Improving Adherence and Satisfaction with the iPLEDGE Program

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Introduction

The iPLEDGE Program is the mandatory pregnancy prevention program associated with the acne medication, isotretinoin. Non-adherence to the iPLEDGE Program results in extra, unnecessary pregnancy testing and increased costs in terms of time and money.

Objectives

The purpose of this Quality Improvement (QI) project was to increase Female of Reproductive Potential’s (FRP’s) adherence to the iPLEDGE Program.

Aim #1: to increase FRP adherence to the iPLEDGE Program by delivering an educational handout and weekly text message reminders

Aim #2: to increase FRP satisfaction with practice management of the iPLEDGE Program

Methods

Sample

Enrollment was determined by which FRPs attended their scheduled appointments. The patients within this practice who visited multiple providers and enrolled in the iPLEDGE Program were included in this QI project. FRPs under the age of 18, a parent or guardian supplied the cell phone number.

All female patients between the ages of 12 and 55 who were seen at the site of interest, prescribed isotretinoin, and enrolled in the iPLEDGE Program were included in this QI project. For FRPs under the age of 18, a parent or guardian enrolled in the iPLEDGE Program were included in this QI project.

Measurement

A Pearson Chi-Square test was conducted to determine whether there was a difference in the number of pregnancy tests performed between groups. The result was not statistically significant (p= 0.15). There was no significant difference between the number of pregnancy tests performed during the intervention period and the historical data.

Aim #2: to increase FRP satisfaction with practice management of the iPLEDGE Program

Satisfaction Survey Results

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Intervention</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>12</td>
<td>17</td>
</tr>
</tbody>
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Wilcoxon Signed Ranks Test: 0.785

Discussion

The use of text messaging reminders did not result in statistically significant improved adherence to the iPLEDGE Program. Neither comparison (2015 vs. intervention NOR 2018 vs. intervention) resulted in a statistically significant Chi Square result. One reason for the deviation from the evidence may be variation in comprehension and similarly among patients managed with the iPLEDGE Program. Older historic data from this practice suggest a rate of non-adherence of 21.3% which may be closer to the true historic rate of adherence for the entire practice than historic data from 2018 which is from the author’s own patient list.

Unfortunately, FRP understanding, or lack thereof, is not the only barrier to adherence to the iPLEDGE Program. One FRP fell outside her 7-day prescription window due to pharmacy error— not a misunderstanding on her part.

The patient satisfaction surveys indicated no change in satisfaction with the iPLEDGE Program. This may be because the iPLEDGE Program is challenging to navigate and is costly in both time and money.

This dermatology practice was sold to a venture capital firm in fall 2017. The new owners implemented a series of infrastructure changes, including administrative structure and staffing. These changes resulted in reallocations from providers and staff. The structural changes and their impact on this project are immaterial.

Conclusions

This project was expensive, sustainable, and patients responded favorably. Statistical significant results may be possible with an increased recruitment time period. There was a clinical significance demonstrated— increase from 14.3% rate of nonadherence to 12%, a 16% increase in adherence. Having more time to collect historical data from multiple providers would likely demonstrate a different rate of historical adherence, as the 2018 historical data merely demonstrated that the author is already promoting a higher rate of adherence than other providers.

Including multiple providers’ patients would incorporate different practice techniques and thereby address the limitation of an already heightened baseline knowledge level encountered in this study.

Measuring satisfaction with the interventions may require that the investigators provide more direction to FRPs. The iPLEDGE Program is challenging for patients, providers, and healthcare workers, but it is an important program with a worthwhile purpose. Methods to facilitate adherence warrant further study.

Figure

- IPLEDGE Program and Pregnancy Testing: What You Need to Know
- Filling Out Your Pregnancy Test Form
- First Pregnancy Test
- Next Pregnancy Test
- Pregnancy Test Reminder
- Final Pregnancy Test