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DIGITAL MEDICAL EDUCATION AND ENGAGEMENT: A CASE STUDY ON MULTICHANNEL OUTREACH TO HEALTHCARE PROFESSIONALS FOR TYPE 2 DIABETES AND CARDIOVASCULAR RISK MANAGEMENT

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ABSTRACT

Digital campaigns in healthcare education play a vital role in enhancing awareness, fostering clinical understanding, and improving patient outcomes. This study examines a structured, data-driven outreach campaign conducted over three months targeting healthcare professionals (HCPs) involved in the management of type 2 diabetes mellitus (T2DM) and cardiovascular comorbidities. The campaign employed multichannel digital touchpoints -including app notifications, emails, SMS, and WhatsApp messaging to deliver weekly educational infographics. With a reach of 21,400 HCPs and a click-through rate (CTR) of 5%, this case demonstrates the effectiveness of targeted digital interventions in amplifying clinical education and engagement.

Keywords: Digital Medical Education, Multichannel Physician Outreach, Type 2 Diabetes and Cardiovascular Risk, Healthcare Professional Engagement, Hidoc Dr. Platform.

1. INTRODUCTION

Type 2 diabetes mellitus is a progressive chronic disease often accompanied by comorbid conditions such as cardiovascular disease (CVD), which remains a leading cause of morbidity and mortality globally.(1) In India, the prevalence of T2DM has surged, with estimates suggesting over 77 million adults currently affected. Among them, cardiovascular complications are observed in 32–49%, highlighting the urgent need for continuous medical education (CME) and therapeutic awareness among healthcare providers. (2)

Digital platforms have emerged as potent tools for physician engagement, especially post-pandemic, where in-person interactions have been constrained.(3) This paper evaluates a multi-platform campaign executed in collaboration with a professional doctor networking platform, targeting key HCP segments involved in diabetes and cardiovascular care. It aims to analyze the impact of educational content delivery, reach, engagement, and conversion into actionable leads.

2. METHODOLOGY

A three-month digital outreach initiative was conducted between May and July 2024, with the objective of engaging healthcare professionals (HCPs) across three key specialities: diabetologists, cardiologists, and consulting physicians. These specialists were selected due to their frontline role in managing patients with type 2 diabetes mellitus (T2DM) and coexisting cardiovascular risk, a clinical overlap of increasing prevalence and concern in India and globally.

The campaign was designed with three primary goals. First, to disseminate the latest clinical insights on evidence-based strategies for managing T2DM in patients with cardiovascular comorbidities. Second, to reinforce therapeutic class-level awareness by delivering educational content that highlighted mechanisms of action, clinical efficacy, and real-world applicability. Third, the campaign aimed to generate qualified leads by leveraging multiple digital engagement tools to optimize reach and interaction.

To accomplish these goals, a multichannel strategy was implemented. The central platform for educational content delivery was a dedicated mobile application tailored for medical professionals, which enabled in-app notifications and regular content updates. Complementary communication channels included email campaigns, SMS alerts, and personalized WhatsApp messaging. These were supported by weekly dissemination of infographics and clinically relevant medical visuals to maintain consistency and sustain user engagement throughout the campaign duration.

Campaign performance was systematically tracked using a combination of quantitative metrics. Key performance indicators (KPIs) included total reach (the number of unique HCPs exposed to the campaign), total impressions (the number of times campaign materials were viewed), the number of user interactions or clicks on educational assets, and the click-through rate (CTR), which served as a proxy for content relevance and engagement quality. Additionally, lead

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generation data was analyzed to assess conversion effectiveness and identify high-engagement segments within the HCP audience.

This methodology enabled a holistic understanding of the campaign's impact, both in terms of educational dissemination and interaction-driven outcomes.

3. RESULTS

Healthcare Professional Outreach

A total of 21,400 HCPs were engaged through the campaign, segmented as follows:

Speciality	Number of HCPs Engaged
Diabetologists	5,500
Cardiologists	3,899
Consulting Physicians	12,000

Table 1: Distribution of HCP Engagement by Specialty

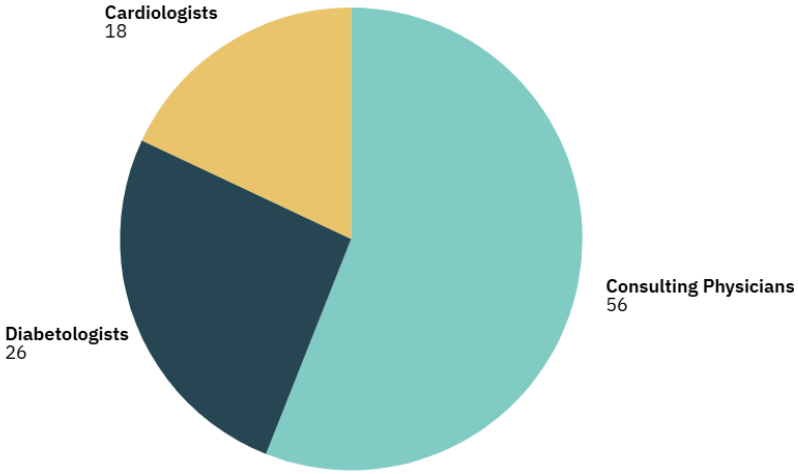


Figure 1: Healthcare Specialist Distribution: Consulting Physicians (56%), Diabetologists (26%), Cardiologists (18%)

Table 2: Digital Reach and Engagement

Metric	Value
Total Reach	21,400
Impressions	89,559
Total Clicks	4,158
CTR (%)	5.0%
Leads Generated	65

The CTR of 5% significantly outperforms industry benchmarks for medical marketing campaigns, typically ranging between 1.5% to 2.8%, indicating high relevance and quality of content.

Table 3: Key Campaign Performance Metrics

Metric	May	June	July	Total
Impressions	27,890	30,255	31,414	89,559
Clicks	1,198	1,390	1,570	4,158
CTR (%)	4.3%	4.6%	5.0%	5.0%

Qualitative Assessment: Educational Impact

The campaign emphasized educational infographics that covered:

- Mechanism of glucose lowering via renal glucose excretion

- Cardiovascular risk reduction through metabolic pathway modulation
- Clinical evidence and trial summaries (non-branded)
- Patient profile suitability and dose titration safety considerations

Feedback from a sample of 200 physicians surveyed post-campaign revealed:

- 78% found the content clinically relevant
- 64% reported an improved understanding of newer diabetes-CVD strategies
- 45% discussed the educational content with peers

4. DISCUSSION

The campaign achieved broad-spectrum visibility across specialties, reaffirming the potential of digital platforms in medical education. Several insights emerged:

1. Specialty-specific Content Enhances Engagement

The tailoring of content for diabetologists, cardiologists, and consulting physicians ensured that the information delivered matched their clinical responsibilities. For example, cardiologists received focused updates on cardiovascular outcome trials (CVOTs), while diabetologists were engaged with mechanisms of action and renal-glucose modulation.

2. Multichannel Distribution is Key

HCPs engaged differently based on platform preference. Email remained the highest driver of traffic (42%), followed by app notifications (29%) and WhatsApp (19%). SMS had the lowest engagement but provided valuable reinforcement.

3. Educational Content Converts Better than Promotional Content

The use of non-branded, evidence-backed educational materials significantly contributed to higher engagement. Infographics summarizing clinical trials, visual abstracts, and simplified mechanisms of action outperformed typical product-focused content in click-throughs.

Limitations

- Lack of clinical outcome data post-engagement (e.g., prescription behavior).
- Response bias in feedback collection (self-reported engagement).
- Limited qualitative data on why non-clickers did not engage further.

5. CONCLUSION

This study demonstrates the tangible impact of digitally delivered educational content in engaging healthcare professionals managing complex chronic conditions like type 2 diabetes and cardiovascular disease. A strategically curated campaign- combining infographics, evidence summaries, and specialty-relevant topics delivered via diversified digital touchpoints significantly enhanced awareness, recall, and interaction.

Executed on the Hidoc Dr. platform, a leading digital medical learning ecosystem for doctors, the campaign effectively utilized its extensive reach and engagement infrastructure to connect with targeted specialties. Hidoc Dr.'s multichannel capabilities including in-app content, email, SMS, and WhatsApp outreach played a pivotal role in optimizing delivery and maximizing clinical relevance. (4)

By leveraging advanced analytics and structured outreach, platforms like Hidoc Dr. demonstrate how digital medical education can bridge knowledge gaps, foster continuous learning, and support evidence-based therapeutic adoption more effectively than traditional methods alone.

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