Evalutaing the Return on Investment (ROI) for Direct-to-Consumer Mobile Engagement in Healthcare

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AUDIENCE: Healthcare leaders and marketers seeking to exploit the potential for mobile communication to accelerate consumer acquisition, engagement, and retention.

PURPOSE: Equip readers to evaluate the return on investment (ROI) of mobile direct-to-consumer or direct-to-patient mobile engagement.

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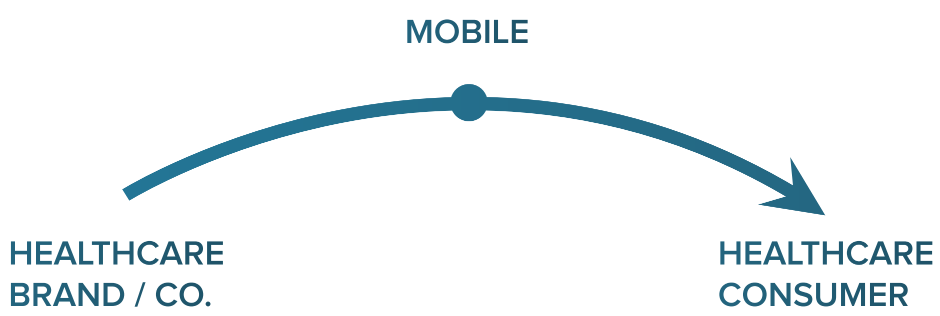
EXECUTIVE SUMMARY

Today, marketers of healthcare products and services face an increasingly challenging marketplace in large part due to escalating reimbursement and pricing pressure from public and commercial payors. The increased pressure on prices and margins from payors can negatively influence product and service adoption during the early launch phase of the product life cycle when adoption momentum and trajectory is critical to the product's near-term and long-term success. Later in the product life cycle (and later is coming sooner these days), markets and products are migrating more rapidly to perceived commodity status and post-patent revenue is minimized by a rapid transition to generic alternatives or low cost substitutes. We can expect these pressures to gain intensity as healthcare markets become increasingly influenced by:

- Greater emphasis on accountable care
- Global economy that places increased pricing pressure on domestic employers
- Healthcare policy decisions that transfer greater economic clout to public (federal and state) purchasers of healthcare

For healthcare marketers, the required response to pressures in the marketplace remains consistent with the historical emphasis. Brand performance results from expanding markets, penetrating markets, and driving increased consumer lifetime value (LTV).

Yet, the path to desired performance with healthcare brands is becoming increasingly influenced by emerging marketing channels. **Today's most significant "emerging" marketing channel is mobile**. Still, describing mobile as "emerging" vastly understates the maturity of the channel, though perhaps not its potential. **Given that 88% of U.S. adults own a mobile phone**, according to the Pew Internet & American Life Project, mobile represents a channel characterized as both mature and high potential. In healthcare, we are now only beginning to realize the potential for mobile to accelerate consumer acquisition, retention, and contribution.



As a result, the successful healthcare marketer must capably define and execute the optimal mix of traditional marketing and mobile. This requires the marketer to recognize and address a potential bias towards traditional marketing channels in the marketing plan and budget. Left unchecked, this bias can result in under-representing the mobile channel. The result can be a loss in market share or a declining revenue curve, particularly in markets where competitive organizations and brands seize a "first-mover advantage" in mobile. A first-mover advantage in mobile results from the compounding powers of:

- An active mobile consumer database
- Continuous improvement of the consumer conversation relative to the deployed mobile channels, the priority, and the audience
- Organizational learning

Organizational learning translates to the deployment of increasingly impactful mobile initiatives within and across divisions or brands as a result of improved audience targeting and an elevated understanding of the triggers that drive the desired behavior.

Ultimately, appropriately representing mobile in the marketing mix for a brand requires marketers to be able to accurately forecast the return on investment (ROI) from the mobile channel. Marketers must be able to develop and analyze the mobile scorecard in order to optimize initial and ongoing investments.

This paper is for healthcare marketers considering the deployment of mobile to acquire, engage, and retain the healthcare consumer. Readers can expect to gain insight into the methodology required to effectively evaluate the return on their investment in mobile. Specific attention will be dedicated to:

- Building the foundation for evaluating the mobile investment
- Optimizing the mobile investment by aligning the mobile deployment with existing marketing assets and towards the desired business priorities
- Defining key performance indicators to evaluate the mobile investment

This paper is for healthcare marketers considering the **deployment of mobile to acquire**, **engage**, and **retain the healthcare consumer**.

2 INTRODUCTION

“They’re keeping score!”

A few years ago I was reminded of the importance of “keeping score” from an unexpected source during a very typical car ride home following my oldest son’s youth basketball game. On this occasion, I had my oldest, Bailey, then 10, and my youngest, Baker, then 6, in the car.

In what has become a cherished tradition, my oldest son and I were discussing his basketball game, this time following a close loss. A few minutes into our conversation my oldest asked, “Dad, is winning important?” Of course, I realized immediately that I had been presented with a “teachable moment”. Immediately, the thought that came to mind was “of course winning is important, but it is more important to represent yourself, your coaches and your teammates with honor and respect”. “You do that by playing hard, playing with purpose, and playing together.” I was going to be so proud of my well-considered response. I was going to shine in my “dad moment”.

Unfortunately, my 6 year-old proved to be less reflective and responded before I was able to launch into my “dad moment”. Baker, until this time a non-participant in the conversation, yelled into the front seat for his brother, “Bailey, they are keeping score!” Wow, I thought. Baker, in his innocence, had cut the wheat from the chaff. I could only respond, “The little guy does have a point. They are keeping score.” On this day, my message had been positioned literally towards the rear or “in the back seat”. “They are keeping score” would be the lasting message from this car ride.

A few years later, I was reminded of that car ride when standing before a group of medical device sales professionals at our national sales meeting. As was customary, my leadership team utilized a portion of the annual meeting to review milestones, achievements, and the trajectory of our business with our sales professionals. As we shared the achievements from the prior year, I found myself reflecting back to the car ride. The team had invested in understanding our business. A meaningful scorecard had been developed, a scorecard that represented the reality and the potential for our business. We were keeping score.

Keeping score is important. Keeping score serves us by motivating individuals and teams, instilling shared ownership of outcomes, and bringing clarity to the efforts required to be successful as a team and in markets. So, how do we “keep score” when the marketing channel is new, potentially revolutionary, and an increasingly relevant contributor to our marketing mix? How can we assess the mobile channel’s ability to build, secure, and retain markets?

3 BUILDING THE MOBILE ENGAGEMENT SCORECARD

Predicting the influence and impact of a new marketing channel or an addition to the marketing asset portfolio can be challenging. At 3Cinteractive, healthcare organizations and brand teams often ask us, “How can we predict and evaluate the return on our investment in mobile?” We respond by first directing attention away from mobile and towards understanding how the critical success factors for the business or brand are currently measured. Understanding the critical success factors and the key performance indicators (KPIs) used to evaluate the business helps set the foundation for predicting and evaluating the impact of the mobile investment. The three pillars required to build the mobile scorecard and ultimately evaluate the mobile ROI are presented below.

1. **Interrogate current performance**

Evaluate and interrogate current performance, both with respect to current values and trajectory (revenue, volume, and share).

> “How can we predict and evaluate the return on our investment in mobile?”

2. **Develop the desired consumer journey**

Determine the current and the desired consumer (or patient) journey with the brand from awareness, to activation, and to engagement with the brand (often expressed as retention or adherence). Assessing the gap between the actual journey and the desired journey permits the marketer to identify opportunities for mobile to elevate the conversation and influence the desired behavior at each phase of the consumer journey.

3. **Optimize the mobile deployment**

Determine the mobile channel or channels (deployed interdependently) required to support the desired journey with the brand.

Interrogate Current Performance

Though mobile devices have become integrated into the fabric of our lives (see the chart on the next page for mobile utilization data), marketers have always sought to communicate effectively and efficiently with potential and active consumers. So, when evaluating the potential for mobile it is fair to begin by asking, how is the organization or brand communicating with consumers? Secondarily, how is the organization or brand benefitting from the current conversation with the consumer(s)? Thirdly, how does the current conversation with the consumer map to the desired conversation with the consumer (communication gap analysis)?

In many respects, setting the foundation for evaluating mobile requires removing the mystery from mobile. This means evaluating mobile not as a stand-alone strategy but as part of a larger marketing strategy that is made more effective because of the consumer's affinity for their mobile device and mobile conversations.

CELL PHONE ACTIVITIES

The % of cell phone owners who use their cell phone to...

82	Take a picture
80	Send or receive text messages
56	Access the internet
50	Send or receive email
44	Record video
43	Download apps
31	Look for health or medical information online
29	Check bank account balance

Source: Pew Research Center's Internet & American Life Project, Summer Tracking Survey, August 7 - September 6, 2012. N=2,581 cell phone owning adults ages 18 and older. Interviews were conducted in English and Spanish and on landline and cell phones (1,206 cell calls were completed.). Margin of error is +/- 2.2 percentage points.
*Video and Apps data from Pew Internet's Spring Tracking Survey, March 15-April 3, 2012. N=1,954 cell phones owning adults 18 and older. Margin of error is +/- 2.6 percentage points.

During the mobile marketing audits we conduct with prospects and clients we find we always dedicate significant time to understanding how the business or brand is measured currently, or prior to a mobile deployment. Our team, as a partner to our client, seeks to understand both point-in-time (or current) metrics as well as the projected trajectory for revenue and volume. The current value and the projected trajectory metrics can be evaluated in aggregate form and by population subset when necessary. The trajectory for the business can also serve as a baseline metric for comparative purposes in future periods.

Further, understanding the revenue or financial trajectory for the business or brand is particularly relevant for products that are currently marketed. With currently marketed products we can extrapolate the trajectory trend into future periods to gain an understanding of the current momentum for the company or the brand. For example, a positive trajectory provides insight that the historical marketing and sales efforts are having a positive influence on market expansion, penetration, and consumer retention, either independently or in aggregate. Understanding the forecasted trajectory for key indicators will provide the necessary foundation to evaluate the financial impact attributed to the addition of mobile marketing, while also respecting the historical efforts deployed to build the brand's market position.

As an example, a review of the important metrics for a retail pharmacy identified first-fill abandonment, number of fills, and average daily consumption for chronic medications as critical metrics. These metrics impact the clinical service, operational efficiency and ultimately the financial success of the retail pharmacy. Understanding the baseline with respect to these metrics enables our combined teams to evaluate the impact mobile communication can have on these performance indicators, relative to the non-mobile population and overall. We will spend more time on the KPIs for retail pharmacy in our case study in Section 5.

Develop the Desired Consumer Journey

Developing the desired consumer journey enables us to define the marketing objectives for each phase of the journey with the brand as well as identify the milestones and metrics required to evaluate the impact of mobile engagement at each phase. As you can see in the consumer journey below, metrics are identified for each phase of the journey with the medical intervention.

PHASES OF THE CONSUMER'S MOBILE JOURNEY

	Acquisition	Searching for Treatment	Engage MD	Primary Adherence	Secondary Adherence
Objective	Secure high potential patient candidates into a mobile conversation	Assist Patients in assessing their risk profile and finding a physician	Equip patients for the MD encounter	Establish positive adherence habits during the initial period (30 days) of the regimen	Encourage secondary fill and downstream adherence
Measurement	Total and percentage of acquired, high potential candidates seeking a physician encounter	Mean time to the physician encounter	Total and percentage of patients investing in learning more about the intervention	First-fill percentage of the mobile populaiton (vs. overall)	LTV of the mobile population (vs. non-mobile and overall)
Tactics	Opt candidates into the mobile workflow using SMS short code, web, or StarStar acquistion. Stratify candidates as desired (source channel, location, mobile channel preference)	Direct patients to online (mWeb) resources to assess risk, explore interventions, and motivate a physician encounter	Bridge patients to the online (mWeb) resource for important questions and considerations for their physician encounter	Support the physician's objective by reinforcing the burden of the condition and establishing the value of the intervention. If required per the condition and/or the intervention, deploy intense reminder and consumption confirmation reminders during the initial 30 days	Motivate and direct patients to secondary fulfillment using mobile reminders, location based direction to the nearest provider, and mobile incentives / coupons (if appropriate)
Potential Mobile Channels Deployed	SMS, IVR, mWeb, StarStar, mApp (if required or signficantly workflow positive)	SMS to mWeb content	SMS to mWeb content	SMS, IVR, mWeb, and/or mApp	SMS, IVR, mWeb, mApp, mCoupon

The metrics aligned with the phases of the consumer journey with the brand also serve the important purpose of **allowing the marketer to assess the impact of the individual or collaborative mobile channels deployed**. When necessary, our team, working with the client, has executed a mid-course correction based on the findings resulting from an evaluation of the performance for the phase. In some cases, the findings from the early phase of the deployment have uncovered a need to prioritize a specific mobile channel or compliment the existing channel with a second mobile channel to more effectively achieve the desired result.

Controls groups can also play an important role in evaluating the impact of mobile especially during the early post-launch phase of the mobile deployment. The control group can include consumers that receive other forms of communication, such as email. Dramatic differences in the value of the mobile consumer, relative to the general population and/or relative to populations engaged via alternatives to mobile (i.e. call center only), can highlight an opportunity to bridge the non-mobile population to mobile engagement to drive increased returns at the individual and the aggregate population levels.

Optimize the Mobile Deployment

After interrogating performance and establishing the desired communication with the consumer, we can then turn our attention to developing the mobile deployment plan. The mobile deployment plan identifies the tactics required to optimize reach, engagement, and influence with the target audience and results from consideration given to the:

1. Priorities for the business or brand
2. Desired consumer behavior
3. Engagement required to accelerate or motivate the desired behavior
4. Opportunities to integrate traditional marketing assets (call center, media, traditional web) into the mobile conversation
5. Audience (or the mobile channel preference for the audience)
6. Cost

Numbers one through four above result from determining the desired consumer journey, which enables assessment of performance, priorities, and the communication. **Adding audience considerations enables the marketing team to align the message with the mobile channel or combination of mobile channels (SMS, voice, mobile web, hybrid mobile app, or native app) to effectively reach and influence the target audience**. As you can see in the chart on the next page, specific populations defined by age, race, and gender, are characterized by unique preferences for each mobile channel. These preferences must be considered to arrive at the optimal mobile channel deployment.

CELL PHONE ACTIVITIES BY DEMOGRAPHIC

The % of cell phone owners who use their cell phone to...

	Access the Internet	Text	Download Apps
All cell phone owners	56%	80%	43%
Men	57	81	45
Women	56	80	41
Age			
18-29	77***	97***	65***
30-49	69**	92**	53**
50-64	40*	72*	25*
65+	13	34	8
Race / Ethnicity			
White, Non-Hispanic	52	79	40
Black, Non-Hispanic	60*	80	50*
Hispanic	66*	85	44

Source: Pew Research Center's Internet & American Life Project, Summer Tracking Survey, August 7 - September 6, 2012. N=2,581 cell phone owning adults ages 18 and older. Interviews were conducted in English and Spanish and on landline and cell phones (1,206 cell calls were completed.). Margin of error is +/- 2.2 percentage points. *Indicates statistically significant difference compared with others in same grouping.

Finally, cost is always an important element of any discussion and certainly represents a critical component of conversations centered on driving the highest ROI from the investment in mobile. As you can see in the chart on the next page, mobile channels differ with respect to:

- Reach or ubiquity
- Content characteristics (media richness)
- Security
- Connectivity to centralized consumer database assets
- Cost

RELATIVE STRENGTHS OF MOBILE CHANNELS

	SMS	mWeb	Native Applications	IVR	Email
Engagement	Proactive	Passive	Passive	Proactive	Proactive
Benefit	Immediate (97% of text messages are opened and read within 5 minutes) Ubiquitous reach	Rich media content support Secure delivery (HTTPS) of customized content HTML5 allows mWeb to replicate native application experience	User experience Leverages native device	Most ubiquitous Most secure (lacks a written record of the content delivered)	Ubiquitous Standardized Mature technology
Limitation	Character limitation Message storage on the device	Access: Some users may not have capability (device limitation or no data plan)	Least ubiquitous Passive engagement can translate to declining use post download Fragmented device market increases expense	Advanced IVR (Text to Speech and Automated Speech Recognition) can be expensive Caller ID can negatively impact effective reach	Deliverability and open rates are declining Some demo subsets have low/no use of home computers or internet access

Obviously, triggering the desired consumer behavior is dependent on the consumer's active beliefs regarding their need for the brand and their commitment to the brand. Sometimes, in healthcare we find that a simple reminder delivered via SMS can be enough to trigger a desired response, such as adherence to a prescribed intervention. Other times, either at the individual level or at the population level, we must overcome significant barriers to the desired behavior, such as a lack of belief in the need for care or a lack of belief in the intervention. In these instances, a simple reminder is not enough and we must support our communication with tools that enable deeper engagement, such as mobile web or a mobile application (native or hybrid). To assist in optimizing the deployment the **mobile platform provider should be able to stratify populations by demographic segments or attributes to enable the brand to optimize the deployment at the aggregate, population subset, and the individual levels**.

4 ISOLATING THE KEY PERFORMANCE INDICATORS FOR MOBILE

Achieving increased precision in predicting and measuring organization and brand performance requires marketers to isolate the KPIs to predict and measure the progress and trajectory of the business or the brand. Isolating the KPIs to a relevant subset equips marketers to achieve clarity across their organization with respect to the desired results and the tactics required to attain the desired results. KPIs play an important role in bridging strategy with the tactics needed to achieve the desired result.

During my time in the pharmaceutical and medical device industries our marketing teams were often inundated with an abundance of market data. In fact, we often found ourselves overwhelmed by the volume of market, prescriber, and surrogate product data. This data proved to be quite powerful in predicting adoption, volume trajectory, and revenue. Still, in order to manage the abundance of data our teams were required to become proficient at identifying and limiting the data set to a few key metrics, dedicating specific attention to avoid redundancy. Redundant metrics can have the unintended effect of inappropriately distracting both sales and marketing teams, resulting in a loss of strategic and tactical focus. Stated more practically, we sought to “keep score” without getting lost in the numbers.

To isolate our attention around a limited set of critical ROI metrics, our teams categorized our marketing metrics into four specific areas aligned with the consumer journey with the brand:

- Awareness
- Activation
- Retention

Lifetime Value (LTV): success in the areas of awareness, activation, and retention determine the longitudinal contribution of the consumer

Ultimately, success in the areas of awareness, activation, and retention determine the longitudinal contribution of the consumer, commonly represented as Lifetime Value (LTV).

But, how does this apply to measuring the return on our mobile investment? Actually, it applies quite directly. We can and should apply the same standard to our mobile investment. **Mobile offers great potential in helping us better understand our marketing investment across awareness, activation, retention, and contribution (LTV)**. The chart on the next page defines the purpose of mobile and the decision support, or analytics, specific to marketing phase.

Phase	Purpose for Mobile	Defining Question
Awareness	Provide consumers with the ability to bridge from awareness to engagement ("I want to learn more.") via their mobile device.	Is mobile expanding the market effectively and efficiently? **Primary KPI:** Cost per Acquisition
Activation	Equip consumers to connect with the sponsor brand, either by driving the consumer to a marketing asset (web, call center) or by driving the consumer to a nearby location (physician office, retail or specialty pharmacy, diagnostic center).	Is the marketing effort, with mobile as an integrated component, effectively transferring the interested population to active consumers? **Primary KPI(s):** Cost per Activation (Transaction event) and Time to Activation
Retention	Translate meaningful conversation with the consumer via their mobile device into the desired behavior. The conversation can include reminders, disease or condition education, intervention education, and distribution of economic incentives (mobile coupons delivered to the cost-sensitive population) depending on the consumer's profile, historical behavior or expressed desire.	Is the brand retaining consumers more consistently using mobile? **Primary KPI:** % of the acquired mobile population that remains active with the brand for a defined period (vs. the overall population)
Contribution	Increase the economic value of the consumer by driving increased retention to the brand and/or via appropriate cross promotion of related products or services.	Is mobile contributing significantly to our profitability per consumer? **Primary KPI:** LTV for the mobile population (vs. overall)

Essentially, we are measuring the impact of communication. Put another way, does communication accelerated and made more productive by access to the consumer's mobile device (and therefore engagement) translate to changing the behavior of our audience? When we view mobile as effective communication we are able to remove the mystery out of evaluating our mobile investment. Quite naturally, we can then evaluate our mobile investment relative to the historical metrics marketers have long used to evaluate a marketing tactic. In the next section, we consider the KPIs relative to specific healthcare verticals.

5 TRANSLATING KPIs TO THE ROI ANALYSIS

Ultimately, the return on mobile can expressed simply as the incremental contribution attributed to mobile relative to the investment in mobile, or:

(Incremental Annual Contribution from the Mobile Population (Activated and Transferred)

Investment in Mobile

More specifically, the return on the mobile investment results from incremental revenue attributed to:

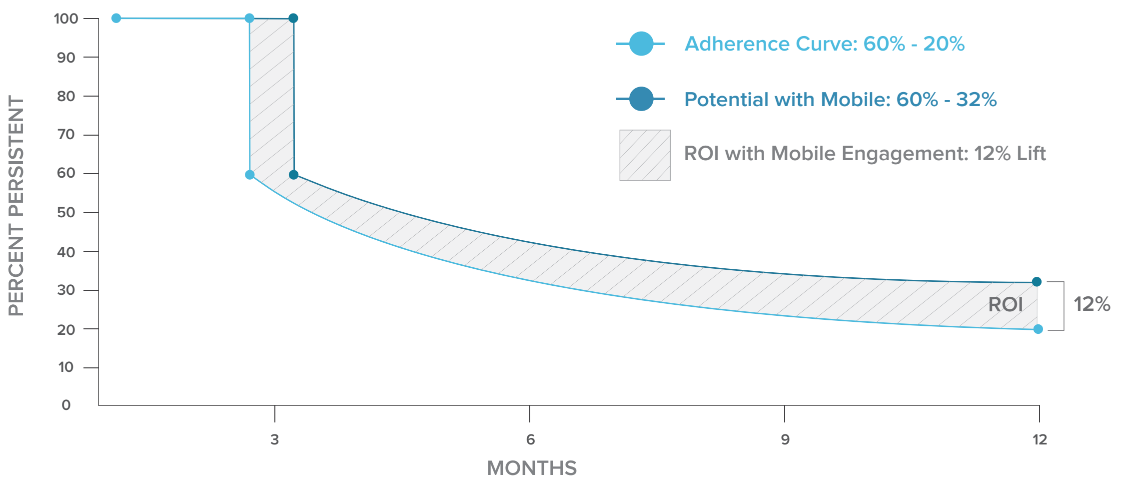
1. Market expansion (Awareness translating to Activation)
2. Increase return on the consumer (Retention translating to Increase Contribution)

This can be expressed in the equation below as:

(Increase in the number of acquired consumers attributed to mobile) x (LTV of the mobile consumer) + (Increase in the contribution of the mobile consumer – value of the non-mobile consumer) x (Active or Current Mobile population)

Investment in Mobile

Returning to our discussion in Section 3, it is important to account for the brand's volume and unit revenue trajectory when assessing the return on mobile. For mature products with significant historical data points we can express the contribution due to mobile as the area under the adherence curve following the mobile deployment less the historical adherence curve. This is expressed in the chart below.



Are there potential advantages from a mobile deployment that we exclude from the ROI calculation? Yes. For example, we routinely exclude increases in productivity in the calculation of the mobile ROI. This is due to a desire to eliminate potential redundancies in the calculation. In the strictest sense, increases in operational productivity (i.e. improved call center productivity dedicated to patient support) translate to increased consumer activations and improved consumer retention. The end result of the increased focus of operational resources is more consumers and engaged, active consumers, which is captured in the "lift" in the LTV of the acquired, mobile consumer base.

Similarly, with respect to awareness, increased brand awareness is only meaningful when it results in increased consumer activations. As brand awareness increases the potential for consumer acquisition and activation increases. This will be expressed in the trajectory for activation period over period and is differentiated from the trend established and projected prior to the mobile deployment.

So, how can we capture the relevant KPIs for each healthcare market? The grid below contains specific metrics by healthcare segments.

Marketing Metrics for the Targeted Healthcare Vertical				
	Marketing Metric Examples, by Phase			
Segment	**Awareness**	**Activation**	**Retention**	**Contribution**
Retail Pharmacy	Number of patients requesting a pharmacy near their location	Reduction in First-Fill Abandonment	Utilization or adherence, expressed as Average Daily Consumption	Annual Value of the Patient (LTV), overall and relative to potential
Manufacturer	Number of potential consumers requesting addition information	Number and percentage of the mobile audience who seek the promoted intervention	Utilization or adherence, expressed as Average Daily Consumption	Annual Value of the Patient, overall and relative to potential
Health System	Number of potential patients expressing interest in a service line	Number and percentage of the mobile audience who seek care for promoted service lines	Reduced appointment abandonment or average number of visits per clinical protocol (i.e. physical theapy visits)	Annual Value of the Patient, overall and relative to potential

CASE STUDY
Retail Pharmacy

Improving revenue using mobile to activate and sustain a meaningful, mobile conversation with patients and the lifetime value of patients taking chronic medications

We can now take the opportunity to examine the projected ROI of mobile in a healthcare setting. The retail pharmacy case study is representative of the challenge facing organizations and brands across healthcare due to potential to improve revenue and clinical outcomes via activating and sustaining a meaningful conversation with the consumer.

In retail pharmacy, consumer activation begins when a patient first drops a prescription, except in cases where activation occurs at the point of care. Too often, the patient will drop off a medication at the pharmacy but will not return to pick up the medication. In fact, the **industry average for first-fill abandonment in the retail pharmacy setting is between 20-27%**. First-fill abandonment results in significant reductions in revenue and profits due to:

- Lost revenue for the first-fill
- Downstream losses in revenue from secondary fills for chronic medications (adherence)
- Productivity and inventory inefficiencies, which is exacerbated by the high cost of human capital in the pharmacy setting (pharmacists and pharmacy technicians)
- Potential revenue losses from non-prescription over-the-counter (OTC) and consumer goods (the "front-end" of the retail pharmacy)

For the purposes of our analysis, we will not consider the clinical implications of non-adherence. The clinical impact of non-adherence has been estimated by the New England Healthcare Institute to be $290 billion in otherwise avoidable medical spending in the U.S. alone each year.

Impact of non-adherence: $290 billion in otherwise avoidable medical spending in the U.S. each year.

SITUATION

A pharmacy chain with 100 retail locations incurs significant revenue loss due to first-fill abandonment and poor compliance to chronic medications. The specific metrics for each challenge are highlighted below.

1. First-fill abandonment is 25% and has remained at 25% for 12 consecutive quarters, representing an ongoing, systemic challenge for the chain

2. Failure to adhere to chronic medications is consistent with the national adherence curve for chronic medications, translating to 50% of chronic patients no longer taking their medication as prescribed at six months and 80% at 12 months

The regional chain on average fills 200 prescriptions per day per location, with new prescriptions representing 30% of all prescriptions (60 of the 200). The blended revenue (generic and brand) for a single prescription is $70, with a contribution margin of 20% or $14. Chronic medications represent 80% of the total annual prescription volume, or 57,600 of the 72,000 total prescriptions.

ASSESSING THE FINANCIAL IMPACT OF FIRST-FILL ABANDONMENT

I. Direct Revenue Opportunity (from abandoned first-fills)	
Abandoned Rx per day, first-fill	20
Retail value of abandoned Rx	$70
Average daily revenue risk	$1,400
Annual revenue risk (single location): First-fill abandonment (360 day work year)	$504,000
Corporate revenue risk (100 locations)	$50,400,000

II. Indirect Revenue Opportunity (lost downstream fills for chronic medications)	
Annual abandoned Rx	7,200
Chronic Rx abandoned (80% of total abandoned)	5,760
Annual value of chronic medication (current adherence rate, 6 total refills or 180 average annual supply)	$420
Incremental value of downstream fills	$350
Annual revenue risk: Incremental fills chronic, current adherence	$2,016,000
Corporate revenue risk (100 locations)	$201,600,000

III. Revenue Impact of Improved Adherence to Chronic Medications	
Number of fills for chronic medications (single location)	57,600
Average number of fills per chronic medications (30 day supply)	6
Number of total prescriptions	9,600
Incremental increase in adherence from mobile	15% or 0.9 incremental 30 day fills per prescription
Incremental fills applied to all prescriptions	8,640
Revenue potential, all prescriptions (single location)	$604,800
Revenue potential (100 locations)	$60,480,000

ASSESSING THE FINANCIAL IMPACT OF INCREMENTAL ADHERENCE TO CHRONIC MEDICATIONS

Total Revenue Opportunity from Reducing First-Fill Abandonment and Improving Adherence (Corporate)	
Annual revenue opportunity: First-fill abandonment (360 day work year), from I above	$50,400,000
Annual revenue opportunity: Incremental fills chronic, current adherence, from II above	$201,600,000
Revenue opportunity from adherence (assumes 15% improvement above baseline)	$60,480,000
Total revenue opportunity (100 locations): First-fill + Adherence	$312,480,000

Obviously, given the revenue opportunity associated with reducing first-fill abandonment and improving adherence we would predict the revenue potential for addressing these challenges to be very high. And, given the assumptions in the case the total revenue potential for a 100-location retail pharmacy with a daily-fill average of 200 exceeds $300 million. The revenue potential begs the question, can the retail chain capture a significant percentage of the potential revenue via meaningful engagement, facilitated using mobile, with the consumer? This will depend on two critical determinants of program success:

1. Mobile participation rate, or the percentage of prescription consumers who elect to receive communication delivered to their mobile device
2. Positive impact, attributed to mobile, on first-fill abandonment and adherence

SOLUTION

The retail chain will deploy mobile using SMS, interactive voice response (IVR), and a hybrid mobile application to address the priorities of reducing first-fill abandonment and increasing adherence. The deployment will require integration with the chain's operating system, in-store promotion, in-store education of staff, dedicated support from corporate marketing, IT, and store management.

The chain has budgeted $2.5 million to launch and execute the mobile deployment. Itemized expenses supporting the mobile deployment include FTE support (including allocations for corporate and location-based personnel), mobile platform, mobile application development and maintenance, variable messaging cost, and in-store promotion. Consumer participation in mobile is predicted to be 15% (Year 1, mid-year value), 30% (Year 2), and 40% (Year 3). The expected impact on adherence is 20%, marginally above the reported for improvement in adherence for SMS only campaigns. This is viewed as a conservative position given the inclusion of IVR and a mobile app in the consumer engagement.

PROJECTING THE ROI

This revenue potential presents a great opportunity for a significant return on the mobile investment. Yet, first-fill abandonment and adherence to chronic medications is a systemic, multi-factorial challenge with deeply rooted behavioral and lifestyle barriers. As a result, we should be conservative in our expectations for improvement.

Using the incremental revenue potential from above and the predicted mobile adoption values established earlier for years one through three (15%, Year 1, mid-year value, 30%, Year 2), and 40%, Year 3), we are able to project incremental revenue and the ROI resulting from "the lift attributed to mobile". The positive impact resulting from mobile, 20%, is applied to the mobile population only to arrive at an ROI of 33% in Year 1, 166% in Year 2, and 255% in Year 3. It important to note that the analysis is applied only to the revenue opportunity from prescriptions and does not represent the upside associated from non-prescription revenue that results from consumers purchasing OTC and consumer goods when picking up a prescription.

Total First-Fill Abandonment Revenue Opportunity (Corporate)				
Priority	Potential	Year 1 Impact	Year 2 Impact	Year 3 Impact
		15%	30%	40%
First-Fill Abandonment	$50,400,000	$7,560,000	$15,120,000	$20,160,000
Incremental Fills Chronic (Current Adherence)	$201,600,000	$30,240,000	$60,480,000	$80,640,000
Adherence (Lift from current LTV)	$60,480,000	$9,072,000	$18,144,000	$24,192,000
Total Revenue Opportunity (100 locations): First-Fill + Adherence	**$312,480,000**	**$46,872,000**	**$93,744,000**	**$124,992,000**
Investment	**$2,500,000**			
Lift from Mobile	20%	ROI Analysis		
Incremental Revenue		$16,632,000	$33,264,000	$44,352,000
Incremental Contribution	20%	$3,326,400	$6,652,800	$8,870,400
ROI		33%	166%	255%
Percentage of Current Contribution		3%	7%	9%

Finally, in the retail pharmacy case study the important metrics that must be monitored on an ongoing basis to ensure operational success, achievement of the ROI milestones, and validation of the mobile investment include:

- Mobile adoption by location (Is the retail location driving mobile adoption at a level consistent with corporate objectives?)
- First-fill abandonment (mobile population on vs. non-mobile and overall)
- Retention (% of mobile population with a secondary fill vs. non-mobile population and overall)
- LTV of the mobile consumer, relative to the non-mobile and overall population (Is the mobile population experiencing the expected lift in adherence?)

6 SUMMARY

Given our position in mobile and our history with healthcare enterprises, our team at 3Cinteractive is often asked to come into an organization to conduct a Mobile Marketing Workshop. The workshops include the fundamentals shared in this paper so that together, with the prospect or client, we can consider the company or brand's objectives, the consumer audience, and existing, non-mobile assets to arrive at the optimal mobile deployment. As shared earlier, this process includes:

1. Interrogating current performance
2. Developing the desired consumer journey
3. Optimizing the mobile deployment, with consideration given to current and future marketing and sales investments (i.e. patient call centers)
4. Isolating the KPIs for the brand and therefore the mobile deployment
5. Establishing the performance milestones
6. Predicting the ROI from mobile

Yet, as we move through the critical process highlighted above we understand brand leadership is weighing, "Should mobile represent an immediate priority?" The potential impact on revenue represents one argument for "YES." However, the greatest argument for investing in mobile may be best represented by current (non-mobile) marketing, operational, and sales investments made by the organization.

In a prior role leading a medical device organization I found myself challenged to fully represent the value a patient to our organization in a manner that would drive improved teamwork across our sales, marketing and operational teams. Of course, it was very easy to arrive at the value of the patient from a transactional standpoint. Quite quickly, we could arrive at revenue per prescription as an expression of patient value. Yet, with respect to the financial and emotional investment in the patient, I was convinced our organization did not fully understand the value of a patient. I can recall a discussion I had with my leadership team to get to this issue during one of our executive retreats. I posed the question, "What do we do, individually and collectively as a team, to enable a conversation with the patient?" Immediately, the team began to respond:

"We motivate a patient to ask a physician about our product."
"We convince a doctor to prescribe our product."
"We convince a payor to reimburse for our product."
"We invest in our story through advocate development, clinical research, and economic evidence."
"We employ 300 sales leaders and sales professionals, a managed care team, an operational team of 150 professionals, training and equipping them for success."

You can see where this is going. By the time a healthcare or life science organization receives a prescription, a tremendous amount of effort and resources has been extended at the individual and aggregate level. I asked our team, “Since we agree that a tremendous amount of intellect, muscle, and sweat has been extended across this team and those who report up through you so that we may ignite a conversation with a single patient, doesn’t it therefore make great sense for our sales and operational teams to work together to ensure that we serve patients (and therefore the physicians who refer patients) at the highest possible level?”

Today, at 3Cinteractive we ask a similar question, “Given the investment the brand makes to ignite a conversation with the consumer, doesn’t it therefore make sense to have a meaningful, ongoing engagement with the consumer?” Furthermore, does it make sense (and cents) to invite the patient into a mobile conversation with the brand? Can the brand benefit from the engagement and commerce potential unique to mobile? Quite often, leveraging current investments becomes the motivator for integrating mobile into the company’s existing work processes and marketing effort.

Returning to the conversation I shared from several years ago about my boys, I walked away knowing that the little guy had stolen my “dad moment.” Winning is important. After all, as Baker shared, “They are keeping score”. And, as we explored in this paper mobile is challenging the way we approach the marketing of healthcare products and services. Yet, little has changed with respect to how we keep score. We still must activate and sustain a dialogue with the healthcare consumer and appropriately measure the impact of our marketing investment using metrics common to assessing consumer acquisition, retention, and consumer value. Even though the scoreboard has not changed we must now understand the power of mobile relative to other investments and also mobile’s ability to serve as a lever for accelerating the return of existing, traditional marketing investments.

A short time after my missed dad moment, I was reminded of a quote from legendary basketball coach Bobby Knight that I would later share on many occasions with Bailey and Baker. Knight once said, “Most people have the will to win, few have the will to prepare to win.” **Are you and your teams preparing to win with consumers who cherish mobile?**

Are you and your teams preparing to win with consumers who cherish mobile?

ABOUT THE AUTHOR

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Barry Hix is a healthcare executive with over 20 years of experience serving public and private companies in the pharmaceutical, healthcare delivery, and medical device industries. Hix's experience includes leadership positions in general management, commercial strategy, reimbursement, and policy. He has also developed, launched and executed marketing strategy for more than 30 medical technologies and services targeting an array of healthcare professionals and patient communities.

Today, Hix serves as the general manager of healthcare solutions for 3Cinteractive, helping 3Ci's healthcare clients deploy mobile into healthcare markets to support clinical, operational, and commercial priorities by driving stronger engagement with patients.

Hix holds a bachelor's in industrial management from the Georgia Institute of Technology, a master's in marketing from Georgia State University, and a master's in public health from Emory University. He has also authored several white papers on the potential of mobile in healthcare and is a sought after speaker at mobile and healthcare events across the country.

ABOUT 3CINTERACTIVE

3Cinteractive (www.3Cinteractive.com) is a mobile platform company with a strong focus on consumer engagement. 3Ci's cloud platform – Switchblade™ – powers mobile applications that help businesses better engage consumers, make 'right-time' decisions and increase the lifetime value of their customers. 3Ci's unparalleled expertise in mobile helps our clients normalize a complex mobile ecosystem and deploy mobile applications that drive measurable results for their business. Founded in 2005, 3Ci is a long-standing member of the CTIA and Mobile Marketing Association. 3Ci ranked No. 1 on Forbes' 2013 list of "America's Most Promising Companies". Follow 3Ci on Twitter @3Cinteractive, on LinkedIn at www.linkedin.com/company/3Cinteractive and on Facebook at www.facebook.com/3Cinteractive.

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