

Prevention for Positives: Project LINK

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1 Background

The Moore Clinic of Johns Hopkins Hospital is an outpatient center for HIV positive patients. Services include primary care, social work, mental health services, and access to an on-site pharmacy. Project LINK is a nurse-lead program at the Moore Clinic aimed at improving adherence with antiretroviral therapy (ART).

Successfully managing HIV is largely dependent on adherence to ART. Yet a recent meta-analysis showed that 45-55% of known HIV infected individuals in the United States had not received any HIV care in the past year, while 25-44% of HIV positive patients were entirely lost to follow-up (Gardner et al., 2011). Non-adherence to ART increases drug treatment resistance, risk for opportunistic infections, and rates of mortality.

Main barriers to successful ART include delaying or not initiating therapy, prematurely stopping therapy, inconsistency in adherence, and developing drug resistance (Gardner et al., 2011). Other barriers to adherence commonly include forgetting, being away from home, or adverse side effects; situational factors such as depression, stress, and lower education have been associated with less confidence in the ART regimen and in one's ability to adhere to medication (Reynolds et al., 2004).

The goal of Project LINK is to provide tailored support for ART adherence and HIV management for patients who experience multiple barriers to therapy. Adherence interventions are directed at providing assessment, support, and information to patients who present with multiple barriers to care.

2 Methods & Materials

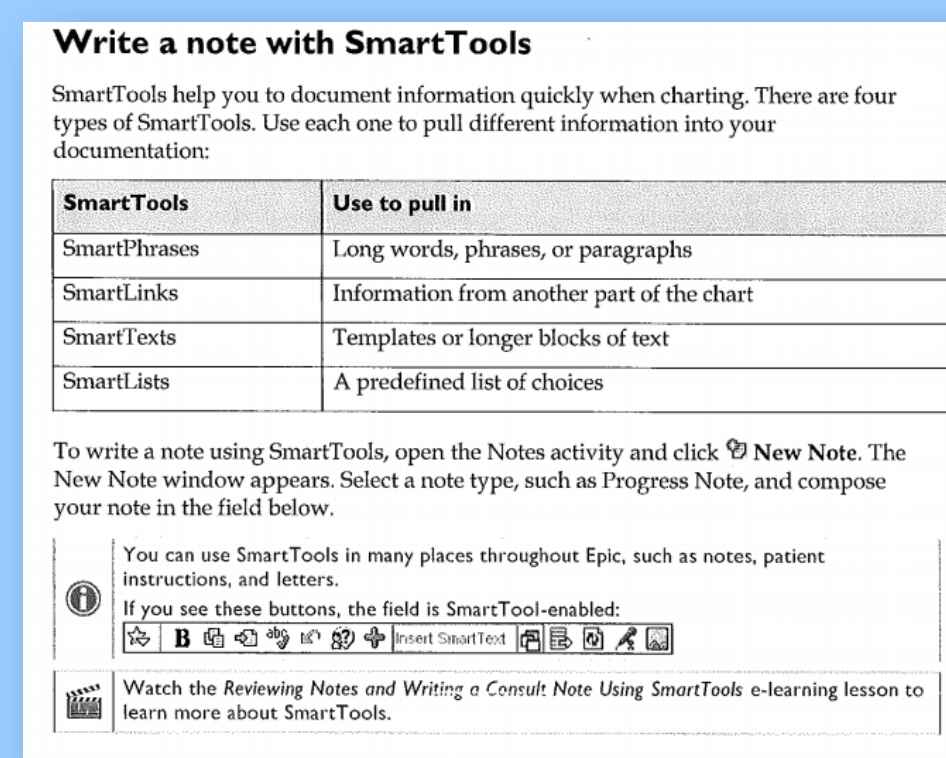
An EPIC template for LINK visits was created in order to standardize visits and track data. Data of interest included the number of participants over time, barriers & facilitators to adherence and clinic visits, and what educational materials have been used and with what success. The template was designed to prompt nurses to gather patient information, minimizing gaps in data and providing a clear picture of an individual's health status.

Five Project LINK Lessons were updated to facilitate visits and provide patients with needed education regarding HIV treatment. Lessons provide patients with information about HIV and how to manage their medications, and are conducted one-on-one by the nurse during the patient's visit.

In addition, educational resources were created in order to provide patients information regarding treatment as prevention, harm reduction, pre-exposure prophylaxis (PrEP), and free local HIV testing agencies.

Project LINK: EPIC template

EPIC templates have *smartphrases* to prompt authors to address specific topics.



LINK Lessons

Lesson 1: HIV & Immune Function

- Basics of HIV
- Impact on immune function
- HIV transmission
- CD4 & Viral Load

Lesson 2: Opportunistic Infection and Prophylaxis

- How decreased immunity can lead to opportunistic infections
- Examples of infections (signs & symptoms)
- Purpose of prophylactic medications and directions on how to take them

Lesson 3: HAART

- Goal of therapy & purpose of combination therapy
- Drug resistance
- Side effects and management
- Forgetting or missing doses
- The ALL or NONE Rule

Lesson 4: Management of Medications

- Determining readiness for ART
- Checklist for nurses regarding patient education

Lesson 5: Putting it all Together

- Review resistance, the ALL or NONE Rule, ART regimen, side effects, and learn how to use a pill box

Educational Materials & Resources



3 Discussion

ART adherence is critical in managing HIV infection; however, adherence also poses one of the greatest challenges for many HIV positive patients. The complexity of the disease requires a high degree of patient responsibility to not only understand their infection, but also how to prevent the progression of HIV while minimizing risks to others.

Patients who are enrolled in Project LINK are provided with increased support through tailored patient education and tools to increase ART adherence. By using the EPIC template, nurses are able to identify common themes in ART adherence, which may inform future interventions for patients at the Moore Clinic.

4 Future Directions

The data derived from the EPIC template will enable nurses to create specific interventions and adapt LINK visits based on demonstrated patient needs.

In addition, future analyses should be done to identify the rates of ART adherence among Project LINK participants over time. Further investigation should also be conducted to evaluate the effectiveness of LINK lessons and the patient education handouts.

5 Acknowledgements

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6 References

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