

Use of Widget Technology to Rapidly Disseminate Medical and Treatment Information Directly to Health Workers' Computer Desktops and PDAs

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Abstract and Objective

To assess the long term utility of using widget technology to disseminate instructional material on New York State Guidelines for post exposure prophylaxis (PEP) for HIV, the diagnosis and management of Acute HIV Infection (AHI), and implementing HIV testing in clinic settings. St. Vincent Medical Centers (SVH) in New York City, created an AIDS Widget application (AWA) to stream instructional data directly to providers' computer desktops via a Widget application. Users download AWA from a central website www.ceitraining.org. Results indicate that the innovative use of Widget technology may have substantial application for delivery of crucial health instruction/information and technology.

Keywords:

Widget technology, Health education, Information exchange

Methods

Authors designed AWA skin and filled Tabs 1 to 8 with streaming content on PEP, AHI, Hepatitis prophylaxis and required HIV testing forms and documentation. Clicking on desktop icon reveals Widget. Clicking on tabs immediately streams content to a user. Authors launched the AWA on 09.08 and advertised its accessibility via news articles, the Web and email. A backend management system permits authors to monitor the number of downloads and the number of times each element of the Widget are accessed by users.

Results

Since 9.08.2009 to 3.7.2010, or 180 days, the AWA has been downloaded on 638 unique computers with nearly 300 users successfully installing the AWA. Most downloads originated from health centers in New York and surrounding States. Notably, health centers from around the world have also downloaded the AWA International locations include (Europe, South America, Africa, Middle East, and Canada). (See Figure-1). About 3 new users/day download the AWA. Dividing 5,989

by 180 days we see that AWA users view widget pages 33 times/day. (See Table 1)

Fire walls at large facilities can prevent Widget download, in such cases Information Technology (IT) departments must work with Widget publisher to assist users in downloading the AWA.

Table 1-User patterns of AWA

WIDGET ACTIVITY BY SECTION VIEWS	
Home:	965
Videos	
nPEP:	1489
oPEP:	509
pPEP:	380
AHI:	561
Guidelines	
PEP & AHI Guidelines:	635
HEP Guidelines	479
Consent Forms:	583
HIV Testing:	388
Total	5989

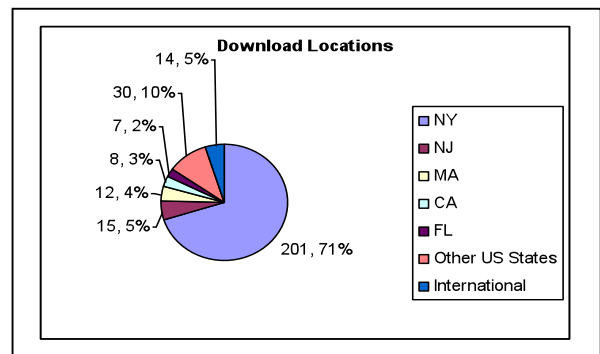


Figure 1 -Download locations

Conclusions

Engineering Widget technology to permit organizations to push current medical, health care and treatment instruction/data to

end users may constitute a substantial technical leap over existing approaches that providers use to access regularly required information. A Widget can be always “on” permanently update Health Care Workers and permit them with immediate access to data. Widgets thus reduce or eliminate time-consuming and ineffectual web searching [1] and permit Widget publishers to push important health information onto users’ desktops. IT firewalls can slow dissemination of application.

References

- [1] Cline, RJW and Haynes KM, Consumer health information seeking on the Internet: the state of the art. *Health Education Res* 16(6), 671-692, Dec 2001 Oxford University Press.