

# **A Review on Pharmaceutical Sales and Marketing**

<sup>1</sup>Datta G. Korde, <sup>\*1</sup>Varad T. Shinde, <sup>1</sup>Prameshwar B. Matlabe, <sup>1</sup>Sham S. Solunke

<sup>1</sup>Raosaheb Patil Danve College of Pharmacy, Badnapur

Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad MS

E-mail: [shindevarad7280@gmail.com](mailto:shindevarad7280@gmail.com)

**Corresponding Author:** Varad T. Shinde

**Abstract:** *Pharmaceutical marketing holds a vital position within the healthcare system, differing significantly from conventional marketing due to the unique nature of its products. Unlike everyday consumer goods, pharmaceutical offerings including life-saving medications, over-the-counter (OTC) drugs, and medical devices address essential health needs rather than discretionary choices. This distinction contributes to the sector's complexity, which is further supported by the inclusion of pharmaceutical studies within medical education. Marketing in the pharmaceutical field demands a highly specialized approach, as its primary audience consists of healthcare professionals, patients, and regulatory authorities. Since pharmaceuticals and medical devices are typically acquired based on medical necessity and professional prescriptions, promotional strategies must focus not only on product value but also on adherence to regulations, safety standards, and therapeutic effectiveness.*

**Keywords:** Pharmaceutical Marketing, Healthcare Promotion, Drug Sales, Medical Devices

## **I. INTRODUCTION**

The pharmaceutical sector is characterized by intense competition and a growing emphasis on strong business relationships, making effective marketing essential for organizational success. Pharmaceutical companies and pharmacies rely on strategic marketing practices to adapt to dynamic market conditions, meet consumer expectations, and support evidence-based decision-making. Marketing spans the entire product lifecycle from planning and development to post-sale evaluation thereby playing a vital role in domestic business operations as well as international market expansion. Fundamentally, pharmaceutical marketing is a social and managerial process aimed at satisfying customer needs while achieving organizational goals and ensuring profitability.

The Indian pharmaceutical industry exemplifies the sector's global significance, ranking tenth in terms of revenue and third in terms of production volume worldwide. India accounts for nearly twenty percent of the world's total volume of genuine pharmaceutical trade and is a global leader in the availability of generic drugs. Over the past decade, globalization and intense competition have reshaped the global pharmaceutical landscape, fostering an environment in which companies must continuously innovate to remain competitive. Within this context, pharmaceutical marketing professionals (PMs) play a crucial role. Unlike highly specialized roles, PMs are generalists who oversee multiple responsibilities across the product lifecycle. They often manage a specific product or product segment from the planning and design stages through implementation. Their responsibilities include gathering and analyzing competitor and market data, collaborating with internal departments such as production, research, and marketing, and contributing to the development and improvement of product features. PMs also participate in product testing, identify problems, recommend corrective actions, prepare reports, and present summaries outlining key findings, shortcomings, and required modifications. Additionally, they compile customer and feature requirements, document technical specifications, determine release timelines, manage development sprints, and maintain a customer-centric approach to create user-aligned epics and stories.

Consumer behavior in the pharmaceutical market is influenced by a wide range of actions and decision-making approaches. These include information search, evaluation of alternatives, price and convenience considerations, and post-purchase assessments that shape future purchasing decisions and brand loyalty. Cultural and social factors such as family, peers, and societal norms also significantly impact consumer choices. However, unlike typical consumer goods



markets, purchasing decisions in the pharmaceutical sector are heavily shaped by the nature of pharmaceutical products, regulatory controls, and the involvement of multiple stakeholders including healthcare professionals, insurers, and pharmacists. Patients generally rely on physicians to prescribe medications, making the doctor's recommendation a primary determinant of purchasing behavior. Trust in the healthcare provider significantly influences consumer decision-making, and much of the buying process occurs within the broader healthcare ecosystem rather than through direct consumer choice.



**Figure1: Crucial role of pharmaceutical marketing**

### **Roles and Responsibilities of a Pharmaceutical Marketer (PM)**

#### **Roles**

- Acts as a generalist managing multiple tasks across the product lifecycle.
- Oversees a specific product or product segment from planning and design to implementation.
- Coordinates with various internal departments such as production, marketing, research, and R&D.
- Ensures that product development aligns with organizational goals and market needs.

#### **Responsibilities**

- Collects and analyzes data from market research and competitor analyses.
- Collaborates with internal teams and evaluates their contributions to product development.
- Enhances existing product features and develops new features when necessary.
- Participates in product testing, identifies issues, and assists in resolving them.
- Prepares reports summarizing findings, shortcomings, required changes, and current conditions.
- Performs all duties with oversight, gaining decision-making skills gradually through experience.
- Compiles customer and feature requirements and documents clear technical specifications.
- Determines product release schedules and manages development sprints effectively.
- Adopts a customer-centric approach to assess personas and create epics and plan-aligned user stories.

### **Pharmaceutical Sales Channels**

#### **1. Direct Sales to Healthcare Providers (HCPs)**

Pharmaceutical sales representatives (PSRs) interact directly with doctors, hospitals, and pharmacies. Their primary focus is to educate HCPs about drug efficacy, safety profiles, clinical outcomes, and therapeutic benefits.

#### **2. Wholesalers and Distributors**

Act as intermediaries to ensure continual drug availability across pharmacies, hospitals, and clinics.

Marketing strategies often target wholesalers to secure favorable distribution agreements.



### **3. Pharmacy Chains and Hospitals**

Major players in delivering pharmaceutical products to end consumers.

Companies often engage in collaborative marketing practices, such as co-promotion and exclusive supply agreements.

### **4. E-commerce and Online Pharmacies**

A rapidly expanding sales channel, especially after the COVID-19 pandemic due to increased consumer inclination toward online purchases.

Companies increasingly adopt direct-to-consumer (DTC) strategies for over-the-counter (OTC) medications.

## **Key Components of Pharmaceutical Sales and Marketing**

### **1. Sales Strategy**

Focuses on converting healthcare professionals into product advocates.

Includes understanding HCP needs, communicating product benefits related to efficacy and safety, and ensuring product availability.

### **2. Marketing Strategy**

Encompasses branding, advertising, promotional planning, public relations, and market segmentation.

Emphasizes targeted marketing to specific HCPs, hospitals, and clinics through multi-channel promotional approaches.

### **3. Advertising**

Highly regulated across global markets, particularly for prescription medicines.

Companies use print, television, and digital media to reach consumers and HCPs.

Direct-to-consumer (DTC) advertising is most prevalent in markets like the United States.

### **4. Digital Marketing**

Digital tools (social media, websites, webinars, email campaigns, and e-detailing) have modernized pharmaceutical promotion.

Social media platforms are increasingly influential for awareness and information dissemination.

### **5. Market Access and Regulatory Affairs**

Ensures compliance with regulatory authorities such as FDA (USA), EMA (Europe), and other national bodies.

Involves strategies to secure insurance coverage, formulary inclusion, and patient accessibility.

### **6. Sales Training and Education**

Pharmaceutical sales representatives undergo structured training in scientific and clinical product knowledge.

Training includes ethical sales behavior, communication skills, and regulatory guidelines.

## **Challenges in Pharmaceutical Sales and Marketing**

### **1. Regulatory Compliance**

Strict regulations govern pharmaceutical promotion, particularly for prescription drugs.

Marketing content must avoid misleading claims and adhere to guidelines from FDA, EMA, TGA, and other regulatory bodies.

### **2. Drug Pricing Pressure**

Governments and insurance companies push for reduced pricing, especially for life-saving and chronic disease medications.

Companies must strike a balance between profitability, ethical responsibility, and public perception.

### **3. Market Saturation and Competition**

Many therapeutic categories are crowded, making product differentiation difficult.

Patent expirations (patent cliffs) invite generic and biosimilar competition, reducing market share.

### **4. Ethical Issues**

Ethical concerns arise regarding the influence of sales representatives on physicians' prescribing patterns.

Companies must avoid conflicts of interest, such as inappropriate gifts, incentives, or persuasion.

### **5. Access to Healthcare Professionals**

Reduced face-to-face interactions due to digital transformation and pandemic-driven virtual consultations.



Traditional sales approaches are becoming less effective as physicians limit in-person meetings.

## **6. Market Competition**

Intense competition exists from generic manufacturers, biosimilars, and innovative therapies.

Developing a unique value proposition and differentiating products remains a continual challenge.

## **Pharma Marketing and the Expanded Role of Pharmacy Intermediaries**

The pharmaceutical marketing sector increasingly recognizes the challenges created by intermediary conflicts within distribution channels. Managing distributorships effectively and improving communication among channel members are essential objectives. As the industry rapidly transitions toward digital platforms, data management and data integrity have become crucial. Intermediaries such as wholesalers, group purchasing organizations (GPOs), and pharmacy benefit managers (PBMs) play an expanding role in pharmaceutical distribution, especially for over-the-counter (OTC) products. Effective brand management now requires acknowledging these intermediaries as strategic business partners.

### **Expanded Role of Pharmaceutical Intermediaries**

**Pharmacy Benefit Managers (PBMs)**

Originally established to manage prescription drug benefits for health plans, PBMs now have a significant influence on pharmaceutical marketing and sales.

**Formulary Management**

PBMs determine which medications are included in a health plan's formulary.

This power allows them to negotiate rebates and discounts from pharmaceutical companies in exchange for favorable formulary placement.

**Tiered Pricing and Rebates**

PBMs negotiate complex pricing structures with manufacturers.

They secure discounts and rebates, making them key players in pricing dynamics and access management.

### **Pharmaceutical Advertising Mix**

Pharmaceutical advertising relies on a complex marketing mix. While the traditional 4 Ps (Product, Price, Place, Promotion) remain central, the expanded **10 Ps** introduced by Booms and Bitner—People, Process, Physical Evidence, Packaging, Policy, Partnership, etc. offer a more comprehensive framework for understanding service-oriented industries such as healthcare.

**Product**

Refers to both medicinal goods and associated healthcare services.

Includes integrated care solutions, improvements in drug formulations, and enhanced support services such as patient scheduling, financial counseling, and safety measures.

**Place (Physical Distribution)**

Determines how healthcare and pharmaceutical products reach patients.

Involves logistics, distribution channels, and delivery systems used by integrated care providers.

**People**

Encompasses healthcare professionals such as doctors, nurses, pharmacists, technicians, administrators, and caregivers who interact with patients.

These individuals play a crucial role in service delivery and influence patient outcomes.

**Promotion**

Pharmaceutical promotion differs from that of FMCG products.

Representative-led promotion, direct marketing, personal selling, and traditional media remain central.

Involves all interactions across the chain—from manufacturers and physicians to pharmacists and end-users.

**Physical Evidence**

Includes tangible elements within the healthcare setting, such as staff qualifications, facility conditions, awards, brochures, pamphlets, and the presence of sales representatives.



Reinforces trust and credibility in the service environment.

Process

Refers to all activities involved in providing pharmaceutical and healthcare services.

Includes strategies, procedures, and mechanisms for enhancing the role of intermediaries in service delivery.

Packaging

Packaging protects pharmaceutical products and communicates essential information.

Eco-friendly packaging is becoming an important aspect of green marketing.

Partnership

Collaboration between pharmaceutical companies, healthcare professionals, and integrated care providers is essential.

Partnerships enhance coordinated care and improve patient outcomes through shared knowledge and aligned goals.

## 5. Market Dynamics and Health Product Economics

The pharmaceutical market is influenced by three core economic pillars: **interest, cost, and supply**.



**Figure 2: Pharmaceutical Marketing Strategy**

### Limitations of Artificial Intelligence in Pharmaceutical Marketing

- **Lack of Human Insight and Empathy:** AI cannot replicate human judgment, empathy, or emotional understanding required for meaningful engagement with healthcare professionals (HCPs) and patients.
- **Low Trust among Users:** Patients and even HCPs may hesitate to rely on AI-driven platforms due to skepticism and limited confidence in automated systems.
- **Limited to Routine Tasks:** AI supports basic tasks such as data processing or customer segmentation but cannot independently manage complex marketing decisions that require human intuition.
- **Unreliable Predictive Accuracy:** Past failures of AI-based prediction models—like Google's keyword-driven forecasting highlight the risk of inaccurate market trend predictions.
- **Regulatory and Compliance Barriers:** Lack of standardized global regulations for AI safety, ethical marketing, and data use restricts widespread application in pharma marketing.
- **Challenges in Real-World Validation:** Difficulty in designing suitable trials and evaluation methods limits the ability to confirm AI's effectiveness in marketing environments.
- **Impact of Global Uncertainties:** Events like the COVID-19 pandemic disrupt market behavior and data patterns, reducing AI's reliability and adaptability in forecasting pharmaceutical demand.





## II. RESULTS AND DISCUSSION

The review demonstrates that pharmaceutical marketing is undergoing significant transformation driven by digitalization, evolving intermediary roles, and increasing regulatory expectations. Intermediaries such as Pharmacy Benefit Managers (PBMs), Group Purchasing Organizations (GPOs), and wholesalers now hold substantial influence over formulary placement, pricing negotiations, and product accessibility. Their expanded involvement reshapes distribution strategies and creates new opportunities for strategic collaboration. Digital marketing has emerged as a core component of modern promotional practices. Search engine optimization (SEO), email campaigns, social media outreach, influencer partnerships, and customer relationship management (CRM) tools collectively enhance brand visibility and targeted communication. However, this digital shift has resulted in information overload for healthcare professionals (HCPs), who frequently report fatigue from excessive promotional content. This decreases engagement and weakens the impact of marketing efforts.

The analysis also highlights the growing relevance of the extended marketing mix (10 Ps). In addition to the traditional elements product, price, place, and promotion—components such as people, process, physical evidence, packaging, policy, and partnership play a crucial role in shaping service delivery and building brand credibility. Green marketing approaches, including sustainable packaging and responsible waste management, further emphasize the industry's movement toward environmentally conscious strategies. Artificial Intelligence (AI) has been recognized as a promising tool for data analysis, segmentation, and routine marketing functions. However, its limitations are evident. AI lacks human empathy, remains dependent on high-quality data, and struggles to achieve trust among patients and professionals. Regulatory gaps, inadequate evaluation frameworks, and unreliable predictive models—such as earlier failed attempts in search-based forecasting—demonstrate the challenges in adopting AI extensively within pharmaceutical marketing. Moreover, global disruptions like the COVID-19 pandemic further complicate AI's effectiveness by altering consumption patterns and limiting access to reliable datasets.

Ethical practices remain central to pharmaceutical promotion. Companies such as Otsuka exemplify compliance-driven models through structured training, anti-corruption guidelines, and transparency standards. Maintaining ethical integrity is essential not only for regulatory compliance but also for fostering trust among healthcare providers and patients.

## III. CONCLUSION

Pharmaceutical sales and marketing differ markedly from conventional sectors due to strict regulations, product complexity, and the involvement of multiple stakeholders in decision-making. The industry requires specialized strategies based on an expanded marketing mix and supported by ethical, patient-centered promotional frameworks. Globalization, market competition, and rapid digitalization have reshaped the industry, making adaptability essential for long-term success. While technological advancements including digital marketing tools and AI have enhanced efficiency and targeted outreach, they cannot replace human expertise, empathy, or ethical judgment. AI continues to face limitations such as low trust, regulatory ambiguity, incomplete data, and challenges in real-world validation. Therefore, technology must complement not replace human-driven decision-making in pharmaceutical marketing. The shift toward digital communication has strengthened engagement strategies, yet it also demands careful management to avoid overwhelming healthcare professionals. Likewise, sustainability initiatives such as green marketing reflect the industry's growing commitment to environmental responsibility and long-term value creation.

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