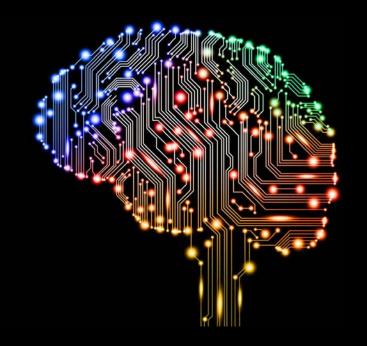
Innovative IT approaches in HIV

Tarandeep Anand

tarandeepsinghanand@gmail.com tarandeepsinghanand@med.unc.edu



Co-founder, Adam's Love and TemanTeman.org The Thai Red Cross AIDS Research Centre

Research Scholar, Behavior and Technology Lab, Institute for Global Health and Infectious Diseases, UNC





Never before has all of humanity been *connected* in this way



3,280,641,778

Internet Users in the world



974,213,465

Total number of Websites



181,542,713,058

Emails sent today



3,716,465,307

Google searches today



3,439,068

Blog posts written today



502,614,013

Tweets sent today



8,138,411,141

Videos viewed today on YouTube



67,915,538

Photos uploaded today on Instagram



101,637,820

Tumblr posts today



1,569,323,202

Facebook active users



420,407,866

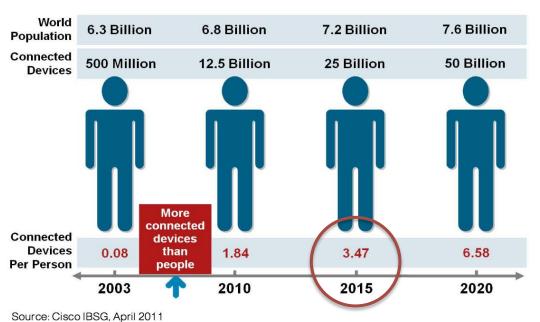
Google+ active users



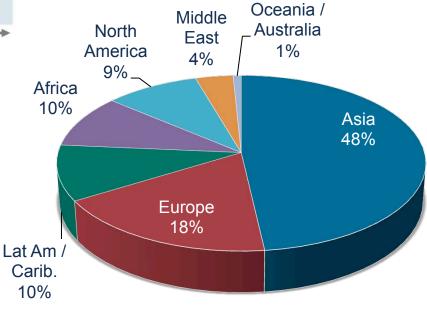
329,730,569

Twitter active users

The Internet of Things (IoT)



Internet users by regions





The era of Infobesity

Population in Thailand



67M

Mobile subscription



110M

Photo uploaded



496M

Time spent online

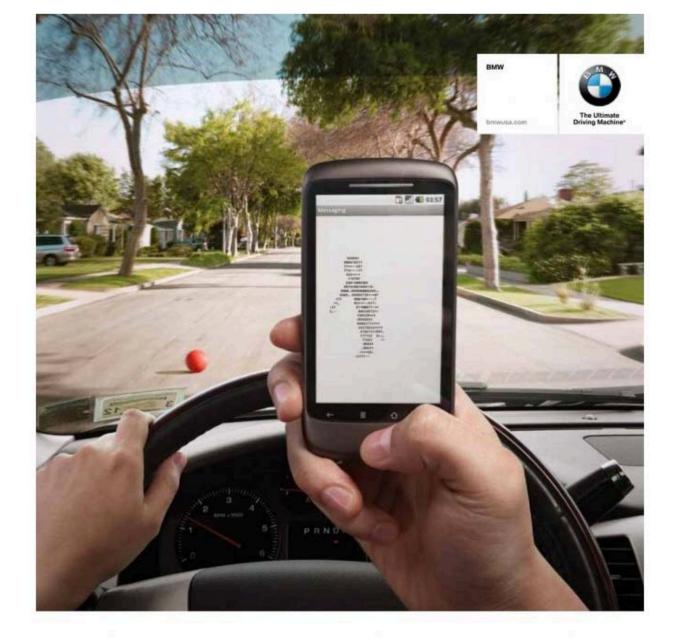


7-8 hrs/day

Smartphone activated



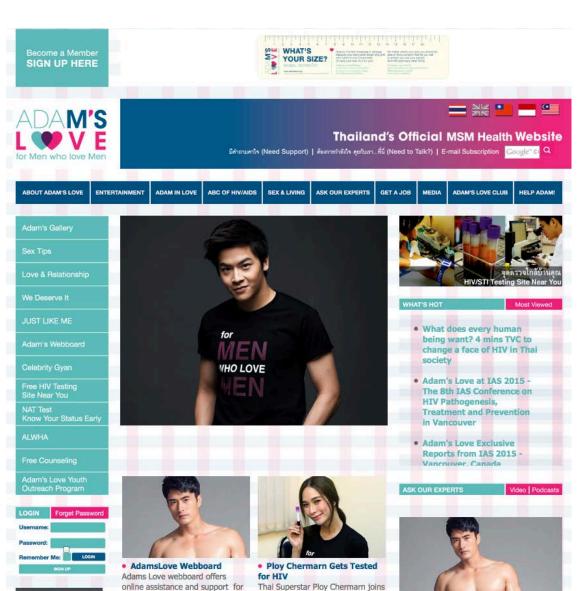
176 times/day



DON'T TEXT AND DRIVE.

You can't count on a text message to reveal what's happening on the road in front of you. That's why, each year, an estimated 100,000 crashes have been tied to texting and driving, while an additional 1.2 million crashes involve other cell phone use.

www.adamslove.org



Adams Love and gets tested for

HIV testing in Thailand

HIV to promote early and routine

all your HIV and STI related

inquiries. We encourage you to post your questions regarding your

sexual health and our experts at

The Thai Red Cross AIDS Research

Adam'.

Adam's Love



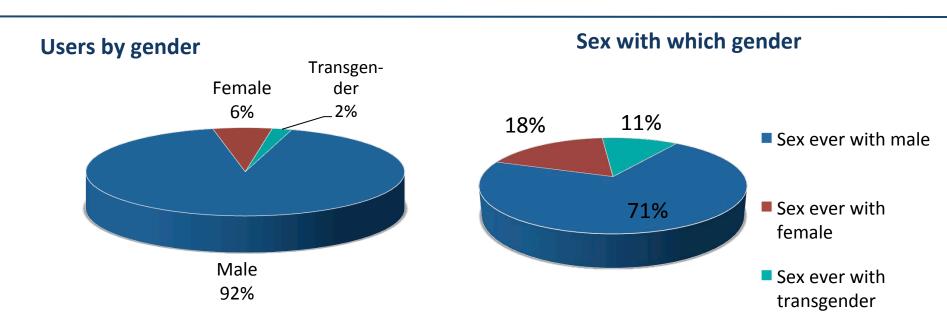


2,590,000 Visitors 11,800,000 Page views 202,000,000 Hits

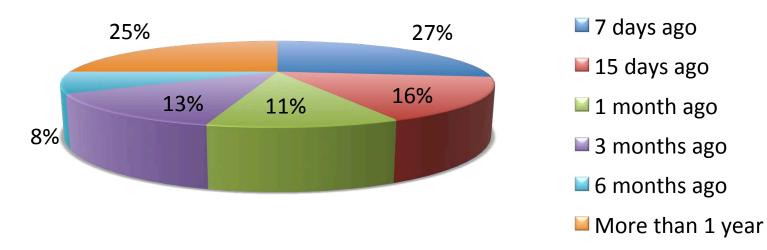
Top visiting countries

- 1) Thailand (84%)
- 2) USA (4.2%)
- 3) Taiwan (1.8%)
- 4) Laos
- 5) China

Adam's Love user demographics

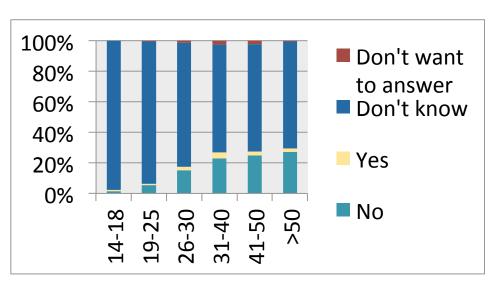


Last risk exposure but haven't received HIV test

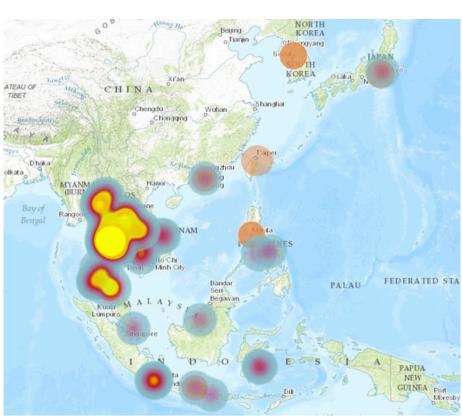


Adam's Love members demographics

Website registration responses (n=5,853)



HIV status by age group



MSM Hotspots

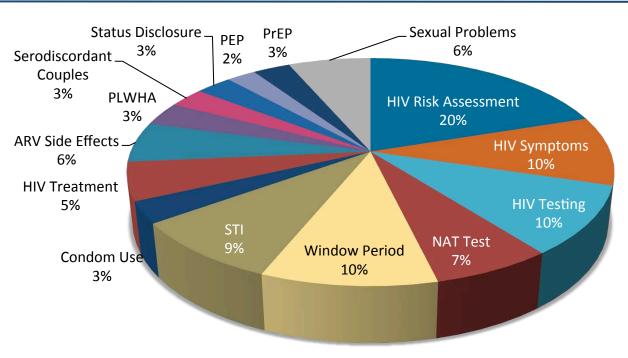
BANGKOK

- 1) Silom
- 2) Jatujak
- 3) Ratchada

THAILAND

- 1) Bangkok
- 2) Chiang Mai
- 3) Pathum Thani

Online counseling



Counseling topics

Online referral	n = 17,357		
HIV testing	12,930		
STI testing	1,909		
HIV treatment and medication	1,321		
PEP and PrEP	867		

Characteristics of MSM recruited online through Adam's Love

(n=1,482)					
	n=1,482				
HIV status		Number of sexual partn	ers in the past month		
Negative	1,264 (85.3%)	Less than 5	,224 (82.6%)		
Positive	218 (14.7%)	6-20	250 (16.9%)		
NEW STOCK STATE OF THE STATE S	Complete Com	21-50	8 (0.5%)		
Age group, years		More than 50	0 (0%)		
14-18	52 (3.5%)				
19-25	669 (45.1%)	Condom use in the past	t month		
26-35	614 (41.4%)	Always	698 (47.1%)		
36 up	147 (10%)	Sometimes	420 (28.3%)		
<u> </u>		Never	170 (11.5%)		
Gender identity	7 TTT 12 TTT	No sex	194 (13.1%)		
Gay or MSM 1,333 (89.9%) Bisexual 120 (8.1%)		Planned interval for next HIV test			
Transgender	29 (2.0%)	Within 3 months	400 (27%)		
Transgender	29 (2.0 /0)	3-6 months	595 (40.1%)		
Disclosure status of gender identity		6-9 months	111 (7.5%)		
Open (out)	857 (57.8%)	9-12 months			
Discreet (hidden)	625 (42.2%)	에게 이 - 이름 (하는 기계에 프로그램을 중심하는 기계 기계에 기계	54 (3.6%)		
	(/ 0 /	More than 12 months	39 (2.6%)		
		Not sure	283 (19.1%)		

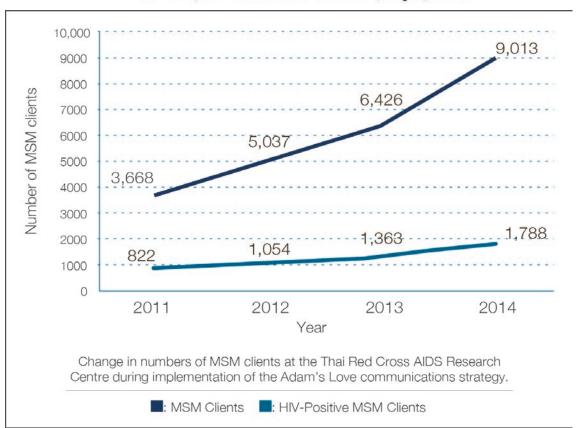
Innovative strategies using communications technologies to engage gay men and other men who have sex with men into early HIV testing and treatment in Thailand

Tarandeep Anand*1,2, Chattiya Nitpolprasert^{1,2}, Jintanat Ananworanich^{1,2,3}, Charnwit Pakam^{1,4}, Siriporn Nonenoy^{1,2}, Jureeporn Jantarapakde¹, Annette H Sohn⁵, Praphan Phanuphak^{1,2}, Nittaya Phanuphak^{1,2}

¹Thai Red Cross AIDS Research Centre, Bangkok, Thailand ²SEARCH, Thai Red Cross AIDS Research Centre, Bangkok, Thailand

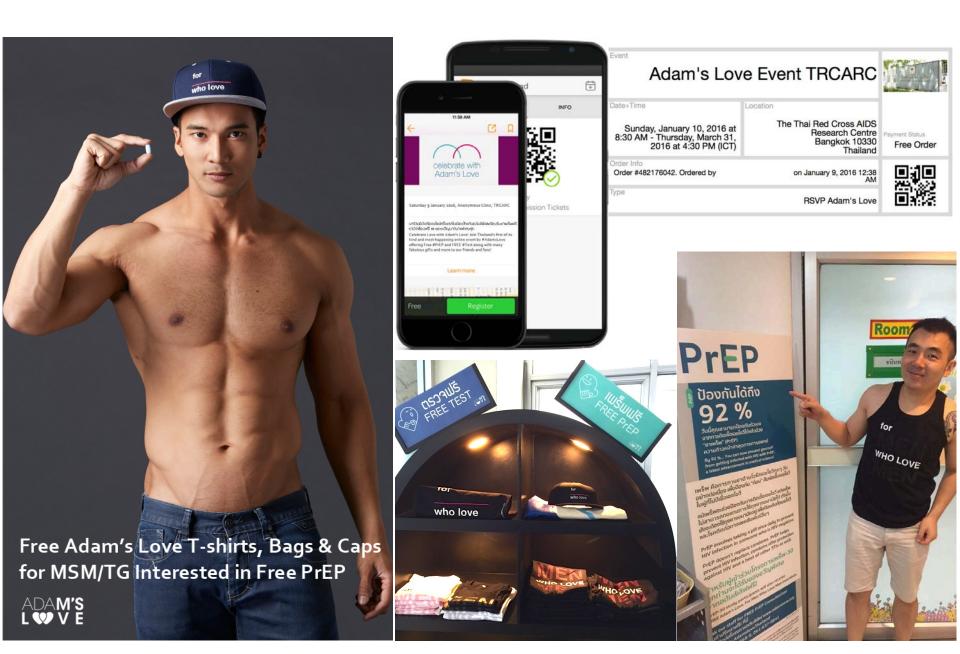
³Present address: US Military HIV Research Program, Walter Reed Army Institute of Research, Silver Spring, MD; and Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD, USA

⁴MSM Sexual Health Clinic, Thai Red Cross AIDS Research Centre, Bangkok, Thailand ⁵TREAT Asia/amfAR–Foundation for AIDS Research, Bangkok, Thailand



25% increase in MSM clients at Anonymous Clinic, The Thai Red Cross AIDS Research Centre

Innovative Online Model for PrEP Scale-up







INDONESIA

Enter Site

MALAYSIA Enter Site

Press conference reducing HIV testing related stigma

Fashion photography exhibition at Jakarta's leading mall 15 high profile Indonesian celebrities featured 90,000 visitors in 5 days















Let's have HIV test for free. Senayan City Sabtu-Minggu ini (10-11 Mei) dan dapatkan t-shirt dari @heytemanteman



10:57 PM - 8 May 2014



Impact

- 103 people volunteered for rapid HIV testing in 2 days
- 47.5% of age group 18 25 years
- Majority (84.4%) were first time testers
- Most were men (79%), more than half (51.4%) were MSM
- 42.7% reported never using condoms
- Overall 392 people received HIV testing at linked sites, 86 people diagnosed HIV positive (Nov 2013 – May 2014)



bunga citra lestari

@bclsinclair FOLLOWS YOU

Singer & Actress from Indonesia

- Jakarta, Indonesia
- (L) Joined May 2009

6,161

PHOTOS/VIDEOS 539

FOLLOWING 145

FOLLOWERS 3.47M

FAVORITES 12

More V

Tweets

Tweets and replies



bunga citra lestari @bclsinclair · May 8

By @heytemanteman "LakukanTes #HIV Dapatkan Tshirt Dari @heytemanteman hanya di @senayancity May 10... instagram.com/p/ntCA2pNEzG/







000

- Nearly 7 million fans reached
- Website gained 694,812 visitors2.5 million pages viewed
- YouTube gained 287,843 views



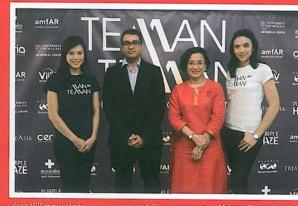
Launch Press Conference in Kuala Lumpur to scale-up early HIV Testing and Treatment





Launch of TemanTeman.org to Curb the Rise in HIV/AIDS in Malaysia

In conjunction with World AIDS Day in December last year, a new resource centre was launched to address the alarming rise of HIV/AIDS in the country. TemanTeman org, a non-government organisation, was officially launched to provide information and help address the spread of HIV/AIDS, and to bring together local experts in the field, pioneers as well as celebrities through a unique online interactive campaign that leverages on the power of social media networks. The initiative was aimed at amplifying and promoting information about the treatment, care and support for those at risk.



Website to raise awareness on AIDS

Online resource centre launched to provide relevant information and support

By KELLY TEY kellytey@thestar, com.my

treated early, patients can pretimuch lead normal lives," said Prof Adeeba.
TemantTeman.org ambassadd carmen So and Diana Danielle also made the first move by vol untevering to get tested.

HEART WAS AND THE WAS AND THE

The state of the s

Yahoo Singapore shared a link.
11 hours ago 🚱

Malaysia launches TemanTeman, a one-stop service centre providing comprehensive information related to sexually-transmitted diseases, to encourage HIV-infected people to come forward for treatment.



AIDS awareness still low in Malaysia, says expert sg.news.vahoo.com

While AIDS-related deaths in the Asia-Pacific region have declined by nearly 40%, Malaysia recorded an increase of 20% in the number of deaths since 2005. The lack of awareness and reluctance to get tested were among the factors contributing to the increase, said Universiti Malaya's Medical Faculty dean and Medicine and Infectious...

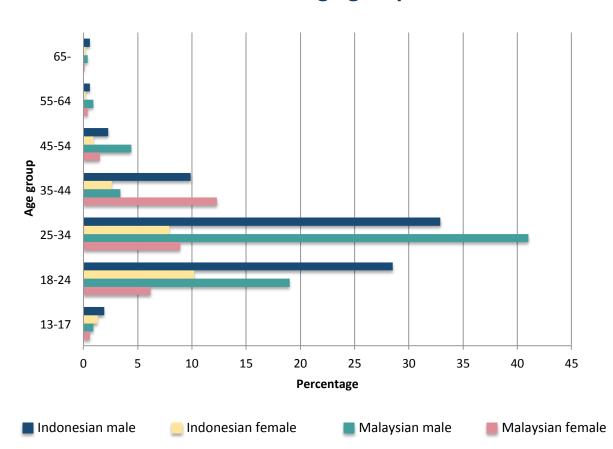
Media coverage value **215,000 USD**

Circulation and viewership
More than 14 Million readers

Malaysia 67.5%

Indonesia 30.5%

Comparing Indonesian and Malaysian users Online engagement in HIV awareness based on age group





HIV/AIDS Symptoms - Gejala-Gejala HIV, www.temanteman.org Indonesia





www.adamslove.org/tw



Collaboration with Taiwan's largest MSM Sauna







(Adam's Love 問卷調查) 齊心努力 讓愛遊成為歷史

Adam's Love 是表版紅十字會獎站研究中心所屬的獨立 研究計畫,宗旨在推動零级視定期節極及預防性投棄支 捷、從泰順。馬來西亞、印尼等國際的 志社群與文藝與架活動,有效傳達服务的防疫肌息保護 個人健康外、更更「讓變滅成為歷史」。2015年度工作 以台灣為溫點。由台北榮縣、高越學練、以及成大藝院 提供藝榜支援、ANIKI 非常樂學成為合作推動夥伴,也 斯特大家計畫經過。

面對傳染病的威脅,有限的資源必須妥蔔安排才能有效 發揮勃簽戰力。防疫政策制定有賴計劃研究結果,而研 究必須免了解問題現況。這就有勞大旗幫忙填一下問卷 關查了! 確實回答問卷問題將有助研究人員正確分析疾 病傳播模式,並提出更有效的防疫策略。

ANIKi 特別在 LINE@ 官方帳號設定《Adam's Love 問 勢調查》協助計畫進行,方便大家以匿名方式提供研究 所需資料, 完成問卷後將自動發出線上優惠券, 慈謝各 但對 Adam's Love 計畫的支持。

憑券於2015年12月31日前 · 會員任一週四全時段可享 NT\$100 優惠價入場一次 · 非會員可享申酬會顯當次免費入場

歡迎踴躍參與. 為愛滋防疫共盡心力!

Adam's Love 計畫官方網站 www.adamslove.org

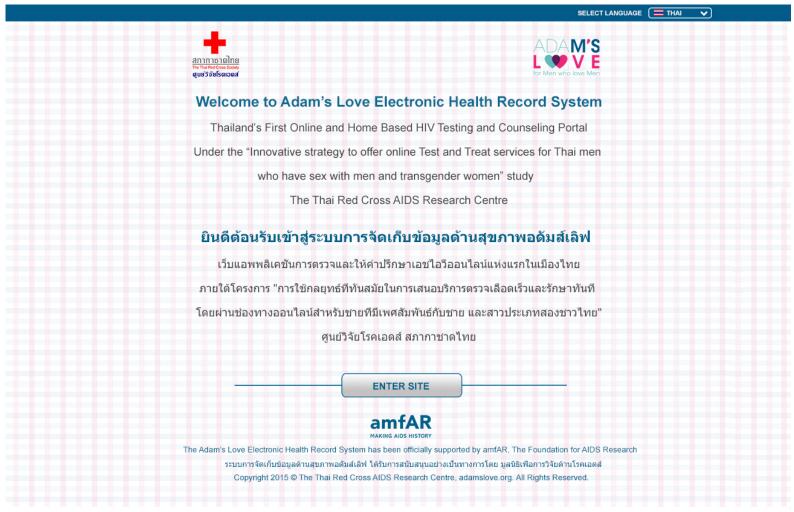
加入 ANIKI LINE@ 官方帳號

(n=809)				
	n=809			
HIV status		Time spent using social media/day		
Negative	664 (82.1%)	Less than 1 hour/day	221 (27.3%)	
Positive	44 (5.4%)	1 - 3 hours/day	319 (39.4%)	
Unsure	76 (9.4%)	3 - 5 hours/day	88 (10.9%)	
Not answer	25 (3.1%)	More than 5 hours/day	, ,	
Age group, years		Use social media to find sex partners		
14-18	18 (2.2%)	No	255 (31.5%)	
19-25	237 (29.3%)	Yes	554 (68.5%)	
26-31	276 (34.1%)			
31-40	220 (27.2%)	Number of sexual partners in the past i		
40 up	58 (7.2%)	≥1	171 (21.1%)	
·		2-5	374 (46.2%)	
Gender identity		6-10	159 (19.7%)	
Gay or MSM	652 (80.6%)	11-20	58 (7.2%)	
Bisexual	138 (17.1%)	≤21	47 (5.8%)	
Male	17 (2.1%)	Condom use with last anal sex		
Transgender	2 (0.2%)	No	193 (23.9%)	
Disclosure status of gender identity		Yes	616 (76.1%)	
Open (out)	97 (12%)	Head we are attended drawn in	the close Comments of	
Discreet (hidden)	712 (88%)	Used recreational drugs in		
,	• •	No	688 (85%)	
		Yes	121 (15%)	

ANIKI sauna Facebook post offering membership discounts for MSM who complete the survey

Survey responses of 809 Taiwan sauna MSM clients using LINE application

Asia's First Electronic Health Record System for MSM and TG Health





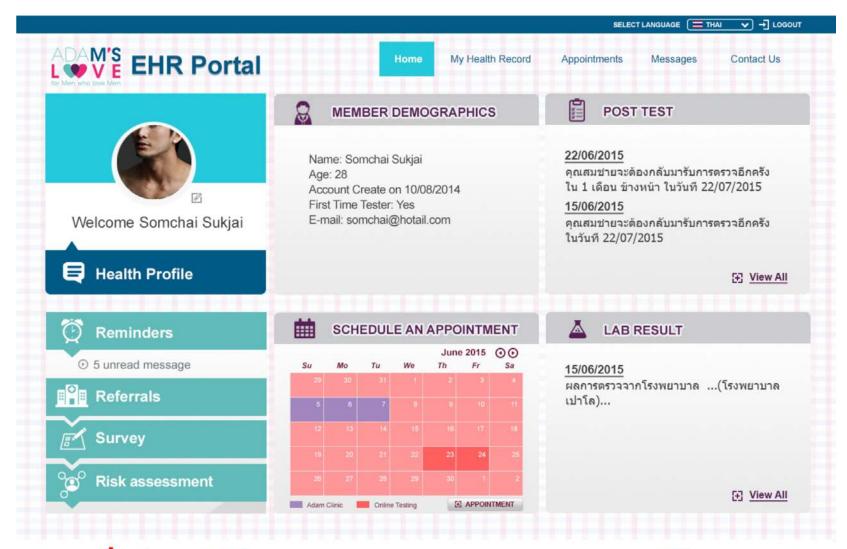








Adam's Love EHR System

















Security breaches have become an epidemic!

- IBM's DB2 Technology & Websphere Portal
- User Authentication Management "Ensuring that users are who they say they are" - LDAP (Lightweight Directory Access Protocol)
- Double Privacy Layer One-time passwords (OTP) system
- Private IP, Server and Firewall
- Troubleshooting (video) to avoid complications during internet loss or hangup



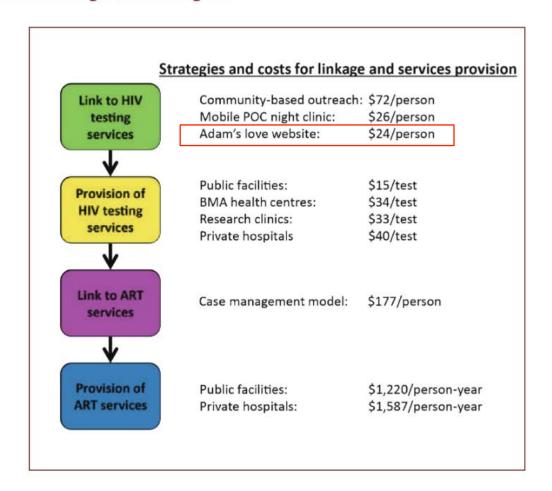
Two-factor authentication (2FA)

Scaling up of HIV treatment for men who have sex with men 🐪 📵 in Bangkok: a modelling and costing study



Lei Zhanq*, Nittaya Phanuphak*, Klara Henderson, Siriporn Nonenoy, Sasiwan Srikaew, Andrew J Shattock, Cliff C Kerr, Brenda Omune, Frits van Griensven, Sutayut Osornprasop, Robert Oelrichs, Jintanat Ananworanich, David P Wilson

Figure 2 Strategies and costs for linkage and services provision of HIV testing and treatment among MSM in Bangkok.



IT & IoT are no longer a future trend. It's already happened!





Improve HIV Prevention & Treatment Cascade



Collaboration with SILS

Understanding Closeted, discreet, 'Hard to Reach' and at-risk Asian MSM and Transgender Individual's

Health Seeking Behavior and Needs for Information

8509 different keyphrases	Search	Percent
คลีนิคนิรนาม Anonymous Clinic	729	4 %
คลินิกนิรนาม	380	2 %
อาการโรคเอตส์ HIV/AIDS Symptoms	225	1.2 %
โรคเอชไอวี HIV	169	0.9 %
อาการของโรคเอตส์ AIDS Symptoms	138	0.7 %
โรคเอส ไอ วี อาการ	122	0.6 %
ลักษณะ ของ โรค เอ ส	96	0.5 %
อาการเอตส์	88	0.4 %
อาการโรคเอต	86	0.4 %
อาการโรคเอชไอวี	86	0.4 %
Other phrases	15979	88.2 %

	8114 different keywords	Search	Percent
ce:	8114 different keywords		7.2 %
hiv คลีบิคบิรบาม		2503	117.11
	Anonymous Clinic	1113	3.2 %
อาการ	Symptoms	651	1.8 %
คลินิกนิรนาม		523	1.5 %
ตรวจ	Test	464	1.3 %
โรคเอชไอวี	HIV	340	0.9 %
ไอ		335	0.9 %
ី		333	0.9 %
http		303	0.8 %
ราคา	Price	293	0.8 %
nat	Nucleic Acid Testing	284	0.8 %
เอดส์	AIDS	262	0.7 %
test		260	0.7 %
โรค		257	0.7 %
เอ		254	0.7 %
อาการโรคเอดส์	AIDS Symptoms	232	0.6 %
นิรนาม	Anonymous	229	0.6 %
ผู้ชาย	Man/Men/Male	214	0.6 %
คือ	Mai / Mei / Maie	207	0.6 %
ตรวจเลือด	Blood Test	183	0.5 %
strip	D.004 1001	179	0.5 %
1004		164	0.4 %
ระยะแรก	Early Stage	154	0.4 %
เชื้อ	Virus	152	0.4 %
คลีนิค		149	0.4 %
Other words	Clinic	24409	70.8 %











Thailand's Official MSM Health Website

MEDIA

ET A JOB

มีคำถามหาใจ (Need Support) | ต้องการกำลังใจ ๆแก้แลว...ที่นี้ (Need to Talk?) | E-mail Subscription | Coogle" Cu 🔍

HELP ADAM!

Adam's Gallery Sex Tips Love & Relationship We Deserve It JUST LIKE ME	* Please Please k website. for your	fill every form		er, signin her lop suitable o	e ontent for the Thank you so mu
Love & Relationship We Deserve It	Please k website, for your	indly register Your informa kind contribu	to help us deve	lop suitable co	ontent for the
We Deserve It	for your	kind contribu		t anonymous.	I nank you so mu
	Lindii (d	3 dacindine)			
JUST LIKE ME					*
	Passwor	d			*
Adam's Webboard	(at least	6 alphabet)			
Celebrity Gyan	200000000000000000000000000000000000000	password			*
Free HIV Testing Site Near You					
NAT Test Know Your Status Earl	Firstnam	ne			*
ALWHA	Lastnam	ie			*
Free Counseling		estate T			
Adam's Love Youth Outreach Program	Date of Dat		/ Year	*	
LOGIN Forget Passwo	1. When	e are you loca	ated?		
Password:	Othe	r, please men	tion		



ADAM'S LOVE CLUB

WHAT'S HOT

Most Viewed

- · Adam's Love launches the first ever HIV-Self Testing Video in Asia
- Celebrate Love with Adam's Love, Gifts and more
- TRCARC & Adam's Love Study on Thailand's First Innovative (Online) HIV **Testing and Treatment** Program
- Now Open! Adam's Love

ASK OUR EXPERTS





- [07 Nov 2013 19:33 pm] Member [07 Nov 2013 19:33 pm] Register [07 Nov 2013 19:34 pm] Adam's Gallery: เครียด กังวล [07 Nov 2013 19:34 pm] Adam's Gallery: ถามความเสี่ยง และผล nat ครับ จิตตก [07 Nov 2013 19:34 pm] Adam's Gallery: ถามความเสี่ยง และผล nat ครับ จิตตก [07 Nov 2013 19:34 pm] Adam's Gallery: ทุกข์ใจอย่างมาก [07 Nov 2013 19:36 pm] Adam's Gallery: ขอถามหมอคับ [07 Nov 2013 19:36 pm] Adam's Gallery: มีโครงการ หรือ อาสาสมัคร สำหรับผู้ติดเชื้อ แต่ย [07 Nov 2013 19:37 pm] Adam's Gallery: ตรวจHIVด้วยตนเอง [07 Nov 2013 19:37 pm] D ความรู้ทั่วไปเกี่ยวกับการตรวจเอดส์ [07 Nov 2013 20:11 pm] Adam's Gallery: โดนทำ Oral Sex ติดเอดส์ได้ไหมครับ
- [16 Dec 2013 07:33 am] Homepage (Thai)
- [16 Dec 2013 07:33 am] Adam's Gallery
- [16 Dec 2013 07:34 am] Adam's Gallery: รบกวนเจ้าหน้าที่หน่อยครับผม
- [25 Dec 2013 13:38 pm] D คลีนิคนิรนาม
- [25 Dec 2013 13:38 pm] Gallery
- [25 Dec 2013 13:38 pm] D เวลาทำการของคลีนิคนิรนาม

Closeted at-risk MSM Health Seeking Behavior

ARVs and cd4 / viral load.

Hi, i am a HIV+ foreigner planning to travel to Thailand, and i would like to ask a few questions regarding your healthcare facilities. I am currently prescribed Atripla in my home country but I will need to purchase more of this whilst in Thailand. I also would like to monitor my cd4 / viral load whilst I am in Thailand. Could you please tell me what kind of documentation from my home country I will need to do this? is a prescription letter from my doctor enough? Thanks in advance.

Posted by: view: 1021 1 last reply

Date: 25 Apr 2015

Just tested poz... what now?

I've just tested positive. The doctor suggested I get some additional tests (liver function, blood counts, etc) when he notified me of my test results, but I was too upset to do anything else at the time. Since it was at a hospital and I'm not Thai, I would also have to pay for everything (about 5,000 baht) which I really don't have right now. I know that I can get medicine at the clinic there at a cheaper price... but can these other tests be done there too? If so, what do I need to do? Do I make an appointment or just walk-in? I don't live in BKK so I would need to travel down there for whatever. Honestly... I'm just a bit in shock still and just don't know what I need to do to start the whole process for treatment. Thanks!

Posted by: view: 1048 1 last reply

Date: 13 Apr ZULD

Some questions about PrEP-30

Dear sir/madam, I am a foreigner. I have some questions about the PrEP-30 program at the Anonymous Clinic. I list as below: 1. May I know what is the service hour for PrEP-30? 2. Do I need to bring my passport or any other documentation? 3. Do I need to make an appointment in advance? If the answer is yes, in which way I can make an appointment (by phone? by e-mail? by website?) 4. Can you descirbe briefly about what I should do when I arrive Anonymous Clinic? (I guess I have to go to MSM clinic on 1st floor, but then?) 5. How long will it take for the whole procedure of PrEP-30 when we visit anonymous Clinic? 6. If I only visit Thailand for a 5-7 days-stay (or shorter), is that possible I can still get PrEP-30 service? (I meet your criteria of PrEP-30) Sorry for so many questions. Thank you for your reply. Best regards

Posted by view: 1466 1 last reply

Date: 01 Apr 2015

HIV treatment - patient from Philippines

Hello, I've been trying to call your phone but I was not lucky to get in. I'm planning to go your clinic this coming January 14, 2015. I would like to confirm if how many days it take to complete the process and getting all the results and the medicines prescribe. Because I need to check if what day will I need to book my return trip to Manila. Also, if you can assist me on the following items:

1) What airport is near the clinic? 2) What hotel is near the clinic? 3) How much is the total cost of the laboratory, consultation and medicines? 4) What is the frequency of visit in Thailand once treatment has been started? Appreciate your positive reply ASAP, thanks.

Posted by: view: 1976 9 last reply:

Date: 08 Jan 2015

Purchasing Truvada from Anonymous Clinic?

Hi there, I live outside Thailand, and I have a prescription for Truvada for PrEP, however I am unable to afford the cost of Truvada in my country. Can I purchase Truvada or Ricovir-EM from the dispensary at the Anonymous Clinic? How much can I purchase at once?

Posted by: view: 2354 13 last reply:

Date: 25 Oct 2014

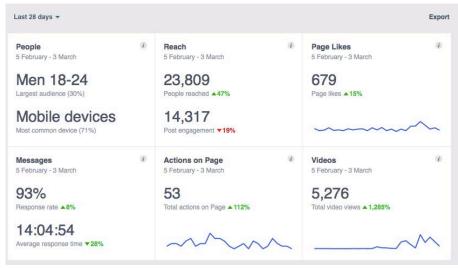
HIV relocating to Bangkok

Hi - I am given an opportunity to relocate to Bangkok but what is holding me back is that I have been tested positive. I am scared that my potential employer will find out about my status as I feel that there's still discrimination in the society that we live in. Is HIV test a must? And if I have the right to refuse a HIV test? What implication will I get myself into with the local regulation for being positive?

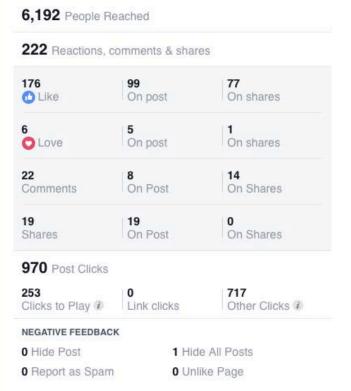
Posted by: view: **1051** 2 last reply:

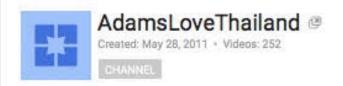
Date: 15 Oct 2014











Lifetime (May 28, 2011 - Mar 1, 2016)

▲ Data in this report may be incomplete or missing.

Data for "Average percentage viewed", "Average view duration", and "Watch time (minutes)" is not available before September 1, 2012. Traffic source and playback location classifications were updated on March 1, 2014 and June 1, 2015. Learn more.

WATCH TIME (MINUTES)

VIEWS

1 004 004+

1,8	94,084*	1,134,450				
0	Traffic source* @		Watch time (minutes)*	Views @	Average view duration*	Average percentage oviewed*
	Suggested videos @		661,009 (35%)	348,660 (31%)	1:59	46%
	Unknown – embedded pla	yer @	337,916 (18%)	220,638 (19%)	2:05	55%
0	YouTube search		283,435 (15%)	194,618 (17%)	1:34	43%
0	Direct or unknown @		242,618 (13%)	163,745 (14%)	1:42	47%
	External @		237,702 (13%)	130,888 (12%)	1:54	50%
	Browse features @		47,194 (2.5%)	15,404 (1.4%)	3:05	43%
	YouTube channels		23,033 (1.2%)	11,990 (1.1%)	2:04	45%
	External app @		18,153 (1.0%)	9,036 (0.8%)	2:00	51%
	Other YouTube features		16,391 (0.9%)	6,772 (0.6%)	2:47	49%
	Google search		12,809 (0.7%)	23,556 (2.1%)	0:49	25%
	Playlists		9,545 (0.5%)	6,181 (0.5%)	1:32	39%
	Video cards and annotation	ins	4,212 (0.2%)	2,333 (0.2%)	1:48	61%

Thank you