Summary of Baseline Data from Marriage Transitions in Malawi Project

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I. Introduction

The purpose of this document is to provide a basic overview of the baseline sample for the core respondents in the Marriage Transitions in Malawi (MTM) survey and how it compares to other large scale survey data from Malawi. There are three sections. The first provides descriptive statistics by gender for the MTM survey on basic demographics, education and reproductive health including views on HIV and HIV testing history. The second section provides a comparison of the MTM survey with the 2004 National Survey of Adolescents (NSA), collected as part of the Next Generation Project by the National Statistics Office in collaboration with ORC Macro, the Centre for Social Research and the Guttmacher Institute (Munthali et. al., 2006). The third section provides a comparison of the MTM survey with the 2004 Second Integrated Household Survey (IHS2), collected by the National Statistical Office with technical assistance from the World Bank and the International Food Policy Research Institute (NSO, 2004).

II. Descriptive Statistics for the MTM Baseline Data

Basic demographics for core respondents of the MTM survey are in listed in Table B1 (for sampling selection see Annex). The total sample size for the core respondents is 1,185 of which 599 are female (50.54%) and 586 are male (49.45%). The mean age for the female respondents is 16.73 (ranging from 13 to 23 years) while the mean age for the male respondents is 20.36 (ranging from 14 to 26 years). The majority of respondents are from the Chewa ethnic group (61.60%), followed by the Yao (19.32%) and Ngoni (9.20%). The Lomwe, Tumbuka and other tribes each make up less than 5% of the pooled sample. The modal religious group of respondents is Protestant (56.54%), followed by Muslim (24.22%) and Catholic (18.24%). Ethnic and religious breakdowns are comparable between the male and female samples.

Co-residence with biological parents is listed in the bottom of Table B1. Just under half of the pooled sample resides with both parents (45.99%), however approximately 29% of pooled sample live with neither parent. The remaining 23% reside with their mothers only, while a very small percent of people resides with fathers only (2.11%). The percent of females who report living with both parents is slightly larger compared to males (49.50 versus 42.49%), while the percent of males reporting living with neither

or mother only is slightly larger as compared to females. There are no households in which there are multiple wives residing therein. Parent IDs are generally very consistent and there were few errors to fix. For 15 core respondents (in 940 households), parent IDs in Section 1 (roster) contradict Section 9 (Part II) – perhaps Part II better picks up biological relationships and Section 1 capture step/adopted parents. As generally the response in part II was that the parent was dead/elsewhere.

Table B2 displays basic results for schooling among the MTM survey baseline disaggregated by gender. Approximately 42.4% of the total sample reports current school attendance. The percent of females currently enrolled is approximately 55%, while the percentage of males currently enrolled is much lower at 29.5%. This difference could be attributed to the age ranges of the sample (where males are on average over 3 years older than females) or the possibility that boys drop out early from school to enter the labor force. Over 2/3 of the pooled sample has completed primary school, while approximately 28% completed secondary education. A small percent have never attended school (3.5%), attended university (0.5%) or a training college (0.8%). As compared to males, females are more likely to have completed primary (70.9% verses 63.7%) and less likely to have completed secondary school (26.7% verses 29.2%). Females are also less likely to have completed university or training college, although these percentages are low overall.

Table B3 shows basic results for reproductive health and HIV related baseline statistics by gender. Approximately 1/5 of the pooled sample reports a fiancé (*chitomelo* or marriage promise) at the time of the survey and the percentage is consistent across gender groups. Overall 56.2% of the sample reports ever having sex. Fewer females report ever having sex (36.8%) as compared to males (76.1%). Among those reporting ever having sexually debuted, females also report a lower number of sexual partners (average 1.4) as compared to males (average 3.2). Approximately 5.3% of the pooled sample has ever had a live birth and 28.9% of males report having undergone circumcision.

Approximately 30.63% of the baseline sample has ever been tested for HIV. The percent of females reporting ever been tested is lower (22.0%) compared to males reporting ever been tested (39.4%). When asked if they are worried about contracting HIV/AIDS, just over half of the pooled sample (52.2%) report not being worried at all. The remaining 36% report being a little worried and being a lot worried (12%). When asked of their perceived likelihood of current HIV infection, the majority (72%) report there is no chance of being infected. A further 23% report there is a low probability of current infection, while small percent report medium and high probabilities of current infection (40.0 and 0.8% respectively). When this same question is poised for the perceived likelihood of future HIV infection, probabilities increase across

categories. Approximately 37% report no likelihood of future infection, while 47% report low probability, 12% report medium and 5% report high probability of HIV infection. Responses across gender are fairly uniform, however females are generally less likely to perceive current or future risk.

III. Comparison of MTM Baseline Data and the National Adolescent Survey

The NAS surveyed adolescents aged 12 to 19 with the objective of producing population-level data on knowledge, attitudes and practices which are risk factors or protect against HIV infection and pregnancy (Munthali et. al., 2006). To create a more comparable group, both samples are limited to adolescents between the ages of 15 and 19. However, note that the NAS sample contains females who are in unions (approximately 17.4% of the sample) unless otherwise noted, while the MTM sample are all unmarried.

Table C1 is a summary of comparison of schooling characteristics between the NAS and the MTM. High percent of males and females have ever attended school, although a greater percent of females in the MTM have ever attended as compared to the NAS (98% versus 95% respectively). Males in the MTM are significantly less likely to be currently attending school (47.3%) as compared to males in the NAS (70.8%). Adolescents in both surveys display similar levels of schooling attainment and age at first attendance. Differences are found for the percent of females with no schooling (fewer females report no attendance in the MTM (1.9%) as compared to the NAS (4.5%)) and for age at first attendance (greater percent of MTM females start school at 7 years as compared to NAS females).

Table C2 shows a comparison of sexual relationship characteristics between the NAS and the MTM. Adolescents in both samples have had similar past sexual activity with the exception of males in the MTM reporting significantly higher percent having sex in the last 12 months (47.3%) as compared to the NAS (37.9%). The number of reported lifetime sexual partners is also very similar between the MTM and the NAS, with the exception of females in the NAS reporting more having four and more (2.6%) as compared to the MTM (1.0%). However a significantly higher percent of females in the NAS report having one sexual partner in the last 12 months (72%) as compared to the MTM (64.9%). Significantly more males in the MTM report two, three and four or more partners in the last 12 months as compared to the NAS and both males and females in the MTM report higher percent of unknown number of partners in the last 12 months. Males in both surveys report a higher number of lifetime sexual partners as well as partners in the last 12 months. Significantly more females in the NAS have ever had a live birth (8.2%) as compared to the MTM (4.4%), however recall that the NAS includes females who have been in a union while the MTM does not.

Table C3 shows a comparison of HIV/AIDS related characteristics between the NAS and the MTM. Significantly more females and males in the MTM have ever been tested for HIV as compared to the NAS. Approximately 21.3% of females in the MTM report ever being tested for HIV as compared to 7.4% of the NAS. Likewise, approximately 31.3% of males in the MTM report ever being tested for HIV in the MTM as compared to 4.9% of the NAS. Similar percent (from approximately 94 to 98%) of both genders across surveys received their test results. Significantly more (93.4%) of the female sample in the MTM told someone their results in comparison to the female NAS sample (81.4%). Significantly more females in the MTM also report knowing someone who has died of AIDS as compared to females in the NAS (83.1% versus 72.8%). The male and female MTM samples are significantly more likely to be tolerant with respect to people living with HIV. When asked if a female teacher had the AIDS virus should be allowed to teach school, or when asked if they would buy fresh vegetables from a shopkeeper who had AIDS, a significantly larger percent of the MTM sample answered affirmatively.

IV. Comparison of MTM Baseline Data and the Second Integrated Household Survey

The IHS2 is a population-level survey aimed at better understanding household poverty dynamics including behavior and welfare, distribution of income, employment, health and education (NSO, 2004). To create a more comparable group for individual-level comparisons, the IHS2 sample is limited to adolescents between the ages of 15 and 21 for females and between the ages of 18 to 25 for males. In addition to comparisons made with the full sample of individuals, a second comparison is made between the MTM and the IHS2 central district sample only. In addition to these two groups, in household-level comparisons, an additional group of household which contain adolescents of the age range described above is included as these households may differ in welfare or demographics than households without young adults present.

Table D1 is a summary of individual characteristics of adolescents in the MTM and the IHS2. A significantly higher percent of females have completed primary school in the MTM as compared to the IHS2 in both the national and central region samples. This difference is accounted for by fewer females ever attending school (2.17% in the MTM versus 5.61% in the IHS2 national sample). Significant differences are in the opposite direction for males. Males in the MTM are more likely to have ever attended school and completed primary but less likely to have completed secondary schooling as compared to either IHS2 sample. The relationships to household head are similar for females, however significantly more males are household heads in the IHS2 data (1.37 in the MTM versus 7.15 in the IHS2

national and IHS2 central sample respectively). These differences are accounted for by fewer males being children or adopted children of the household head in the MTM as compared to the IHS2.

Table D2 presents a summary of household-level comparisons between the MTM and the IHS2 (national sample, central region sample and the 'restricted' sample including at least one adolescent). There are many significant differences between the MTM and the IHS2 samples. Household size is significantly larger in the MTM sample (6.20 members) as compared to the IHS2 sample (4.51 members), although this difference decreases in the central region and restricted samples (4.69 and 5.95 members respectively). Approximately 75.66% of MTM households report male household heads while significantly more (78.97%) IHS2 central region households and significantly fewer (73.42%) of IHS2 restricted sample report male household heads. Of the MTM household heads, significantly fewer have been separated and significantly more are widows/widowers as compared to the IHS2 national sample. Many of the differences in the household head union status between the two surveys are likely to stem from the fact that the IHS2 sample has more adolescents acting as household heads. Similar percent of households report owning their dwellings in both surveys (approximately 79.90 to 81.01%). MTM households fair significantly better in terms of number of rooms, electricity and permanent roofing as compared to IHS2 national and central region samples, although these differences disappear when compared to the restricted sample. Generally fewer MTM households have piped water and obtain water from an unprotected well while more MTM households obtain water from pump/protected spring as compared to the IHS2. There are significantly differences between the percent of MTM households with types of toilets, however they are not consistent across IHS2 surveys. More MTM households have flush toilets (4.91%) as compared to the national IHS2 sample (2.88%), however this difference disappears in the subsequent IHS2 samples. More MTM households also have latrines (80.55%) as compared to the IHS2 central sample (77.47) however the difference disappears in the national and restricted sample. Significantly fewer MTM households report having no toilet (14.54%) as compared to the IHS2 central sample (18.80%), however fewer of the IHS2 restricted sample report having no toilet (12.03%) and there is no difference in the IHS2 national sample.

References

Munthali, A., Zulu, E.M., Madise, N., Moore, A.M., Konyani, S., Kaphuka, J. et. al. 2006. "Adolescent Sexual and Reproductive Health in Malawi: Results from the 2004 National Survey of Adolescents" *Occasional Report No. 24*. New York: Guttmacher Institute.

National Statistical Office (NSO). 2004. “Malawi Second Integrated Household Survey (IHS-2), 2004-2005.” Basic Information Document. National Statistics Office: Zomba, Malawi.

Table B1. Demographic MTM survey baseline descriptive statistics

	Pooled (N = 1,185)	Female (N = 599)	Male (N = 586)
Age (in years)	18.52	16.73	20.36
Tribe			
Chewa (=1)	61.60	62.27	60.92
Yao (=1)	19.32	18.53	20.17
Ngoni (=1)	9.20	9.52	8.87
Lomwe (=1)	3.80	4.17	3.41
Tumbuka (=1)	2.28	1.84	2.73
Other (=1)	3.80	3.67	3.92
Religion			
Protestant (=1)	56.54	55.76	57.34
Catholic (=1)	18.23	18.86	18.86
Muslim (=1)	24.22	25.07	23.38
No religion (=1)	1.01	0.33	1.71
Co-residence with biological parents			
With father only (=1)	2.11	1.67	2.56
With mother only (=1)	22.95	21.23	24.70
With both parents (=1)	45.99	49.50	42.49
With neither parent (=1)	28.86	27.42	30.20

Table B2. Schooling MTM survey baseline descriptive statistics

	Pooled (N = 1,185)	Female (N = 599)	Male (N = 586)
Currently enrolled (=1)	42.36	54.92	29.47
Highest level completed			
Never attended/pre-school (=1)	3.46	2.17	4.78
Primary (=1)	67.26	70.78	63.65
Secondary (=1)	27.93	26.71	29.18
University (=1)	0.51	0.17	0.85
Training college (=1)	0.76	0.17	1.37

Table B3. Reproductive health/HIV MTM survey baseline descriptive statistics

	Pooled (N = 1,185)	Female (N = 599)	Male (N = 586)
Reproductive health			
Has current fiance (=1)[1]	21.10	21.20	20.99
Ever had sex (=1)	56.20	36.73	76.11
Number of sexual partners (=1)	2.59	1.37	3.19
Ever given birth (=1)[2]	5.32	4.68	5.97
Circumcised (=1)	n/a	n/a	28.94
Ever been tested for HIV (=1)	30.63	22.04	39.42
Worried may contract HIV/AIDS			
Not worried (=1)	52.15	53.26	51.02
Worried a little (=1)	36.03	33.22	38.91
Worried a lot (=1)	11.73	13.36	10.07
Views on likelihood of current HIV infection			
None (=1)	72.34	74.62	69.97
Low (=1)	22.78	21.20	24.40
Medium (=1)	3.97	3.34	4.61
High (=1)	0.84	0.67	1.02
Views on likelihood of future HIV infection			
None (=1)	36.62	37.63	35.67
Low (=1)	46.58	43.91	49.32
Medium (=1)	11.73	13.19	10.24
High (=1)	4.81	5.01	4.61

Note: Sample size for number of sexual partners is: pooled (N = 665), male (N = 445), female (N= 220).

[1] Respondent currently has a *chitomelo* or promise to marry.

[2] Females are asked if they have ever had a live birth, males are asked if a girl has ever given birth to a child that he fathered.

Table C1. Comparison of schooling characteristics in the NAS and the MTM

	Females		Males	
	NAS (N = 1,055)	MTM (N = 522)	NAS (N = 1,126)	MTM (N = 201)
Ever attended school (=1)	**95.4**	**98.1**	97.2	97.0
Currently attending school (=1)	58.1	55.7	**70.8**	**47.3**
Highest level completed				
No schooling (=1)	**4.5**	**1.90**	2.8	3.0
Primary (=1)	72.1	73.0	75.0	72.1
Secondary (=1)	23.3	24.9	22.1	24.4
Higher/Tertiary (=1)	0.0	0.2	0.1	0.5
Age first attended school [1]				
Less than 6 years (=1)	46.7	44.5	41.5	40.5
7 years (=1)	**14.9**	**20.5**	16.8	19.5
8 years (=1)	8.8	10.4	10.3	11.3
9 years or older (=1)	21.3	22.5	23.0	25.6
Don't know (=1)	8.3	0.0	8.4	0.0

Note: Ages 15 to 19. Bold denotes statistical significance at the 5 % level or better. Ns in the NAS are weighted.

[1] Among the reduced sample who have ever attended school. Males NSA (N = 1,091), males MTM (N = 195), females NSA (N = 1,007), females MTM (N = 512).

Table C2. Comparison of sexual relationship characteristics in the NAS and the MTM

	Females		Males	
	NAS (N = 1,055)	MTM (N = 522)	NAS (N = 1,126)	MTM (N = 201)
Sexual activity status				
Never had sex (=1)	63.4	63.4	40.1	34.3
Ever had sex, no last in last 12 months (=1)	8.2	9.0	21.9	18.4
Had sex in last 12 months (=1)	28.3	27.6	**37.9**	**47.3**
Number lifetime sexual partners [1]				
One (=1)	66.6	71.7	42.6	34.8
Two (=1)	24.8	21.5	23.2	25.0
Three (=1)	6.0	5.8	13.8	15.9
Four or more (=1)	**2.6**	**1.0**	20.5	24.2
Number of sex partners in the last 12 months [1]				
None (=1)	22.4	0.0	36.6	0.0
One (=1)	**72.0**	**64.9**	52.3	43.9
Two (=1)	5.0	8.4	**10.7**	**18.2**
Three (=1)	0.3	0.5	**0.3**	**3.8**
Four or more (=1)	0.0	1.6	**0.2**	**6.1**
Don't know (=1)	**0.3**	**24.6**	**0.0**	**28.0**
Ever had live birth (=1)	**8.2**	**4.4**	0.8	2.0

Note: Ages 15 to 19. Bold denotes statistical significance at the 5 % level or better. Ns in the NAS are weighted.

[1] Among the reduced sample who have ever had sex. Males NSA (N = 699), males MTM (N = 132), females NSA (N = 383), females MTM (N = 191).

[2] Among the reduced sample of females not currently in union: NSA (N = 913), MTM (N = 521).

Table C3. Comparison of HIV/AIDS related characteristics in the NAS and the MTM

	Females		Males	
	NAS (N = 1,018)	MTM (N = 522)	NAS (N = 1,111)	MTM (N = 201)
Ever been tested for HIV (=1)[1]	**7.4**	**21.3**	**4.9**	**31.3**
Received HIV test results (=1)[2]	95.2	94.6	93.6	98.4
Told anyone about HIV results (=1)[3]	**81.4**	**94.3**	88.6	91.9
Know/suspect someone who died of AIDS (=1)	**72.8**	**83.1**	79.5	83.6
Female teacher with AIDS should be allowed to teach (=1)	**46.2**	**70.7**	**61.5**	**75.6**
Would buy fresh vegetables from shopkeeper with AIDS (=1)	**46.1**	**72.3**	**58.7**	**84.1**

Note: NAS data restricts HIV/AIDS questions to those who have heard of AIDS (96.7 % of females and 98.7 percent of males have heard of AIDS). Ages 15 to 19. Bold denotes statistical significance at the 5 % level or better. Ns in the NAS are weighted.

[1] The NAS restricts the sample to those who know a testing cite: males (N = 964), females (N = 851).

[2] Among the reduced sample who have ever been tested. Males NSA (N = 47), males MTM (N = 63), females NSA (N = 61), females MTM (N = 111).

[3] Among the reduced sample who have ever been tested and received results. Males NSA (N = 44), males MTM (N = 62), females NSA (N = 59), females MTM (N = 105).

Table D1. Comparison of individual-level characteristics in the IHS2 and the MTM

	Females			Males		
	MTM (N = 599)	IHS2 (N = 2,057)	IHS2 Central (N = 906)	MTM (N = 586)	IHS2 (N = 2,354)	IHS2 Central (N = 954)
Highest schooling level completed						
Never attended/pre-school (=1)[1]	**2.17**	**5.61**	**6.28**	**4.78**	**7.26**	**8.67**
Primary (=1)	**70.78**	**65.13**	**66.05**	**63.65**	**49.36**	**52.08**
Secondary (=1)	26.71	28.46	26.46	**29.18**	**41.35**	**36.50**
University (=1)	0.17	0.28	0.25	0.85	0.56	0.48
Training college (=1)	**0.17**	0.52	**0.95**	1.37	1.47	2.28
Relationship to HH head						
Head (=1)	0.84	1.05	1.15	**1.37**	**7.15**	**7.63**
Child/adopted child (=1)	73.29	73.47	74.49	**70.48**	**61.43**	**61.51**
Grandchild (=1)	10.02	10.80	9.84	6.48	7.66	5.90
Other (=1)	15.86	14.68	14.52	21.67	23.77	24.96

Note: IHS2 age groups are limited to females ages 15 to 21 and males age 18 to 25. Ns and mean values are weighted. Bold denotes statistical significance at the 5 % level or better.

[1] Never attended/pre-school category in IHS2 is ambiguous. Prompt on questionnaire codes 0 as pre-school while data set codes 0 as none. Assumption is that 0 corresponds to pre-school or none.

Table D2. Comparison of household-level characteristics in the IHS2 and the MTM

	MTM (N = 1,060)	IHS2 (N = 11,280)	IHS2 Central (N = 4,320)	IHS2 Restricted[1] (N = 3,044)
Household size	**6.20**	**4.51**	**4.69**	**5.95**
Male headed (=1)	**75.66**	77.08	**78.97**	**73.42**
Marital status of HH head				
Monogamous (=1)	**63.36**	63.88	64.36	**57.86**
Polygamous (=1)	10.29	9.17	10.71	9.11
Separated (=1)	**1.98**	**5.08**	**5.12**	**4.27**
Divorced (=1)	6.61	6.38	5.18	5.87
Widow or widower (=1)	**15.11**	**12.18**	**11.23**	15.11
Never married (=1)	**2.64**	3.31	3.40	**7.77**
Housing characteristics				
Own home (=1)	80.66	79.90	80.64	81.01
Number of rooms in house[2]	**3.04**	**2.47**	**2.39**	2.95
Electricity (=1)	**12.83**	**6.15**	**5.44**	11.03
Permanent roofing (=1)	**33.11**	**26.80**	**22.58**	36.29
Water source				
Piped (=1)	**21.42**	22.13	**17.21**	**26.64**
Pump/protected spring (=1)	**61.23**	**45.76**	**40.83**	**43.66**
Unprotected well/spring/reservoir (=1)	**17.08**	**32.12**	**41.96**	**29.69**
Other (=1)	0.28	0.00	0.00	0.00
Toilet				
Flush (=1)	**4.91**	**2.88**	3.74	5.34
Latrine (=1)	**80.55**	80.60	**77.47**	82.63
None (=1)	**14.54**	16.51	**18.80**	**12.03**

Note: Ns and mean values are weighted. Bold denotes statistical significance at the 5 % level or better.

[1] Sample is restricted to households which contain at least one adolescent in MTM age range.

[2] IHS2 data uses values of 0 for number of rooms, while MTM does not.

Annex: Sample

The original sample design staggered the age distribution of males and females, with 20 respondents (10 male and 10 female) for each enumeration area. In the actual sample, the age distribution maps closely, but not exactly to the target design (Annex Tables 1 and 2). The target design was not precisely achieved in any enumeration area. This is due to two factors: (i) age is reported with noise between listing and Household Roster, and (ii) number of eligible respondents for specific ages was insufficient.

There were a total of 315 replacement cases. The details on replacements are presented in Annex Tables 3 and 4. About half (55%) of these replacements were due to inaccurate information from listing (codes 4, 5, 6, 9, and 10).

Annex Table 1

	Target	Actual
Females by age		
13	0	1
14	0	27
15	60	124
16	180	154
17	180	120
18	120	84
19-21	60	87
23	0	1
total	600	598
Males by age		
14	0	1
15	0	1
17	0	15
18	60	82
19-20	180	222
21-22	300	201
23-25	60	63
26	0	1
Missing	--	1
Total	600	587

Annex Table 2

Number of core respondents in EA	Number of EAs
13	1
15	1
18	1
19	3
20	56
22*	1
Total core resp: 1185	Total EAs: 60

* In this EA they had two replacement (girls) of which they refused to be interviewed, and they were replaced by two boys. Then the field team discovered the mistake to replace the girls with boys, hence they went again to interview another two (girls) replacement making it 22 core respondents.

Annex Table 3

Explanation		**% of all replacements**
1.	Away for a couple of days (2-3, up to ~1 week)	2.9
2.	Away temporarily	17.2
3.	Visits made (2 to 3) respondent not found	9.2
4.	Does not live in the household	18.4
5.	Ever married	11.1
6.	Boarding school	9.6
7.	Refusal (by parents)	4.4
8.	Refusal (by core respondent)	4.4
9.	Wrong age	14.6
10.	Wrong gender	1.6
11.	In police custody	0.6
12.	Employer prohibited	0.3
13.	Ill/epileptic/deaf	3.2
14.	Police quarters: unable to interview these residents	0.3
15.	Mentally ill	1.3
16.	No parent there to give consent	0.6
17.	Language (respondent from Congo)	0.3
	Total	100

Annex Table 4

Number of replacements in EA	**Number of EAs**	**% of EAs**
0	1	1.7
1	3	5.0
2	3	5.0
3	3	5.0
4	10	16.7
5	12	20.0
6	13	21.7
7	6	10.0
8	6	10.0
9	2	3.3
11	1	1.7
Total	60	100
Mean number of replacements per EA: 5.3		