

Background/Clinical Unmet Need

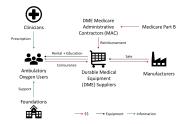
- >1.5 million Americans receive long-term oxygen therapy (LTOT) to treat chronic hypoxemia, improve their daily quality of life, and slow disease progression
- Medicare spends >\$2 billion annually for LTOT. constituting around 25% of the program's total expenditure on durable medical equipment
- Individuals relying on high-flow oxygen (>3 L/min) face even higher unmet burden, particularly as portable oxygen concentrators are not suited for those requiring more than 3 L/min of continuous flow

Problem Definition: To seize this opportunity to address the need for a portable, high-flow oxygen device in the U.S., OXFO is seeking a comprehensive market analysis and entry strategy to ensure a successful launch of the OXFO System upon FDA approval.

Value Proposition



The Patient Journey



Map of relevant stakeholders and flows in the U.S. oxvgen therapy device market

The OXFO System: U.S. Market Entry Strategy

Varshini Odavar, Marvam Shamsie, and Alec Creta MIT Healthcare Lab in collaboration with OXFO



OXFO

The OXFO Corporation:

- · Founded by Carlos Bazoberry, MD and Brent Young, MD
- Combat the global oxygen crisis in Boston, MA (2020)

The OXFO System:

- Portable, high-flow, on-demand oxygen delivered at ambient pressure and capable of dynamic response to patients' flow needs
- Compatible with available nasal cannulas and standard oxygen cylinders

Current Status:

- 2022 Market and regulatory authorization in Colombia targeting ambulatory patients prescribed LTOT
- 2025 Targeting FDA approval for U.S. market entry

Stakeholder Interviews

- "It's all about mobility" Mike Hess, Senior Director Oxygen360, COPD Foundation.
- "I would love to see more devices out there...that have a larger variety of options and settings to accommodate a larger variety of patients" Chrysalis Ashton, Director of Clinical Operations for CareLinc
- periods of time" was the most frequent response when patients were asked the "...one thing vou could change to improve your home oxygen experience".

	B2B2C Sales & Rentals		D2C Sales	D2C Rentals
fanufacturers			PrecisionMedical	indgen
Distributors	* APRIA * adapthealth Vened ROTECH Distributo C LINCARE	Internet rs Retailers		
Payors	Medicare / Insurers / Consu	mers	Consumers	Medicare / Insurers

Market verticals of competitive companies

Reimbursement

- Oxygen delivery devices are not profitable for DME distributors
- Only rented oxygen equipment is eligible for coverage: purchased equipment is statutorily non-covered. Patients rarely purchase the device given costs and maintenance (as noted by interviewed stakeholders)
- The device needs to adhere to the reasonable useful lifetime (RUL) requirement commencing from the initial date of service and lasting for 5 years.
- Payment rules for oxygen equipment only cover a 36-month rental period. During this period, the reimbursement amount includes not just the equipment but also accessories, delivery, backup equipment, maintenance, and repairs.

HCPCS Code	Description	Est. Monthly Reimbursement	Max. Reimbursement	
E1390	Stationary Oxygen Concentrator	\$145	\$5,220	
E1392	Portable Oxygen Concentrator	\$49	\$1,764	
E0431	Portable Gaseous Oxygen System	\$27	\$972	
QB/QF	Modifier*	\$72	\$2,592	
E0434	Portable Liquid Oxygen System	\$49	\$1,764	

Recommendations

Immediate (<1 vear)

- Prioritize securing a distribution partner(s) for the OXFO System in a B2B2C model
- Focus on targeting users requiring >4 L/min and gualifying for the OB/OF modifiers per Medicare
- · Initiate collaborations with distributors by participating in industry events such as MedTrade and forming partnerships with foundations like Oxygen360 to increase recognition, advocacy, and marketing

Short-Term (2-3 years)

· Explore direct-to-consumer (D2C) sales by beginning to market directly to consumers, clinicians, and hospitals

Long-Term (5+ years)

- Investigate the integration of the OXFO System with portable oxygen concentrators (POCs) and liquid oxygen
- It is not recommended to explore direct-to-consumer (D2C) rentals due to the outsized requirements

Acknowledgements

We would like to thank Professors Diwakar Gupta and Anne Quaadgras, our mentor Don Triner, our TA Julianna Oliver, and our hosts OXFO and Romy Benninga.



Rendering of the portable OXFO System

- - "Give me more portable tanks or supplies so I can leave the house more frequently and for longer