

OXYGEN CONCENTRATORS:

MARKET VECTORS AND STRATEGIC OPPORTUNITIES

Oxygen concentrator markets promise to grow across as new technologies significantly reduce the size and weight of units. The growth and strategies are documented in this all new study from WinterGreen Research. The Technology promises to be the primary market driver as home health care markets achieve significant growth from the decrease in hospital length of stay.

Key Findings of Study

- Further cuts in oxygen reimbursement are a virtual certainty
- Reimbursement drives markets
- New technologies are evolving
- Portability of units is a driving design objective
- Several new oxygen concentrator technologies appear to hold promise
- Companies are changing direction
- More medical care delivery is anticipated to occur in the home and alternate site arenas

Market Directions/Opportunities

- Care delivery is moving out of the hospital
- Growth of oxygen concentrator markets is being fueled by an increase in respiratory disease
- Other growth factors include the aging of the population, renewed interest in patient mobility, and demands for better care delivery
- Increasing influence of HMO and managed care providers on the delivery of homecare services

THE STUDY ADDRESSES:

- Market segments likely to have strong and sustained growth
- The potential for new technologies to impact markets
- Strategic positioning of oxygen company participants
- Market directions and strategic market alliances
- Risk/reward scenarios -- Access to existing customer bases
- Strategies for success

MARKET VECTORS AND STRATEGIC OPPORTUNITIES IN OXYGEN MARKETS

Oxygen at home is delivered via three modalities, oxygen concentrators, used an estimated 80% of the time, liquid oxygen, and high pressure oxygen. Supplemental oxygen is frequently prescribed for patients with a variety of disease conditions. For patients with these conditions, oxygen helps fuel brain and muscle cells. It also eases the workload of the heart.

No new treatment modalities loom to replace oxygen therapy and oxygen therapy is fundamental to life for people that need it. Demand for oxygen is expected to continue. Some revision of the care delivery process is anticipated as managed care providers seek to eliminate fraud and initiate good business management practices on the delivery of care for respiratory disease.

Oxygen must be prescribed by a physician. The flow rate is determined by the amount of oxygen needed to fuel active muscles. During exercise, more oxygen is needed than during sleep when blood oxygen levels naturally fall. Oxygen conservation devices permit some efficiencies of care delivery.

IF YOU HAVE ANY OF THESE QUESTIONS

What strategies hold promise
Where are the opportunities
How will markets unfold
Why will new technologies evolve new product designs
Which service configurations position providers with competitive advantage

You NEED this study

REPORT OUTLINE

TABLE OF CONTENTS

EXECUTIVE SUMMARY

CHAPTER SUMMARIES

MARKET PROFILE

MANAGED CARE

HOME CARE MARKET PARAMETERS

INCIDENCE OF RESPIRATORY
DISEASE

PROFESSIONALS

OVERVIEW OF OXYGEN

EQUIPMENT

OXYGEN CONCENTRATORS

HEALTHDYNE

DEVILBISS

INVACARE

NELLCOR/PURITAN-BENNETT

AIRSEP

AEQUITRON

NIDEK MEDICAL

EVEREST & JENNINGS

TIMETER OXYGEN CONCENTRATOR

LIQUID OXYGEN

REASONS FOR PRESCRIBING LIQUID
OXYGEN

PURITAN-BENNETT

CAIRE/MVE/CRYOGENIC ASSOCIATES

PULSAIR/DEVILBISS/SUNRISE

PENOX

COMPRESSED GAS OXYGEN

CYLINDERS

CHAD THERAPEUTICS

MADA

DEVILBISS

OXYGEN CONSERVATION DEVICES

PULSAIR OXYGEN CONSERVATION
DEVICE

CHAD

VICTOR

HIGH PRESSURE OXYGEN SYSTEMS

OXYGEN MARKET FORCES

OXYGEN MARKETS

CHANGES IN OXYGEN
REIMBURSEMENT
LIQUID OXYGEN
OXYGEN CONCENTRATORS
HIGH PRESSURE OXYGEN
OXYGEN CONSERVATION DEVICES

FORECASTS 1994-2000

OXYGEN CONCENTRATORS
LIQUID OXYGEN
COMPRESSED GAS OXYGEN
CYLINDERS
OXYGEN CONSERVATION DEVICES
HIGH PRESSURE OXYGEN SYSTEMS

**LIST OF TABLE AND
FIGURES 1994-2000**

MARKET PROFILE

HEMOCARE DEALERS
HEMOCARE DEALER PROFILE
RESPIRATORY DISEASE INCIDENCE
CHRONIC
ACUTE

MARKET SHARES

OXYGEN CONCENTRATORS

STRATEGIES

FACTORS DRIVING GROWTH
STRATEGIC POSITIONING FOR
OXYGEN CONCENTRATORS
NEW TECHNOLOGY

REPORT METHODOLOGY

This is the twelfth in a series of market forecasts of respiratory disease equipment and oxygen businesses. The project leaders have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases. In-depth interviews are conducted with a broad range of key participants in the market.

ABOUT THE COMPANY

WinterGreen Research, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care and advanced computer technology. Industry reports focus on opportunities that will expand existing markets or develop major new markets. The reports assess new product and service positioning strategies; new and evolving technologies; and technological impacts on products, services, and markets. Market shares are estimated. Leading market participants are profiled, and their marketing strategies, acquisitions, and strategic alliances are discussed. The principals of WinterGreen Research have been involved in analysis and forecasting of international business opportunities in telecommunications and advanced computer technology markets for over 30 years.

ABOUT THE PRINCIPAL AUTHORS

Ellen T. Curtiss, President, co-founder of WinterGreen Research, conducts strategic and market assessments in technology-based industries. Previously she was a member of the staff of Arthur D. Little, Inc., for 23 years, most recently as Vice President of Arthur D. Little Decision Resources, specializing in strategic planning and market development services. A graduate of Boston University and the Program for Management Development at Harvard Graduate School of Business Administration, she is a Chartered Financial Analyst.

Susan Eustis, Vice President, co-founder of WinterGreen Research, has done research in communications and computer markets and applications. She holds several patents in microcomputing and parallel processing. She is the author of recent studies of the Regional Bell Operating Companies' marketing strategies and of a study of telecommunications company positioning in the European market. Ms. Eustis is a graduate of Barnard College.

ORDER FORM

Return to: WinterGreen Research, Inc.
6 Raymond Street
Lexington, MA 02173 USA

Tel (617) 863-5078
Fax (617) 863-1235

Please enter my order for:

OXYGEN CONCENTRATORS: MARKET VECTORS AND STRATEGIC OPPORTUNITIES, FORECASTS TO 2000

___ Enclosed is my check for \$2800
___ Please bill my company using P.O. Number _____
___ Please charge my American Express Card Number _____ Exp. Date ____
___ Please charge my MasterCard/Visa Card Number _____ Exp. Date ____
___ Additional copies, @ \$375 (Extra copy price in effect only with initial order)

WINTERGREEN RESEARCH, INC.

Signature **X** _____ Date _____

Name _____ Title _____

Company _____ Division _____

Address _____

City _____ State _____ Zip _____

Telephone _____ Fax _____

Please Note: Residents of Massachusetts and Connecticut must include appropriate sales tax.
Subscribers outside the United States must provide prepayment in U.S. Funds