

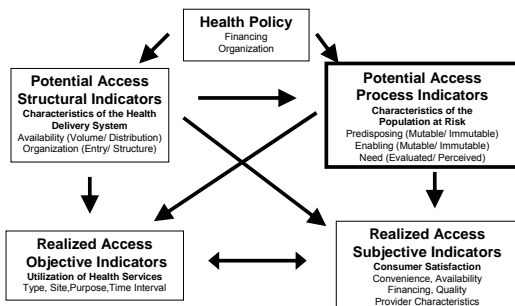
Individual Characteristics that Affect HIV Primary Care Utilization

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Purpose of Study

- Explore the association between specific characteristics of the HIV + individual and utilization of HIV medical Care
 - HIV attitude
 - Trust in health care system
 - Perceived Stigma
- Increase HIV medical care use through changes in allocation of resources and the design of the system resulting in improved quantity and quality of a HIV infected individuals' lives while decreasing strain on scarce and valuable health system resources.

Health Services Utilization Model



Research Design/ Method

- A descriptive comparative design of HIV + seeking care at 1 site in Southern LA
- Potential subjects were identified and enrolled at 1st visit
- Subject completed SUMCH completion
 - 72 (53%) subjects choose to “self completion”
 - 65 (47%) subjects choose to have assistance
- Subjects were compensated with \$10 gift card
- ~72 Days (2 months and 2 weeks), medical record were abstracted by researcher for HIV medical care utilization (U+/ U-) and CD₄ count

SUMCH

Survey for Utilization of Medical Care in HIV

- 140 item, 10 page survey
- Compiling of 4 established tools designed to measure 4 of the 5 independent factors (5th independent factor is CD₄)
 - HIV Attitude Tool* (HAT): HIV Attitude
 - HIV Stigma Scale (HSS): Perceived Stigma
 - Health Care System Distrust Scale (HCSDS): Trust in Health Care System
 - HIV Symptom Index (HSI): Perceived Need
 - Substance Abuse and Mental Illness Symptoms Screener (SAMISS)
- Demographic Data to describe sample

Sampling and Size

- METHOD: Convenience, non randomized sampling
- SIZE DETERMINATION
 - Based on validity data of SUMCH main components
 - Health Care System Distrust Scale (HCSDS) (Rose, Peters, Shea, and Armstrong, 2004)
 - HIV Symptom Index (HSI) (Justice et al. 2001)
 - Estimated 60 subjects in each subgroup
- Enrollment began June 2006
- In 2/07, 120 subjects enrolled but < 60 (n=32/ 26.6%) subjects in U-subgroup: enrollment continued for a total 12 month
- Enrollment closed in June 2007 with 137 subjects n=33/ 24% in U- subgroup)

Limitations

- One recruitment site
- Less the 60 subjects in U- subgroup
- Use of both convenience and non randomized sampling method
 - Subpopulations may not have been included
- Inclusion criteria
 - ≥ 18 years
 - Understood/ spoke English

SUMCH Demographics N=137

Gender	~ CD4 (SD)	~Age/Yrs (SD)	~Distance/Miles (SD)
M 57% (n=78)	289.67 (266.15)	38.17 (11.77)	14.25 (20.29)
F 42% (n=57)	358.86 (267.13)	37.84 (9.99)	10.47 (11.68)
T 1% (n=2)	433.00 (562.86)	23.50 (3.54)	4.50 (2.12)

SUMCH Demographics

Ethnicity	~ CD4 (SD)	~Age/Yrs (SD)	~Distance/Miles (SD)
AA 87% (n=120)	319.55 (266.01)	37.58 (11.33)	12.16 (17.59)
Caucasian 20% (n=14)	309.96 (306.96)	40.14 (9.14)	16.93 (11.95)

Katrina Effect

- 28% (n=38) subjects reported some degree of “damage” due to Hurricane Katrina
 - 2 subjects had a family member killed during the storm AND lost home due to extensive damage in the NO region
 - 1 subject had a family member killed but had no damage to her home
 - 18 subjects had home destroyed/ unlivable in the NO region
 - 17 subjects had damaged/ livable outside the NO region

Who Returned to Utilize HIV Medical Care (U+)

- Males (78.2%) vs. females (71.9%)
(chi square= 0.70, p= 0.402)
- Non AA (82.4%) vs. AA (75.0%)
(Fisher’s exact test p= 0.374)
- Non-Hetro (77.1%) vs. Hetro (75.5%)
(chi square= 0.04, p= 0.844)
- Distant Traveled of U+
 - < 10 miles (73.6%)/ ≥ 10 miles (80.4%) (p= 0.379)
 - U+ median miles 7.0 /U- median miles 6.0 (p = 0.349)

Who Returned to Utilize HIV Medical Care (U+)

- Education: (chi square= 0.90, p=0.638)
 - Some HS (72.1%)
 - HS Grad (80.0%)
 - Some college/ VT (78.0%)
- Income (chi square= 1.25, p= 0.264)
 - < 6,000/yr (74.6%)
 - > 6,000/yr (83.3%)
 - No Answer (63.6%)

Who Returned to Utilize HIV Medical Care (U+)

- HIV Transmission Risk (52% of U+ hetero risk)
 - 79% of non IVD risk returned while only 46% of those with IVD risk returned (U+) (p= 0.023)
- U+ had higher mean age:38.8 vs. 34.7
 - (p= 0.060)
- U+ had less Medium days of dx (p < 0.001)
 - U+ 57 days / U- 650 days
 - Post Hoc Pair-wise comparison of (U+)
 - <90 days (61%) (chi square= 7.49, p= 0.006)
 - 90 days-6yrs (28%)
 - > 6yrs (12%) (chi square= 6.54, p= 0.011)

Katrina Effect

- 29% affected did not return vs. 22% not affected
- 38 reported cases of “Katrina effects” classified
 - Less subjects with hurricane effect in NO utilize care (62%) vs. those who reported hurricane effect outside NO (82%)
 - Hurricane Effect in NO/ Yes: subject had a family member killed during the storm AND/OR lost their home due to extensive damage in NO region (n=21)
 - Hurricane Effect in NO/ No: subject had their home damaged but was livable outside NO region (n=17)
 - Fisher exact test p= 0.282

Effect of Service Site

Ret Rate	Better things to do (20%)	Wait too long (15%)	Hard to get here (13%)	Others Dis. Clinic (10%)	Comf in clinic (75%)
YES	89%	85%	83%	92%	76
NO	77%	74	75%	74%	76%
P	.078	.304	.430	.118	.565

SUMCH Data

	Att (26.5)	Stigma (50.5)	H Trust (9.2)	Trust (25.6)	CD4 (321.0)	Sym (27.5)
U+	26.8	48.8	9.4	25.3	322.6	27.9
U-	25.6	55.8	8.4	26.6	314.2	26.3
p	.100	.068	.178	.152	.776	.695

Health Care Prior to HIV

	Have Usual HC (32%)	No Usual HC (68%)	Pre HC Exp (24%)	No Pre HC Exp (76%)
U+	37.5% (39)	69.9% (65)	81.8% (27)	74.1% (77)
U-	15.2% (5)	30.1% (28)	18.2% (6)	25.9% (27)
P	.017		.000	
OR	3.36		1.58	

Effect of Mental Health on Return

Return Rate	Antidepression Meds (18%)	Sym depress (48%)	Sym Anxiety (42%)
Yes	84%	74%	76%
No	74%	77%	76%
p	.296	.400	.991

Social Support

Return Rates	Know other HIV+ (66%)	Told Other (74%)	Company to Clinic (52%)
YES	74%	74%	80%
NO	79%	81%	71%
p	.578	.389	.215

How did you get to clinic today?

	U+	U-
Bus or Trolley (6%)	4.8%	9.1%
Other's Car (7%)	6.7%	9.1%
Owe Car (24%)	26.0%	18.2%
Ride from other (41%)	41.3%	39.4%
Taxis/ Van Service (19%)	19.2%	18.2%
Walked (2%)	1.0%	6.1%

Barriers to Care/ Competing Needs

Factors	U+	U-	P
Homeless (28%)	25.0% (26)	36.4% (12)	.264
Incarcerated 72hr (48%)	44.2% (46)	60.6% (20)	.101
Sex for Money/Drugs (15%)	14.4% (15)	18.2% (6)	.588
Have Children (66%)	67.3% (91)	63.6% (21)	.833
Recovery (19%)	20.4% (21)	15.2% (5)	.616

Substance Use and Return

- Those with the highest Non Rx Drug use (n=12) had the HIGHEST return rate (91%)
- Overall, there was not a significant relationship between substance use and return rate
- Those that reported “more need to cutdown” on drug use were more likely to return for care (p=.042)

ETOH USE

ETOH Use	NO Use	LOW Use	MILD Use	MOD Use	HIGH Use	HEST Use
U+	20 (76%)	18 (69%)	13 (81%)	12 (92%)	6 (55%)	10 (77%)
U-	6 (23%)	8 (30%)	3 (19%)	1 (8%)	5 (45%)	3 (23%)
p	.390					

Illicit Drug USE

NON RX	NO Use	Low Use	MILD Use	MOD Use	HIGH Use	HEST Use
U+	36 (77%)	15 (83%)	10 (63%)	8 (89%)	2 (33%)	8 (89%)
U-	11 (23%)	3 (17%)	6 (38%)	1 (11%)	4 (67%)	1 (11%)
P	.124					

Misuse of RX Drugs

RX Use	NO Use	LOW Use	Mild Use	MOD Use	HIGH Use	HEST Use
U+	37 (77%)	20 (80%)	14 (64%)	6 (100%)	1 (33%)	1 (50%)
U-	11 (23%)	5 (20%)	8 (36%)	0 (0%)	2 (67%)	1 (50%)
p	.166					

Length in Recovery n= 26 (19%)

	U+	U-
>1mon (7)	4	3
1-3 mons (5)	4	1
3-6 mons (3)	3	0
6-12 mons (3)	3	0
1-3 yrs (2)	2	0
3-6 years (2)	2	0
>6yrs (4)	3	1
Total	21	5

Lessons Learned

↑ Perceived Stigma = ↓ Return

Stigma Score	Told Others	Know Others
Yes	51.7 (LESS Stigma) (n=101)	49.5 (n=90)
No	47.6 (n=34)	52.7 (LESS Stigma) (n=45)
p	.318	.450

Those who TOLD others have LESS perceived stigma
Those who KNOW others have MORE perceived stigma

↓ Trust in HCS = ↓ Return

Distrust Score	Previous HC Exposure	Usual Source of HC
YES	24.6 (n=33)	24.8 (n=93)
NO	25.9 (n=102)	25.9 (n=42)
p	.351	.338

Those with previous HC had MORE trust in HC.
Those with usual source of HC had MORE trust in HC

↓ HIV Trust = ↑ Return

HIV Trust	Comfort in Clinic	Prev HC Exp
Yes	9.1 (n=102)	9.2 (n=33)
No	9.5	9.3
P	.626	.332

Those who were comfortable in clinic had ↑ HIV Trust
Those with previous HC exp had MORE HIV Trust

↓Symptoms= ↑Return

HSI Score	Depression sym	Anxiety Sym
yes	38.62 (n=66)	20.88 (n=58)
NO	17.24	37.71
P	.000	.000

Those reporting anxiety or depression also reported more HIV related symptoms

Need For Care and Return Rate

- Contradictory trend noted in SUMCH Data
 - U-: Lower CD₄count, Less symptoms
 - U+: Higher CD₄count, More symptoms
 - Questions the generalizability of common assumption that correlate immune system state (CD4 count) with HIV symptoms' intensity and number.

Conclusion

- Key aspects to assess and intervene to assure utilization
 - Younger
 - Hx IVU
 - Higher perceived Stigma
- Challenge policies that "target"/ allocate base on specific demographic characteristics
- Trends are present and deserve additional research
 - Stigma, Trust, Attitude
 - Other Mutable Predisposing Characteristics (LOC, Empowerment, Risk Taking)
