0.0	0.0	0.0	$0.0	$0.0	$0.0	$0.0
% of total	*1.8%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Net Income	$916.3	$112.1	$235.9	$349.6	$247.1	$944.7	$1,486.6	$2,180.2	$2,853.6
Net Margin	*6.4%*	*2.7%*	*5.2%*	*7.2%*	*5.5%*	*5.2%*	*6.9%*	*8.7%*	*10.1%*
EPS	$0.15	$0.02	$0.03	$0.05	$0.04	$0.13	$0.21	$0.30	$0.38
YOY Growth	*-32.3%*	*-70.8%*	*-*	*-*	*-*	*-10.3%*	*54.7%*	*43.6%*	*28.3%*
Diluted Shares O/S	6,115	7,003	7,020	7,040	7,060	7,031	7,150	7,300	7,450

Source: Zacks Investment Research — *Brian Marckx, CFA*

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BALANCE SHEET **Electromed Inc.**

		September 30, 2010	June 30, 2010
ASSETS			
Current assets:			
Cash and cash equivalents	$	6,015,773	610,727
Accounts Receivable		7,047,718	6,577,002
Inventories		1,435,045	1,470,775
Prepaid expenses and other current assets		338,794	269,193
Deferred income taxes		514,000	514,000
Total current assets		15,351,330	9,441,697
Property and equipment, net		2,933,898	2,688,941
Finite-life intangible assets		1,305,293	1,055,776
Deferred common stock offering costs		-	828,034
Other assets		146,673	128,789
Total assets	$	19,537,194	14,143,237
LIABILITIES			
Current liabilities:			
Revolving line of credit	$	1,268,128	1,768,128
Current maturities of long term debt		400,111	397,886
Accounts payable		930,921	1,239,827
Accrued compensation		676,212	665,083
Warranty reserve		389,754	363,277
Other accrued liabilities		185,357	60,308
Income tax payable		52,291	7,789
Total current liabilities		3,902,774	4,502,298
Long term debt, less current		1,925,673	2,033,325
Deferred income taxes		145,000	145,000
Total liabilites		5,973,447	6,680,623
Commitments and contingencies			
STOCKHOLDERS' EQUITY			
Common stock		80,879	61,879
Additional paid-in capital		12,655,425	6,685,362
Retained earnings		909,943	797,873
Common stock subscription receivable for shares o/s of 48,500		(82,500)	82,500
Total stockholders' equity		13,563,747	7,462,614
Total liabilities and stockholders' equity	$	19,537,194	14,143,237

Electromed,Inc

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CASH FLOW STATEMENT **Electromed Inc.**

	Three months September 30, 2010	2009
Cash flows from operating activities:		
Net income	$ 112,070	342,256
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	78,684	79,241
Amortization of finite-life intangible assets	25,721	4,832
Amortization of debt issuance costs	13,408	2,504
Share based compensation expense	42,900	39,173
Deferred income taxes	-	(7,800)
Loss on disposal of P&E	2,385	1,302
Issuance of common stock for services	-	22,500
Changes in operating assets and liabilities:		
Accounts receivable	(470,716)	(253,459)
Inventory	35,730	(129,979)
Prepaid expenses and other assets	(96,234)	(63,948)
Accounts payable and accrued liabilites	194,943	89,198
Net cash provided by operating activities	(61,109)	55,620
Cash flows from investing activities:		
Expenditures for P&E	(97,544)	(25,138)
Expenditures for finite-life intangible assets	(196,332)	-
Net cash used in investing activities	(293,876)	(25,138)
Cash flows from financing activities:		
Payments on revolving line of credit	(500,000)	-
Principal pymnts on LT debt inc. capital lease obligations	(105,428)	(99,459)
Payments of deferred financing fees	(4,659)	-
Proceeds from stock issuance	6,370,118	-
Proceeds of warrant exercises	-	49,333
Proceeds from subscription notes receivable	-	7,500
Net cash provided by (used in) financing activities	5,760,031	(42,626)
Net increase (decrease) in cash and cash equivalents		
Cash and cash equivalents, beginning of period	610,727	361,916
Cash and cash equivalents, end of period	$ 6,015,773	$ 349,772

Electromed, Inc

HISTORICAL ZACKS RECOMMENDATIONS



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