



Helping Care Providers Improve Patients Self-Management of Their Care Plan.

- Leverage Access, Education, Encouragement and Support from Virtual Care Team and Stakeholders.
- Integrated Mobile Communications, Data Analytics/Embedded Algorithms to Measure and Report Patient Achievement.
- Patient Achievement Goals Measure: Fulfilling Prescription Requirements, Maintaining Trust and Compliance with Care Plan, and Accountability Using Physician/Care Team Validated Clinical Results.

HIPAA Compliant Solution Includes:

- Encrypted Data Base, Dashboard, and Messaging. Secure Text, Text to Voice and IVR.
- Custom Care Plan for One-to-Many Patients.
- Real Time Measurement with Alerts/Notifications.
- Algorithms to Recommend Care Plan Adjustments.



#	Message Title	Content	Patient (MR)	Date	System Response	Message Type
1	test for 8/16/2017 2	no	Terry Walters	Aug. 16 2017 7:48 PM	too bad, Pull Down Text: too expensive	Reply
2	8884 for Charles	no	Charles Winston	Aug. 21 2017 7:41 PM	what is up, Pull Down Text: I am in class	Reply
3	test message	no	Terry Walters	Aug. 29 2017 10:17 PM	we will call you to find out why, Pull Down Text: too expensive	Reply
4	test message	no	Terry Walters	Sep. 05 2017 10:19 PM	we will call you to find out why, You Selected: too expensive	Reply
5	test for Whitman	no	Terry Walters	Oct. 15 2017 7:01 PM	Mary is calling you.	Reply
6	hello Terry, did you take your meds today?	no	Terry Walters	Oct. 23 2017 12:13 PM	Oh, sorry to hear. Why is calling you., You Selected: forget	Reply
7	test for diana	no	Janet Su	Oct. 31 2017 10:46 AM	congrats to hear, You Selected: I didnt feel well	Reply
8	hydration	no	Janet Su	Nov. 05 2017 9:15 PM	we need to find out why, You Selected: I do	Reply

Supporting Healthcare's Triple Aim Goal with NotifiUs.

- Improve Patient Experience of Care with New Levels of Care Plan Compliance Achievement (i.e. Medication Adherence).
- Easily Implement Custom Adherence Programs for Many Patients and Improve the Health of Communities and Populations.
- Reduce per Capita Cost of Healthcare for Patient and Patient Stakeholders, with Proper Medication Usage.
- Use Extensive Reporting and Real-Time Tracking for Immediate Update on Patient Progress. Integrated Work-Flow Supports Automated Support and Educational Update Messages, and Individual Patient Reward Programs.

The Economic and Social Impact from Improper Medication Adherence: It has been estimated that half of chronic disease medications are not taken as prescribed. Even after a prescription has been filled, many patients do not continue to take their medication.ⁱ In fact, within 1 year, over 50% of patients prematurely discontinue their medications -a recent report from IMS Health found that nearly half of Medicare diabetic patients fail to meet recommended medication adherence rates.ⁱⁱ Reasons for medication nonadherence are multifactorial and difficult to identify. Broadly they include age, information, perception and duration of disease, complexity of dosing regimen, polytherapy, psychological factors, safety, tolerability and cost.ⁱⁱⁱ

The number of people and organizations impacted by a patient's poor health attributed to poor medication adherence is extensive. Friends and family of the patient obviously want to see the patient productive and enjoying life as does the care provider whose mission is to support the health and wellbeing of their community. In the U.S. alone over 150,000 deaths each year is attributed to poor medication adherence. Healthcare insurers face lower cost and reduced variance with forecasted expenses, and pharmaceutical manufacturers improve revenue and improve production efficiencies when patients stick to their medication prescription requirements. It is estimated that \$300B to \$500B each year in avoidable hospital costs, and lost pharmaceutical sales is incurred unnecessarily each year by these stakeholders.

Oral Oncolytic and Diabetes Medication Self- Management: Examples of Current Medication Adherence Challenges: Various measures to increase patient adherence in type 2 diabetes have been investigated including, reducing the complexity of therapy by fixed-dose combination pills and less frequent dosing regimens, using medications that are associated with fewer adverse events (hypoglycemia or weight gain), educational initiatives with improved patient–healthcare provider communication, reminder systems and social support to help reduce costs. These investigations typically prove encouraging but fall short to prove a “significant” improvement toward medication adherence behavior. For example, despite the many therapy and education options to help Type 2 Diabetes patients manage glycemic and A1c levels; less than 50% are successful according to the American Diabetes Association (ADA).

With rates of patient adherence to oral oncolytic therapy dipping as low as 20% in some studies,^{iv} care providers, patients and family members, and other patient stakeholders (such as health insurance payers and pharmacists) need to more closely work together to ensure the patient receives the full benefit of their prescribed treatment. Oral medications are reported to account for up to 35 percent of the current oncology pipeline.^v They are one of the fastest-growing areas of cancer treatment, comprising more than 25 percent of anti-cancer therapies.^{vi} The introduction of these breakthrough medications is largely responsible for improving cancer survival rates. A key patient and stakeholder challenge is the new patient responsibility to self-manage their treatment program, which in many cases has proven difficult for patients to satisfactorily complete.

Why NotifiUs Patient Engagement Program (PEP), and Cryptocurrency. The NotifiUs patient engagement process is a Quality Improvement standard that combines clinical operations procedures with mobile communications that leverage integrated data analytics and embedded algorithms to track patient adherence behavior and immediately address patient non-compliance. Specific objectives, such as meeting steps to maintain an A1C level below 7, are mapped into custom care plans to overcome the adherence barriers mentioned previously.

It begins by establishing Achievement Goals across the following 4 categories; patient comprehension of prescription requirements, patient concerns with cost or access to medication, confidence in care plan and education to ensure medicine benefits and risks are understood.

Next, a mobile communications program is implemented between patient, provider and other patient stakeholders, such as friends and family. The NotifiUs platform securely stores all patient data, analyzes this data for the express purpose to track and report patient progress or lack of progress to achieving adherence goals. When goals are not met, a unique work flow is initiated through algorithms to follow up with the patient in a manner to change their behavior.

It is the patient response that is captured by the NotifiUs engagement platform as a “state” that is integrated with the NotifiUs reward and blockchain ledger. The state is uniquely validated by the care provider and serves as a trustworthy accomplishment of the patient’s goal achievement.

The patient’s medication adherence achievement benefits all “stakeholders”. And through the unique NotifiUs patient engagement program addresses the challenge of medication adherence on a behavioral level and through the same process integrates into a blockchain methodology that translates successful patient behavior into “value” for all stakeholders.



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- ⁱ FDA, U.S. Food and Drug Administration, *Why You Need to Take Your Medications as Prescribed or Instructed*, Feb. 16, 2016, [SpecialFeatures/ucm48554](#).
- ⁱⁱ Breznick, Jennifer, *Poor Medication Adherence Impacts Close to Half of Diabetics*, *Population Health News*, July 13, 2016.
- ⁱⁱⁱ García-Pérez, L.-E., Álvarez, M., Dilla, T., Gil-Guillén, V., & Orozco-Beltrán, D. (2013). Adherence to Therapies in Patients with Type 2 Diabetes. *Diabetes Therapy*, 4(2), 175–194. <http://doi.org/10.1007/s13300-013-0034-y>
- ^{iv} In-Office Dispensing of Oral Oncolytic: A Continuity of Care and Cost Mitigation Model for Cancer Patients. *Ajmccom*. 2016. Available at: <http://www.ajmc.com/journals/supplement/2016/improving-patient-access-to-critical-therapies-in-the-age-of-cost-sharing/in-office-dispensing-of-oral-oncolytics-a-continuity-of-care-and-cost-mitigation-model-for-cancer-patients/P-1>.
- ^v Butt, F. &. (2016). Implementing oral chemotherapy services in community pharmacies: a qualitative study of chemotherapy nurses' and pharmacists' views. *International Journal of Pharmacy Practice*, 24(3), 149-159. doi:10.1111/ijpp.1233.
- ^{vi} Lauren Hutchens, M.P.H.. April 03, 2017 6:00 AM. How Oncologists Can Help Oral Chemotherapy Patients Manage Their Adherence