

THE FUTURE OF MEDICATION ADHERENCE

McKesson Patient Relationship Solutions



TRENDS, INSIGHTS, AND IMPLICATIONS

As a strategic thought leader, McKesson Patient Relationship Solutions (MPRS) is continually speaking with industry experts and following healthcare commentary in order to identify emerging trends in the industry. While positive changes have been made in the adherence market, there are still opportunities for improvement. Adherence is a costly problem (estimated \$290 billion), with both human and economic costs. Unnecessary hospital admissions, physician visits, and lab tests will continue to contribute to the rising cost of adherence while the industry reacts to an aging population of baby boomers and other key population shifts. Patent expirations loom and there are trends toward consolidation such as payers acquiring providers and hospital-physician affiliations. Adherence is a complex and often misunderstood challenge but one thing is certain, healthcare as a whole is moving toward a more patient-centered approach with a strong emphasis on collaboration across stakeholders. The following white paper addresses the emerging healthcare trends that will shape and drive the future of the adherence landscape and, ultimately, support your strategies to optimize the performance of your brand.

EMERGING TRENDS THAT WILL SHAPE YOUR BRAND'S SUCCESS

1

Regulatory changes are having a widespread impact including how we communicate, share data, and how practitioners are compensated. From the Patient Protection and Affordable Care Act to the HITECH Act, there are a number of new regulations that will impact how healthcare is managed, programs are marketed, expand medical coverage for millions of Americans, and ultimately drive many of the trends listed below.

2

The **healthcare consumer is changing** due to digital resources, cultural shifts, and an aging population. With the proliferation of digital resources and channels, patients are going online from their computers and mobile devices to access health information. At the same time, the growing Hispanic population is looking for culturally relevant communications, while an aging population and obesity are fueling the need for managing chronic conditions.

3

Advancing technology like EHR and ePrescribing is improving access to data and providing critical linkages across stakeholders, creating new opportunities to influence medication adherence. Access to real-time data and connectivity has the potential to bring together stakeholders and help increase adherence. Technology will also help physicians to engage with their patients in new ways.

4

Payment incentives for physician payments are being linked to performance goals, quality metrics, and health outcomes. This will create a focus on chronic care management and reward outcomes that can be directly tied to adherence. Many patients are also receiving incentives from health plans and PBMs to comply with their treatment plans.

5

The **pharmacist's role is shifting** to play a more prominent role in adherence through more direct patient engagement. Automated systems, in both large and small pharmacies, are allowing pharmacists to spend more face time with patients to foster relationships that promote healthier outcomes. Pharmacists are also joining adherence networks such as those offered by McKesson that provide training and patient coaching opportunities.

6

The **role of the physician continues to evolve** with new technologies and a greater reliance on other healthcare professionals. With physician assistants and nurse practitioners taking on a bigger role in direct patient care, physicians may have less face-to-face dialogue with patients. While new technologies are providing opportunities for virtual visits, online program integration, and follow-up care, physicians and other healthcare providers may need additional training to enhance their skills in this space.

7

There are a **multitude of individual adherence programs** currently being tested by healthcare stakeholders. Adherence tactics such as predictive modeling, gaming, social media, pharmacy programs, financial incentives, and more are under investigation by pharma, payers, providers, and others. While somewhat fragmented, these new learnings may contribute to a more holistic approach for patient adherence in the future. With a number of adherence tactics still in their infancy, creating a well planned and integrated adherence strategy has never been more critical.

1. CHANGING FACE OF HEALTHCARE CONSUMERS

An aging and overweight population has shifted the industry focus from acute care to chronic disease management. This year, America's 50 and older population will reach 100 million. Two-thirds of American adults are considered clinically obese in addition to one-third of our children. These numbers are staggering.

Beyond disease states, patient population is also changing culturally which is challenging what we know, or think we knew, about health behaviors and attitudes. Hispanics suffer disproportionately from chronic conditions including diabetes, HIV/AIDS, Alzheimer's disease, asthma, and obesity. A recent study by Global Advertising Strategies found that 20% of Hispanics and African Americans – who top the charts in chronic diseases like diabetes and heart disease – don't comply with their drug regimens. The study also notes that less than 5% of consumer advertising budgets are devoted to what amounts to 40% of the population. It is important that manufacturers look to understand and engage effectively with these populations going forward.



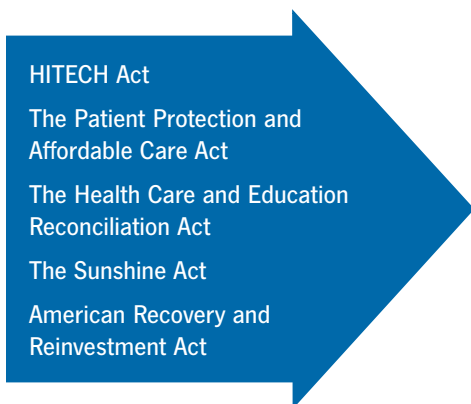
Through lack of adherence, conditions are worsening. Patients are experiencing premature disability, lower quality of life, and sometimes even death. The bottom line is pharmaceutical manufacturers have to leverage, or acknowledge, other patient resources.

Twitter and Healthline are offering personal perspectives and experiences; YouTube is enabling users to share videos on health topics. Online resources are becoming more credible with 65% of consumers viewing 'patients living with the condition' as a credible source. For instance, PatientsLikeMe, a health data-sharing platform where patients can share and learn from real-world, outcome-based health data, has nearly 135,000 members interacting across 1000+ conditions.

MPRS' research has shown that 55% of patients rely entirely on their physician to make treatment decisions, indicating that almost half are looking elsewhere. Online information can be useful for patients before AND after their physician visit. In a study conducted by Edelman, it was found that 91% of patients approach their physicians to validate information they found online, while 68% turn to other sources to validate information received from their doctor. These adherence resources are everywhere and manufacturers must use care to ensure their messaging has the relevant content that individual stakeholders crave.

2. REGULATORY CHANGES

The current regulatory environment creates opportunity and risks. There is a substantial emphasis on transparency and expanded coverage, particularly as it relates to wellness and prevention. With this, the need for management of chronic conditions and medication adherence is even greater. Each of these recent legislative acts will have some impact on our industry in the coming months.



Healthcare Reform	Implications
Expand coverage for underinsured	Guarantee access to medical insurance for tens of millions of Americans
Payment reform	Reimbursement will allow greater focus on patient adherence
Wellness and prevention	Encourage greater tools to identify and target patients who are non-adherent
Electronic Health Records	Encourage data sharing across care providers and care settings
Payment transparency	Physicians must disclose financial benefits from speaking engagements, honorariums, etc.

Agencies from CMS to the FDA to DEA are expected to continue to issue rules on a wide range of topics, including ePrescribing for controlled substances, meaningful use of health IT, HIPAA, and Rx electronic tracking. Healthcare reform will continue to be a key driver in advancing adherence solutions through incentives, accountability, and technology – all of which are discussed in greater detail throughout this market profile.

3. ADVANCING TECHNOLOGY

Technology improves access to data, provides critical linkages, and data sharing beyond that of the consumer. Digital health media and patient focused technologies are emerging. For example, MyPHR allows patients to create, share, and manage their personal health record. Wikis are informing patients by providing articles on health, diseases, and treatment.

In the field, electronic prescribing is steadily growing. The number of prescribers routing prescriptions electronically grew 66% from 2009 to 2010, representing approximately one-third of all office-based prescribers. The benefit of this real-time identification of non-adhering patients was illustrated in Surescripts research which indicated an 11% improvement in new prescriptions filled using electronic prescribing.

In light of the Health Information Technology for Economic and Clinical Health (HITECH) Act providing more than \$35 billion in incentives to healthcare organizations, more than 30% of clinical settings now utilize Electronic Health Records (EHR). It is estimated that HITECH incentives will boost EHR adoption rates to 90% by 2019.

The widespread adoption of EHRs has also been successful in driving medication adherence. A recent study by Kaiser Permanente has shown an improved number of patients following physician recommendations on medications for chronic illnesses.

Only 7% (hypertension), 11% (diabetes), and 13% (cholesterol) of those Kaiser patients receiving medical care in this 'integrated' manner failed to pick up their medication. Previous studies have shown up to 22% of patients in non-'integrated' health systems neglect to fill new prescriptions.

Nevertheless, EHR is not without challenges - according to Accenture Health, the biggest challenges healthcare systems are facing are:

- Underestimating the time and cost to implement EHR systems which may be underestimated by as much as 100% in some cases.
- Healthcare organizations are experiencing a significant shortage of qualified IT professionals to meet the demand associated with EHR implementation and support.
- Creating a culture to support EHR adoption in order to ensure that the majority of clinicians are actively and effectively using advanced health IT.

Pharmaceutical companies will need to determine the value of incorporating EHR and, specifically, ePrescribing into their strategic marketing plans. For example, can ePrescribing be used as a means to increase adherence and brand loyalty through an ePrescribing coupon? Also, what impact will ePrescribing have on how brands engage with patients?

The ever improving technology, meaningful use and financial incentives, and the need for operational efficiencies will continue to drive the adoption and improvement of ePrescribing and EHR systems. Going forward, EHR will provide an opportunity for pharma to partner with institutions by encouraging them to use EHR data to identify where patients are in their treatment and help determine what could be done to help them increase adherence.

Can ePrescribing be used as a means to promote brand loyalty through an ePrescribing coupon or voucher program?

4. PAYMENT INCENTIVES

Payment incentives have been designed to encourage a focus on chronic care management and rewarding health outcomes. From 2015 to 2017, the Affordable Care Act will be phased in, tying physician payments to performance metrics. Shifting from a fee-for-service model to payment systems that reward for health outcomes gives incentives to providers to work towards driving adherence. Providers will be seeking resources to help achieve these healthier outcomes.

Better, more informed conversations between a physician and their patients will increase their likelihood to adhere. An SDI study reported that patients purchased one-third more Rx's in their first 150 days of therapy when physicians discussed 'why this medication was right for me' with patients.

Patients are also receiving financial incentives to adhere to healthy behaviors. Some health plans are providing financial incentives which pay patients to comply with their treatment regimens. For example, Aetna, Inc. in Philadelphia entered patients taking warfarin into a daily lottery offering financial incentives for remaining adherent. The lottery was designed to take advantage of behavioral research indicating that even small rewards and punishments can be great motivators for patients.

Payment incentives and accountability can continue to be influential in driving more effective patient/provider engagement. Manufacturers can help physicians navigate this new terrain by providing them resources to maximize patient adherence.

5. SHIFTING ROLE OF THE PHARMACIST

The pharmacist is coming out from behind the counter and becoming a strong clinical resource in driving medication adherence. As their role shifts to more direct patient engagement, the industry is shifting as well. The growth of personal care in independent pharmacies has prompted larger chain pharmacies to develop their own patient-centered care programs. CVS Caremark recently partnered with Dovetail Health, a provider of transitional care services, to help prevent hospital readmissions stating that helping patients better manage and understand their medication regimens after they are discharged from a hospital can play a large part in reducing the likelihood of readmissions. To that end, Dovetail is providing plan members with in-home medication counseling focused on medication adherence and drug safety.



**Pharmacy coaching
has shown positive
results.**

In an October 2011 New York Times article, it was estimated that insurance questions and other administrative tasks occupy 25% of pharmacists' time. Technology is providing opportunities for the pharmacist to become a more important member of the care team. Routine pharmacy functions are now automated, allowing the pharmacist to play a larger role in patient counseling. Technology is also being used to target patients to provide more personalized messaging. Launched in 2008, McKesson's Pharmacy Intervention Program found patients that received face-to-face behavioral coaching showed significant adherence benefits and resulted in a strong program ROI for program sponsors. For example, COPD patients who received coaching showed an average of 1.6 incremental fills over 10 fills and diabetes patients showed an average adherence increase of 25% over 7 fills when compared to patients who did not. CVS Caremark's six-month pharmacist counseling pilot echoed the sentiment of increased patient adherence and went so far as to assert payers could save an estimated \$600 per member per year by using the program.

Training resources and adherence networks will continue to raise pharmacists' comfort and skill level, making the role of pharmacies and their staff a more prominent part of medication adherence.

6. EVOLVING ROLE OF THE PHYSICIAN

A physician's role in adherence is critical. According to SDI/IMS, physicians' choice of language can influence adherence. Patients who were told by a physician how often to take their medication had a 21% greater Rx utilization. Non-adherence is physicians #1 complaint about their patients yet physicians acknowledge they do not have sufficient time for adequate adherence counseling. Recent McKesson research has shown 71% of physicians want more information about support programs offered by manufacturers; therefore, there is an opportunity to provide physician communications training programs to enhance skills.

Additionally, physician assistants and nurse practitioners are becoming more visible in direct patient care. Both in-store pharmacists and hospital-based nurses talking with patients as they are discharged have been proven more effective than doctors at encouraging patients to stay on their medications. Furthermore, through the use of new communication technologies, physician face-time is decreasing and more patient care is being done remotely through virtual visits and email. Email messaging research shows that communication can be patient-centered and give patients an even stronger voice than in-person visits. Accordingly, manufacturers should consider more online integration of their programs and follow-up solutions in support of this.

7. TESTING OF ADHERENCE TACTICS

There is widespread testing of medication adherence programs taking place. Numerous stakeholders, including payers, PBMs, employers, and manufacturers, are considering investment in and implementation of a multitude of adherence tactics today. A multi-channel approach incorporating such tactics as predictive modeling, reminders, behavioral coaching, value-based rewards, social media, and other technology may be employed to raise awareness and promote healthier outcomes.

Financial assistance is one adherence strategy that has become highly debated recently as its usage increased. The number of co-pay coupon programs marketed to the American public has increased by more than 260% in the past two years. This has led the FDA to investigate whether rebates and other DTC offers influence patient perceptions of the drug's value and performance. In "Letting the Facts Get in the Way: An empirical defense of coupons and co-pay offset programs," Mason Tenaglia, managing director of the Amundsen Group and a member of PharmaExec's editorial board, states that co-pay card program usage is not correlated with any lower generic utilization in any of the major therapeutic classes. Also, coupons today are most frequently used by patients taking the least expensive drugs for employers and insurers and the return on investment comes from higher adherence to therapies that have already been chosen by the physician and patient.

As blockbuster drugs brace for loss of exclusivity, Pfizer's high-profile \$4 co-pay offer for Lipitor is being closely watched. As their profit-per-pill declines, many are asking, "is it worth it?" One thing is certain, when their 180-day exclusivity period ends this May, all eyes will be on Pfizer to gauge their brand's lasting power. As the industry continues to change, innovative new tactics for engaging patients will continue to emerge as well.

THE WAY FORWARD: ADVANCING ADHERENCE

The challenge many manufacturers face today is a lack of an overarching adherence strategy. Different brands try individual tactics, often discontinuing as budgets, priorities, and personnel shift. At MPRS, we see an opportunity to better integrate programs and expand them across the organization. The way forward is through integrated tactics which produce a more powerful adherence campaign.

The right adherence mix will require enlisting new adherence advocates – pharmacists, physician assistants, nurse practitioners – and leveraging technology to build patient-centric content. Manufacturers should have a plan for using technology to address adherence and help providers connect the dots from adherence to outcomes to incentives. Looking to industry research, listening to stakeholders, and a commitment to long term adherence campaigns, manufacturers will be able to better serve their patient population. Applying a behavioral-based approach with more personal, one-to-one conversations will result in more meaningful patient interactions and increased engagement. Only through this integrated approach and a solid technological foundation will your brand and its patients' health continue to flourish.

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McKesson Patient Relationship Solutions (MPRS) is a business unit of McKesson Corporation that was created specifically to support pharmaceutical and device manufacturers by delivering market leading acquisition and adherence solutions. Using category insights, market research and behavioral concepts, our core competency is understanding patient barriers to adherence and providing scalable yet personalized support. Our U.S.-based, healthcare contact center supports patients, pharmacists and physicians alike. From Patient Support Representatives to Certified Pharmaceutical Technicians, we support your campaign from enrollment to outreach. No matter what your program goals or challenges may include, we can help you connect with your patients to drive brand performance. For more information, visit our website at www.mckesson.com/mprs.

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