

8.1. Abstract/Summary: Current Prioritization Methods and Current Prioritization Model for Target Populations for HIV Prevention in Pennsylvania:

Overall Objectives:

To establish an empirical process for prioritization of target populations for HIV prevention in Pennsylvania.

Background and Significance:

The CPG in PA has commissioned the prioritization of target populations in order to ensure that priority setting is fair. In pursuit of this goal the CPG has committed itself to an empirically determined objective process as opposed to the previous method that relied on subjective perceptions of committee members to set priorities. The field of prioritization of target populations for HIV prevention is still in relative infancy and is yet to be rigorously peer-reviewed, hence the difficulty in finding relevant literature.

Methods: The Priority Setting Model To Identify Target Populations and Analyses:

Transmission categories and factors by which the transmission categories would be ranked were established based on the CPG's previous priority target groups that were based on the main modes of transmission and races/ethnicities across the state. Potential factors for prioritizing the target populations that were identified included: predominant mode/risk behavior; estimated live HIV cases in transmission category as proportion of total living with HIV in Pennsylvania; estimated unadjusted relative risk or likelihood of death as an indicator of relative survival time for transmission category which is in turn an indicator of relative likelihood of increase/decrease in prevalent pool of infected persons (assuming no decline in other contributing factors); barriers to prevention; resources currently distributed to each target population; etc). Data needed for each factor and target population were gathered if it existed, new data collection and analyses were performed and made available, and data not readily available that needed to be collected were identified and plans are continuously under review to collect the needed data. The target population factors were assigned weights from 0-10, giving the most important or reliable greater weight, and the least important or reliable lesser weight. Categories within each factor were ranked and each factor assigned a relative weight compared to other factors in the model. The available data were inputted into the model (Table 1, Appendix I) and the rank for each factor was multiplied by the weight associated with the factor, resulting in a product score for that factor corresponding with the appropriate transmission category. The product for each factor by transmission category was then entered into the respective cell in the transmission category column in Table 1. The totals for each transmission category column were calculated; based on the sum of scores of the transmission category column, the percentage for each transmission category were calculated and entered on Table 1. Each transmission category was stratified by race/ethnicity to establish population-transmission categories. Each transmission category sum of scores was thus stratified by race/ethnicity according to the relative percentage of incident AIDS cases (diagnosed in more recent years, 1995-1997) in each transmission category by race/ethnicity. The population-transmission group cross-tabulation yielded population-transmission groups that were ranked according to the percentage share of the total score for all population-transmission groups (Table 2, Appendix II).

Interim Results:

The interim results of the implementation of the prioritization model at this point in the progression of the prioritization process shows the following statewide-level priority ranking of target populations-transmission groups: 1) white MSM (18.6%); 2) black IDU (15.8%); 3) black MSM/IDU (10.1%); 4) white MSM/IDU (9.0%); 5) black herero (8.3%); 6) white IDU (8.2%); 6) white hetero (8.2%); 8) Hispanic IDU (7.6%); 9) black MSM (5.8%); 10) Hispanic hetero (4.4%); 11) Hispanic MSM/IDU (3.0%); 12) Hispanic MSM (1%).

Discussion, Limitations and Recommended Future Activities for Prioritization of Target Population Groups:

In Pennsylvania, the initial primary/"macro prioritization" phase of the process of prioritization that is presented in this summary has rank-prioritized target population-transmission groups at the statewide level. It is expected that the next phase may entail a radical shift on three major fronts of the current paradigm: a) a shift from focusing on at risk HIV- populations to HIV+ populations as the key priority target population within each population-transmission group; and b) a shift from the current statewide paradigm of one set of statewide priority target populations to regional priority target populations that are more relevant to the epidemic in each region. The latter shift will result in regional priority target populations and consequently the prevention intervention plans will need to be tailored to meet the needs of the regional priority target populations. However, the CPG recognizes the resource-intensiveness and limitations of planning resources to support regionalized consultative mechanisms, hence the CPG will deliberate the consultative aspect further to determine a workable approach for taking regional perspectives into account in the translation of the regionalized priority-setting model. As additional data that is identified as needed to fully operationalize the revised model become available or as epidemic changes occur, such new data needs will be incorporated into

the model and the priority target populations will be updated at least 3 yearly. Further steps will entail secondary/“micro-prioritization” in the regional/local context of region-specific local target populations within each regional primary /“macro” priority target population (viz. prioritization of secondary/micro factors such as social and other risk-defining factors: e.g. critical secondary factors that need to be taken into account in secondary/micro prioritization within each primary/ “macro” priority target population may include the following: *younger age group* and *socioeconomic status* among black MSM; *homelessness* among white IDU; *black hetero sex workers of low socio-economic status* who *trade sex* with IDU; or *transgender, socioeconomic status* and *urban-setting* among white MSM, etc. These secondary/ “micro” factors tend to be region-specific and their relevance will need to be assessed through region-specific sub-analyses and targeted needs assessments or surveys in the respective regional target populations. Through this more specific local secondary/micro prioritization within the regional priority population-transmission groups, regional/local data may inform secondary/micro-prioritization and targeting of harder to reach poorer or homeless IDU/other substance users, incarcerated persons and those discharged from incarceration; sex workers; low socioeconomic persons (viz. homeless persons); at-risk youth/young adults, etc. A project is currently being implemented for the proposed revision of the prioritization of target population as described above.

To address the likely lack of data that would be useful for prioritization of various emerging populations, it is also recommended that the CPG set aside 3-5% of total resources available for this planning process in each year for special projects such as prioritization, rapid surveys and needs assessments among these target populations.

Public Health Use of Findings of Prioritization Analyses:

The findings of the study are used by the CPG to target prevention services to HIV infected persons most likely to transmit HIV to others and populations most at risk of acquiring HIV infection. The results of the study are also disseminated by the CPG and the State to HIV prevention service delivery partners and are used by the State in allocating prevention resources and as a guide for services provided by the Department’s HIV prevention service delivery partners.

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8.2. Abstract/Summary: Project Plan/Work Statement for Revision of Statewide Prioritization of Target Populations for HIV Prevention in Pennsylvania:

[Format based on “Guidance for Recommending Additional Analyses for Use in the Planning Process”].

1. **Main statewide or specialized planning questions/objectives to be answered with the proposed data source/study data/analyses:**

The main objectives of the project are to revise the statewide prioritization model for targeting populations for HIV prevention in Pennsylvania and collaborate with the CPG to incorporate the new priority target populations into the prevention plan.

2. **How the proposed data source/study data/analyses addresses the main planning objectives/questions outlined in #1 above;**

a. Describe the specific **project/study objectives/purpose** of the study/data collection/source/analyses proposed;

The specific project objectives are to develop a project plan and implement this plan to revise the prioritization model on aspects that include:

i) Introducing a mechanism within the revised model for refocusing the main target population within each population-transmission group to firstly identify HIV infected persons most likely to transmit HIV to others and secondly uninfected populations most at risk of acquiring HIV infection;

ii) Introducing a mechanism within the revised model for changing the current statewide paradigm of one set of statewide priority target populations to include regional priority target populations that are more relevant to the epidemic in each region;

iii) In addition to the above-outlined primary/“macro prioritization”, the project will develop a mechanism to be used as a guideline for secondary/“micro prioritization” within each prioritized regional population-transmission group [This additional step entails secondary/“micro-prioritization” in the regional/local context of region-specific local target populations within each regional primary /“macro” priority target population (viz. prioritization of secondary/micro factors such as social and other risk-defining factors: e.g. critical secondary factors that need to be taken into account in secondary/micro prioritization within each primary/ “macro” priority target population may include the following: *younger age group* and *socioeconomic status* among black MSM; *homelessness* among white IDU; black *hetero sex workers* of *low socio-economic status* who *trade sex* with IDU; or *transgender, socioeconomic status* and *urban-setting* among white MSM, etc. These secondary/ “micro” factors tend to be region-specific and their relevance will need to be assessed through region-specific sub-analyses and targeted needs assessments or surveys in the respective regional target populations. Through this more specific local secondary/micro prioritization within the regional priority population-transmission groups, regional/local data may inform secondary/micro-prioritization and targeting of harder to reach poorer or homeless IDU/other substance users, incarcerated persons and those discharged from incarceration; sex workers; low socioeconomic persons (viz. homeless persons); at-risk youth/young adults, etc.]

b. **Study population/setting**, sample size, representativeness of study and generalizability/applicability of findings of study/data source from which the data to be analyzed is derived;

The study population for data collected for use in prioritization is the Pennsylvania population of persons infected with HIV who are at risk of transmitting HIV and those who are uninfected but at risk of new infections. The prioritization plan and data used to ‘operationalize’ the model must therefore be applicable on a statewide and regional level and data sources used must be of sufficient sample size to assure representativeness of the population groups that the results of the model will be applicable to. This is necessary to ensure that the findings/results of the analyses of the model are generalizable across the state and at a regional level.

c. **Study methods and procedures** (attach data collection forms used to collect the data to be analyzed where applicable);

The methods to be followed to revise the model for prioritization will follow the established procedures used for the current model as described in the abstract describing the current model and results (see Section 1.1. Page 1-2). The procedures and model revision will be consistent with CDC guidance outlined below.

CDC-guidance for prioritization of target populations:

All jurisdictions receiving CDC prevention funding must establish a prioritization process for target populations and interventions to be applied to the target populations. To support establishment of this process, the CDC provides guidance for establishing priorities. It envisions prioritization occurring in two ways:

I) Prioritization of target populations at risk of HIV transmission.

II). Prioritization of HIV-prevention interventions for each target population.

The CDC recommends the following "key priority setting tasks":

- 1). Identify target populations.
- 2). Identify potential factors for prioritizing target populations (e.g., AIDS case rates, HIV transmission rates, barriers to prevention, etc.).
- 3). Gather existing data sets or identify new data you need for each factor for each population.
- 4). Weight target population factors (giving the most important or reliable greater weight, and the least important or reliable lesser weight).
- 5). Rank and score target populations using the above factors.
- 6). Use the above scores to prioritize the target populations.
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- 7). Identify a list of interventions for each target population.
- 8). Identify factors for each intervention.
- 9). Gather data on each factor for each intervention.
- 10). Weight intervention factors.
- 11). Rank and score interventions for each target population using factors.
- 12). Prioritize interventions for each target population.
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- 13). Review and evaluate the overall priority-setting process.
- 14). Incorporate the above prioritization process in writing the prevention plan.
- 15). Review the health department application and determine concurrence.

d. **Public Health applicability/recommendations possible/anticipated:**

The prioritization model will generate specific recommendations of population-transmission groups that should be targeted for HIV prevention at the statewide and regional level.

3. Summary of **Public Health inference for planning that is possible/anticipated** from the use of findings/data from the proposed data source/study data/analyses;

The findings of the revised model for prioritization of target populations for HIV prevention are to be used by the CPG to target prevention services to HIV infected persons most likely to transmit HIV to others and populations most at risk of acquiring HIV infection. The results of the study are also disseminated by the CPG and the State to HIV prevention service delivery partners and are used by the State in allocating prevention resources and as a guide for services provided by the Department's HIV prevention service delivery partners. Regional HIV prevention service delivery partners will also use the prioritization as a guide for targeting prevention services at the regional/local level.

4. **Timeline of Project** (% Projected FTE Effort):

Phase I: January 2005- February 2005: plan development, revision of model, departmental and external peer review, and community planning review of conceptual framework (25% Effort);

Phase II: March 2005 – April 2005: procurement of data sources, application of data in model and generation of results (20% Effort); **Phase III: May 2005:** departmental and external peer review, community planning review (20% Effort);

Phase IV: May-June 2005: alignment of target populations with priority interventions (25% Effort);

Phase V: July 2005: update of prevention plan (20% Effort);

Phase VI: August 2005 onwards: dissemination of priority target populations and interventions (20% Effort);

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Abstract/Summary of Step 1* of the Refined Model's Interim Methods & Results for Statewide Prioritization of Regional HIV Prevention Service Areas in Pennsylvania.

Objectives:

The overall objective is to establish an empirical process for prioritization of target populations for HIV prevention in Pennsylvania. The specific objectives of the state-commissioned Project for Refinement of the Model for Prioritization of Target Populations for HIV Prevention are to develop a project plan and implement this plan to revise the prioritization model on aspects that include:

- i) Introducing a mechanism within the revised plan/model for refocusing the main target population within each population-transmission group to firstly identify HIV infected persons most likely to transmit HIV to others and secondly uninfected populations most at risk of acquiring HIV infection;
- ii) Introducing a mechanism within the revised plan/model for changing the current statewide paradigm of one set of statewide priority target populations to include regional priority target populations that are more relevant to the epidemic in each region;
- iii) In addition to the above-outlined primary/"macro prioritization", the project will develop a mechanism to be used as a guideline for secondary/"micro prioritization" within each prioritized regional population-transmission group;

Background and Significance:

The HIV Prevention Community Planning Group (CPG) in PA has commissioned the refinement of the current model for prioritization of target populations for HIV prevention in order to ensure that priority setting is fair, equitable and driven by supporting data to focus on those indicated to be in need of HIV prevention services. In pursuit of this goal the CPG has committed itself to an empirically determined objective process as opposed to the previous method that relied on subjective perceptions of committee members to set priorities. Pursuant to the CPG's adoption of a regional prioritization framework in 2005 along HIV prevention regions/service areas funded by the Department (10 County/municipal Health Departments and 6 Health District areas), the Department worked with consultants to develop a model/formula for regional distribution of HIV prevention resources to the above-mentioned HIV service areas. This summary presents the interim methods and results of *Step 1* of the 4-step process previously outlined to accomplish the objectives set out for refinement of prioritization of target populations for HIV prevention in Pennsylvania. The field of prioritization of target populations for HIV prevention is yet to be rigorously peer-reviewed in the scientific literature, hence the difficulty in finding relevant literature.

Methods: Interim Sub-Model for Step 1 Analyses in the Refinement of the Priority-Setting Model To Identify Target Populations for HIV Prevention:

Population data and measures of HIV disease occurrence in Pennsylvania's HIV prevention service areas were estimated and tabulated (Table 1). Transmission categories and factors by which the CDC-funded HIV prevention service areas would be ranked were established based on the CPG's previous priority target groups that were based on the main modes of transmission and races/ethnicities across the state. Potential factors for prioritizing the target populations that were identified included: estimated percentage (%) live HIV cases in HIV prevention service area as a proportion of total number of persons living with HIV (PLWH) in Pennsylvania excluding Philadelphia (indicator of relative size of potential source population of transmission in each prevention service area); rate PLWH per 100,000 pop (indicator of size of source population of potential transmission relative to general population potentially at risk of acquiring new infections); and average annual rate of increase in AIDS incidence in most recent pre-HAART 5-year period (most recent available indicator of rate of change in HIV incidence, assigned lower weight due to old time period of data). Additional factors that may be useful to distinguish resource allocation to service areas are under consideration and further updates will be made as the refined model gets developed. Data needed for each factor and target population were gathered if it existed, new data collection and analyses were performed and made available, and data not readily available that needed to be collected were identified and plans are continuously under review to collect the needed data. The HIV prevention service area target population factors were assigned weights from 0-10, giving the most important or reliable greater weight, and the least important or reliable lesser weight. Categories within each factor were ranked and each factor assigned a relative weight compared to other factors in the sub-model. The available data were inputted into the sub-model (Table 2) and the rank for each factor was multiplied by the weight associated with the factor, resulting in a product score for that factor corresponding with the appropriate HIV prevention service area. The product for each factor by HIV prevention service area was then entered into the respective cell in the HIV prevention service area category column in Table 2. The totals for each HIV prevention service area column were calculated; based on the sum of scores of the HIV prevention service area column, the percentage for each HIV prevention service area were calculated and entered on Table 1. The HIV prevention service area tabulation yielded HIV prevention service areas that were ranked according to the percentage share of the total score for all HIV prevention service areas (Table 3).

Project methods based on CDC Guidance on Prioritization.

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Interim Results:

Table 1 shows basic population data and measures of HIV disease occurrence in Pennsylvania's CDC-funded HIV prevention service areas. In Table 2, we present the interim sub-model for Step 1 of the refinement of prioritization of service areas for HIV prevention. Table 3 and Figure 1 show the interim results of the implementation of the refinement of the prioritization model's Step 1 with recommended statewide distribution and ranking of HIV prevention service area allocations represented as follows: 1) Southeast (16.2%); 2) South central (14.1%); 3) Allegheny County (13.3%); 4) Allentown (8.3%-tie); 4) Southwest (8.3% - tie); 5) York City (7.3%); 6) Northeast (6.7%); 7) Northcentral (6.6%); 8) Montgomery (4.2%); 9) Northwest (3.4%-tie); 9) Bucks County (3.4%-tie); 10) Chester County (3.1%); 11) Erie County (2.1%); 12) Wilkes-Barre (1.5%); 13) Bethlehem (1.4%); 14) Philadelphia (NA - not included in CDC/state-funded HIV prevention resource allocation).

Discussion, Limitations and Recommended Future Activities for Prioritization of Target Population Groups:

The sub-model presented represents work in progress and is presented as a discussion document to solicit additional comments as development of a refined model progresses. Among various issues to consider in further development of model are a) whether the sub-model should be differentiate HIV service areas into 2 rankings for i) prevention for positives to prevent their transmission to those at risk for acquiring new infection (primary infection) and the infected (secondary infection); and ii) prevention for "negatives" at risk for acquiring new infections (primary infection) and the infected at risk for re-infection(secondary infection) to enable them to protect themselves from infections; b) consideration of additional factors that may be better differentiating of HIV preventions service areas in terms of prioritization of and ranking of resource allocations; c) factoring an additional category of HIV prevention service area accounting for a set-aside % of resources (?5%) for use to provide technical support to each HIV prevention service area.

Public Health Use of Findings of Prioritization Analyses:

The findings of the study are used by the CPG to target prevention services to HIV infected persons who may be a potential source of transmission of HIV to others and to target prevention services to populations at risk of acquiring HIV infection. The results of the study are also disseminated by the CPG and the State to HIV prevention service delivery partners and are used by the State in allocating prevention resources and as a guide for services provided by the Department's HIV prevention service delivery partners.

 *This summary presents the interim methods and results of *Step 1* of the 4-step process previously outlined to accomplish the objectives set out for refinement of prioritization of target populations for HIV prevention in Pennsylvania. **The 4-step process/framework adopted by the CPG in 2005 to accomplish the objectives set out for prioritization of target populations for HIV prevention in Pennsylvania is as follows:**

Step 1: Pursuant to the CPG's adoption of a regional prioritization framework along HIV prevention regions/service areas funded by the Department (10 County/municipal Health Departments and 6 Health District areas), the Department is developing a model/formula for regional distribution of HIV prevention resources to the above-mentioned HIV service areas generally targeted at the two main populations of a) persons living with HIV and b) HIV-ve persons at risk of acquiring HIV infection;

Step 2: Refine current model for prioritization into two (2) versions custom-designed for application in each of the two main populations of a) persons living with HIV and b) HIV-ve persons at risk of acquiring HIV infection within each region. The refined model would then be applied to each of these two main populations, so as to generate two (2) sets of target populations for HIV prevention based on probable modes of transmission/behavioral risks (i.e., MSM, IDU, MSM/IDU, and heterosexual risks) stratified by race/ethnicity, sex/gender, and age) within each of the two main populations.

Step 3: Apply each model to the two main populations of a) persons living with HIV and b) HIV-ve persons at risk of acquiring HIV infection within each region and generate two (2) sets of target populations for HIV prevention based on probable modes of transmission/behavioral risks (i.e., MSM, IDU, MSM/IDU, and heterosexual risks) stratified by race/ethnicity, sex/gender, and age) within each of the two main populations. Following guidelines to be provided, prioritization "micro" factors within each target population would be implemented within each region/service area.

Step 4: Develop a statewide composite list based on the sums of the scores of the same target population across regions, i.e. to show a statewide picture of the rank of each target population within each of the two main populations of a) persons living with HIV and b) HIV-ve persons at risk of acquiring HIV infection at the statewide level.

Project methods based on CDC Guidance on Prioritization.

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HIV Epidemiology Collaboration Unit

[Statewide HIV/AIDS Epidemiology Support for Disease Control & Prevention]

TABLE 1. MEASURES OF HIV DISEASE OCCURRENCE IN PENNSYLVANIA HIV PREVENTION SERVICE AREAS

MEASURES OF DISEASE OCCURRENCE	HIV Prevention Service Areas/Regions																		
	SE	SC	SW	NW	NC	NE	Philadelphi	Bucks	Montgom	Chester	Allentow	Bethlehe	Wilkes-B	York City	Allegheny	Erie	PA	PA (Excl. Phila)	
Est. Pop. N 2003	1,570,458	1,531,484	1,507,297	662,908	682,855	1,288,360	1,479,339	613,110	770,747	457,393	105,958	72,570	41,630	40,081	1,261,303	279,966	12,365,459	10,886,120	
Est. abs. N. PLWH* in 2003	3,175	2,745	1,625	626	1,223	1,291	21,091	633	794	560	1,074	156	124	593	2,587	357	38,654	17,563	
Est. % PLWH 2003	8	7	4	2	3	3	55	2	2	1	3	0	0	2	7	1	100	100	
Est. % PLWH (excl. Phila.), 2003	18	16	9	4	7	7		4	5	3	6	1	1	3	15	2	100		
Est. rate PLWH (per 100,000 pop.)	202	179	108	94	179	100	1426	103	103	122	1014	216	297	1479	205	128	313	161	
^HAART Era Average Annual Rate of Increase in Cumulative AIDS Incidence, % (Cum thru 2002/ Cum. Thru 1996)	7.1%	6.8%	4.8%	5.3%	5.9%	6.0%	8.5%	4.9%	6.1%	7.2%	8.5%	6.3%	8.2%	7.9%	5.9%	8.9%	7.4%	6.4%	
^Pre-HAART Era Average Annual Rate of Increase in Cumulative AIDS Incidence, % (Cum thru 1996/ Cum. Thru 1991)	12.5%	12.7%	9.1%	9.6%	10.5%	10.8%	14.3%	9.7%	11.4%	13.3%	13.2%	10.7%	14.6%	12.6%	10.4%	13.7%	12.9%	11.4%	

*PLWH, persons living with HIV; ^HAART, highly active antiretroviral therapy;

TABLE 2. SUB-MODEL FOR RANKED RESOURCE-DISTRIBUTION TO CDC-FUNDED HIV PREVENTION SERVICE AREAS (EXCLUDING PHILADELPHIA?)

RANKING OF EACH HIV PREVENTION SERVICE AREA/REGION BASED ON EACH FACTOR BY WEIGHT SCORE, AND SUM OF SCORES FOR EACH SERVICE AREA & RESULTING PERCENTAGE SHARE OF HIV PREVENTION SERVICE AREA/REGION

FACTOR	RANK OF CATEGORY WITHIN EACH FACTOR	Weight	SE	SC	SW	NW	NC	NE	Philadelphia	Bucks	Montgome	Chester	Allentown	Bethlehem	Wilkes-Bar	York City	Allegheny	Erie	Calculation Guide		
1. Estimated Number or % live HIV cases in LMRO as proportion of total living with HIV in Pennsylvania (excl. Philadelphia).	10 Over 40%		18.1	15.6	9.3	3.6	7.0	7.4		3.6	4.5	3.2	6.1	0.9	0.7	3.4	14.7	2.0	A		
	9 35-40%																				
	8 30-35%		3,175	2,745	1,625	626	1,223	1,291	21,091	633	794	560	1,074	156	124	593	2,587	357	B		
	6 25-30%																				
	5 20-25%																				
	4 15-20%																				
2. Rate PLWH per 100,000 pop	3 10-15%	5	15875.2	13727.4	8124.4	3128.4	6116.6	6455.1	105453.5	3163.4	3968.8	2801.5	5369.6	782.1	618.7	2964.9	12933.6	1786.0	C = weight X B		
	2 5-10%		90.4	78.2	46.3	17.8	34.8	36.8		18.0	22.6	16.0	30.6	4.5	3.5	16.9	73.6	10.2	D = weight X A		
	1 0-5%																				
	10 Over 50%		202	179	108	94	179	100		103	103	122	1014	216	297	1479	205	128	E		
3. Average annual rate of increase in AIDS incidence in most recent pre-HAART 5-year period.	7 25-30%	3	606.5	537.8	323.4	283.1	537.4	300.6		309.6	309.0	367.5	3040.6	646.6	891.7	4438.4	615.3	382.8	F = weight X E		
	5 10-24%																				
	3 less than 10%																				
	10 15% increase	1	12.5	12.7	9.1	9.6	10.5	10.8		9.7	11.4	13.3	13.2	10.7	14.6	12.6	10.4	13.7	G		
	9 14% increase																				
	8 13% increase																				
	7 12% increase																				
	6 11% increase																				
5 10% increase																					
4 9% increase																					
			12.5	12.7	9.1	9.6	10.5	10.8		9.7	11.4	13.3	13.2	10.7	14.6	12.6	10.4	13.7	H = weight X G		
SUMMATION (EXCL.PHLA)			SE	SC	SW	NW	NC	NE	Philadelphia	Bucks	Montgome	Chester	Allentown	Bethlehem	Wilkes-Bar	York City	Allegheny	Erie	SUM	Calculation Guide	
		Total Sum of Scores	709	629	379	311	583	348	0	337	343	397	3084	662	910	4468	699	407	14265	D+F+H	
		% of Sum of Scores	5.0	4.4	2.7	2.2	4.1	2.4	0.0	2.4	2.4	2.8	21.6	4.6	6.4	31.3	4.9	2.9	100.0		
		Rank	4	7	11	15	8	12		14	13	10	2	6	3	1	5	9			
		Sum of Scores	16494	14278	8457	3421	6665	6767	105454	3483	4289	3182	8423	1439	1525	7416	13559	2182	207034	C+F+H	
	% of Sum of Scores	16.24	14.06	8.33	3.37	6.56	6.66		3.43	4.22	3.13	8.29	1.42	1.50	7.30	13.35	2.15	100			

TABLE 3: SUMMARY RESULTS OF SUB-MODEL FOR HIV/AIDS PREVENTION PLANNING IN PENNSYLVANIA (EXCL. PHILADELPHIA).

– RANKED CDC-FUNDED HIV PREVENTION SERVICE AREAS

Rank	Relative % (Overall Score)	CDC-FUNDED HIV PREVENTION SERVICE AREAS REGIONS
1	16.2%	Southeast District
2	14.1%	South Central District
3	13.3%	Allegheny County
4	8.3%	Allentown (City)
4	8.3% (tie)	Southwest District
5	7.3%	York (City)
6	6.7%	Northeast District
7	6.6%	Northcentral District
8	4.2%	Montgomery County
9	3.4%	Northwest District
9	3.4% (tie)	Bucks County
10	3.1%	Chester County
11	2.1%	Erie County
12	1.5%	Wilkes- Barre(City)
13	1.4%	Bethlehem (City)
14	NA	Philadelphia County

NA*-Service Area Not Included

Figure 1. Results of an Interim Sub-Model for Resource Distribution to HIV Prevention Service Areas in Pennsylvania, 2005

