# Supplemental Digital Appendix 1 Data Collection Tool

#### This data collection instrument is composed of 6 parts

Part A, B, C are to be completed by the Focal Person in consultation with the appropriate person from the health facility and/or the medical school.

**Part A** consists of a questionnaire about the health facility

**Part B** consists of a questionnaire about the health facility data

**Part C** consists of a questionnaire about medical student rotations at the Facility

#### Parts D, E, and F are Interview Guides

Please, feel free to take additional notes as required for any of the questions

**Part D** is an interview guide for the Health Facility Manager

*Part E* is an interview guide for the Clinical staff member who supervises the students

*Part F* is an interview guide for a health facility staff member not directly supervising students

### **Part A: Facility Questions:**

арр	roį	completed by Focal Person of each MEPI school in consultation with the priate person from the health facility and/or the medical school. For any question $\Box$ please put an $X$ in the correct answer.	
	1. Please, note the name and location of the site?		
		Is the site selected for this study: Urban Peri-urban Rural	
	3.	How do you define a "rural" health facility?	
	<b>4.</b>	Which agencies sponsor/ fund this health facility (check all that apply): Government NGO/non-governmental organization Faith-based organization Private/state-based Other (please specify):	
	5.	What level of care does this health facility provide? (check all that apply)	
		National District	
		Community	
		Regional	
		If you checked more than one box, please explain and describe further	

	ligital content for Talib Z, van Schalkwyk S, Couper I, et al. Medical Education in Settings: How Medical Students Contribute to Health Care in Ten Sub-Saharan African d Med.
	Does the facility have overnight beds (in-patient)? Yes No a. If <b>YES</b> how many beds?
	Does this facility have an ambulatory (out-patient) clinic? Yes No a. If <b>YES</b> , on average how many patients are seen in the ambulatory/out-patient clinic each day?
8.	What are the cadres of clinical providers working at this site (check all that apply)? Doctors
	Nurses
	Pharmacists
	Midwives Other (please specify):
9.	How many doctors work at this site?
10	. How many nurses work at this site?

	11. Who employs the health providers at this site (check all that apply)?		
	☐ Government		
	<ul><li>□ NGO/non-governmental organization</li><li>□ Faith-based</li><li>□ Private</li></ul>		
	Other (please specify):		
12.	Does this health facility provide any of the following health services (check all		
that ar			
tiiat aj	oply)?		
	oply)? General acute-care (out-patient)		
	General acute-care (out-patient)		
	General acute-care (out-patient)  Obstetrics (including antenatal and/or post-natal)		
	General acute-care (out-patient)  Obstetrics (including antenatal and/or post-natal)  Child-health (prevention and/or treatment)		
	General acute-care (out-patient)  Obstetrics (including antenatal and/or post-natal)  Child-health (prevention and/or treatment)  HIV care (treatment and/or prevention services)		

#### Part B: Health Facility Data

To be completed by Focal Person in consultation with appropriate person from the health facility

Indicator	Is this data collected at this facility? (Y/N)	When did the facility start collecting this information (month/year)	What level is this data typically aggregated to(e.g. daily, weekly, monthly, quarterly)	Is this data readily available for collection? (Y/N)	Can you provide monthly 2014 #s (If yes, please either scan the data or enter it into an excel sheet.)*
# of patients seen in the ambulatory (out- patient) clinic					
# of patients seen in the in-patient service					
# Total number of deliveries					
#of Caesarian sections performed					
# of HIV patients tested for HIV					
# of measles vaccines provided					
# of male circumcisions					

<sup>\*</sup>If data is at a higher or lower level of aggregation, please still collect it. If data is at a lower level of aggregation, the study team is available to assist with aggregation as needed.

<sup>\*\*</sup>Please also provide a scanned copy of all indicators collected at the health facility for any given time period.

# **Part C: CBE Experience for medical students:**

To be completed by Focal Person in consultation with the appropriate person from the medical school and/or the health facility

### Questions related to medical student rotations at the facility:

1.	Please list the institutions that send students to your site and the type of students that come (i.e., university name, medical students):
2.	Since when have medical students been coming to this health facility? (List month and year if both known, otherwise just list year)
3.	How long do medical students typically stay (or how long is a typical student rotation to this facility)?
	a. What is the shortest duration (#weeks)?
	b. What is the longest duration (#weeks)?
4.	Are there times during the year when there are no students at the health

facility?

Decentralize Countries.	ed Aca	digital content for Talib Z, van Schalkwyk S, Couper I, et al. Medical Education in Settings: How Medical Students Contribute to Health Care in Ten Sub-Saharan African d Med.  Yes
I		No
	a.	If yes, for how many weeks in a year are there <b>no</b> students at this facility?
	b.	Approximately, how many <b>medical students</b> are at this facility at one time?
	C.	Similarly, approximately how many students (including <b>all fields of training</b> ) are at there at one time?
	d.	Which months of the year are students at your facility (list all months)?
!	5.	What activities do students participate in while at the facility? (Check all activities that apply)
] ] ] ] ]		Ambulatory clinical care In-patient clinical care Research Preventive healthcare and promotion Community outreach activities Supervision of lower-level students Ouality-improvement projects

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Countries. Aca	
	Administrative meetings at the health facility
	Laboratory activities
	Other activities (please specify):
L	
6.	Are the supervisors from the:
	Health facility
	Medical school
	Both
7.	What are professions and qualifications of the students' supervisors?
88	a. Are there any formal agreements in place for the medical student rotations? For
ex	cample, with the ministry of health or the medical school?
	Yes
	No
	b. Please describe the agreements that are in place for this rotation. Who are the holders who have signed the agreement?

Supplemental digital content for Talib Z, van Schalkwyk S, Couper I, et al. Medical Education in Decentralized Settings: How Medical Students Contribute to Health Care in Ten Sub-Saharan African Countries. Acad Med.
<ul> <li>9. Are there specific learning objectives for the students during their community rotation?</li> <li>☐ Yes</li> <li>☐ No</li> </ul>
10. Is there a formal curriculum for the students during their community rotation? $\hfill \square$ Yes $\hfill \square$ No
<ul> <li>11. Does the health facility provide students with (check all that apply)?</li> <li>☐ Accommodations</li> <li>☐ Meals</li> <li>☐ Meeting room</li> <li>☐ Transport</li> </ul>

## Part D: Interview with Health Facility Manager

- 1. What is your role at the health facility?
  - i. How long have you been there?
  - ii. What is your professional background or training?
  - iii. Describe your interaction with the students?
  - iv. Do you directly supervise students?

#### We would like to understand the effect of having students at your health facility.

- 2. Describe the activities of medical students at your health facility.
- 3. How does the supervising clinical staff feel to have students work with them?
  - i. Does it affect the quality of care they provide? Describe.
  - ii. Do you think it affects their job satisfaction? Describe.

- 4. Are academic staff/clinicians from the medical school involved in patient care in your facility? If so, please describe.
- 5. How is the administration of the health facility affected by having students present?
- 6. What resources are needed to train students at the health facility?
  - i. Any additional supplies? Medications? Protective gear?
  - ii. Any other resources?
- 7. How are patient volumes affected by students at the health facility?
  - i. Are you able to see more patients or fewer patients?
  - ii. Do patients have a shorter waiting time?
- 8. Is there allocated space for students in the facility
  - i. If so, describe?
  - ii. If not, where do the students work?
- 9. How is the **overall quality** of care provided at the health facility affected by students being there?
  - i. Is it improved? If so, please provide some examples.
  - ii. Does the quality of care decline? If so, please provide some examples.
- 10. Do students participate in the care for HIV patients at this facility?
  - i. If so, please describe
- 11. Do students participate in maternal care at the facility?
  - i. If so, please describe
- 12. Do students participate in the care of children at the facility?
  - i. If so, please describe
- 13. How do patients feel about having students at the health facility?
  - i. Please provide examples
- 14. How is the community affected by having students at the health facility?
  - i. Please, provide examples of above?
- 15. Are there times of the year when there are no students?
- a. When students are not there, what is different at the health facility?
  - i. Are there any changes to the work environment?

- ii. Are there any differences in the # of patients seen?
- iii. Are there any differences in the # of deliveries?
- iv. Are there any differences in the quality of care?
- v. Any other differences when students are not there?
- b. If students are at this site all the time, what do you think are the benefits or challenges of having students at the facility continuously?
- 16. Are there other students, besides medical students that rotate through your facility?
  - i. If yes, what are these other students studying?
  - ii. In general, how do they contribute to the health facility?
  - iii. Do they interact with medical students?
    - If yes, describe the interaction?
    - How does this interaction affect clinical care?
- 17. Can you summarize the advantages to having medical students at your health facility?
- 18. Can you summarize the disadvantages of having medical students at your health facility?

For the following questions, please indicate which applies: Very Satisfied, Satisfied, neither satisfied nor dissatisfied, Dissatisfied or Very Dissatisfied: How satisfied are you with:

- 19. The level of participation of the students in health facility activities?

  Very Satisfied / Satisfied / neither satisfied nor dissatisfied / Dissatisfied /very

  Dissatisfied:
- 20. The quality of student interaction with community members?

  Very Satisfied / Satisfied / neither satisfied nor dissatisfied / Dissatisfied / very

  Dissatisfied:
- 21. The quality of student interaction with patients visiting the health facility?

  Very Satisfied / Satisfied / neither satisfied nor dissatisfied / Dissatisfied / Very

  Dissatisfied
- 22. The impact of students on their supervisor's job satisfaction?

Very Satisfied / Satisfied / neither satisfied nor dissatisfied / Dissatisfied / Very Dissatisfied

- 23. The overall student contribution to the care provided to patients by the health facility?
  - Very Satisfied / Satisfied / neither satisfied nor dissatisfied / Dissatisfied / Very Dissatisfied:
- 24. Is there anything else you want to share about the effect medical students have on your community health facility?

# <u>Part E: Interview with clinical staff who supervise medical students:</u>

- 1. What is your role at the health facility?
  - i. How long have you been there?
  - ii. What is your professional background or training?
  - iii. What is your interaction with the students?
  - iv. Do you directly supervise students?

#### We would like to understand the effect of having students at your health facility.

- 2. Describe the activities of medical students at your health facility.
- 3. How do you feel about having students work with you?
  - i. How does it affect the quality of care you provide?
  - ii. How does it affect your job satisfaction?
- 4. What resources are needed to train students at the health facility?
  - i. Any additional supplies? Medications? Protective gear?
  - ii. Any other resources?
- 5. Is there a structured curriculum for the students to follow while they are in your facility?
  - i. Are there specific learning objectives for students while they are here?
  - ii. Have you seen the curriculum and objectives?

- 6. As a supervisor of students, has the medical school provided you with any benefits?
  - i. Have you had any training to teach effectively in the clinical setting?
  - ii. Does the medical school offer any CPD (continuing professional development) courses?
  - iii. Do you have any access to any teaching material or resources through the University?
- 7. Do academic staff/clinicians from the medical school participate in oversight of students?
  - i. If so, do these visiting faculty participate in clinical care?
- 8. How are patient volumes affected by students at the health facility?
  - i. Are you able to see more patients?
  - ii. Do patients have a shorter waiting time?
- 9. How is the overall quality of care provided at the health facility affected by students being there?
  - i. Is it improved? Any other examples?
  - ii. Does the quality of care decline? If so, please provide some examples.
- 10. Do students participate in the care for HIV patients at this facility?
  - i. If so, please describe
- 11. Do students participate in the care of women and children at the facility?
  - i. If so, please describe
- 12. How are patients affected by having students at the health facility?
  - i. Please describe
- 13. How is the community affected by having students at the health facility?
- 14. Are there times of the year when there are no students?
  - i. When students are not there, what is different at the health facility?
    - 1. Are there changes to the work environment?
    - 2. Are there any differences in the # of patients seen?
    - 3. Are there any differences in the # of deliveries?

- 4. Are there any differences in the quality of care?
- ii. If no, what do you think are the benefits or challenges of having students at the facility continuously?
- 15. Are there other students, besides medical students that rotate through your facility?
  - i. If yes, what are these other students studying?
  - ii. In general, how do they contribute to the health facility?
  - iii. Do they interact with medical students?
    - 1. If yes, describe the interaction?
    - 2. How does this interaction affect clinical care?
- 16. Can you summarize the advantages to having students at your health facility?
- 17. Can you summarize the disadvantages of having students at your health facility?
- 18. Are you provided any additional resources (e.g. drugs, supplies) because students come to your facility?
  - i. If so, who provides these resources?
  - ii. If so, please provide examples of additional resources
- 19. Is there anything else you want to share about the effect students have on your community health facility?

# <u>Part F: Interview with clinical staff not directly supervising medical students:</u>

- 1. What is your role at the health facility?
  - i. How long have you been there?
  - ii. What is your professional background or training?
  - iii. Describe your interaction with students?
- 2. In what ways do students affect your work?
  - i. Do they have a positive impact on your work? If so, please describe

- ii. Do they have a negative impact on your work? If so, please describe
- 3. How are health services affected by having students at this health facility?
  - i. How do students contribute to HIV care and prevention through the facility?
  - ii. How do students contribute to maternal and child health?
- 4. How is the care you provide to patients affected by working with students?
  - i. How does it affect the number of patients you care for?
  - ii. How do students affect the quality of care you provide?
- 5. How are your patients affected by having students at the health facility?
- 6. How is the community affected by having students at the health facility?