

Supplementary File 5: MMAT Methodological quality assessment

	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q1 0	Q1 1	Q1 2	Q1 3	Q1 4	Q1 5	Q1 6	Q1 7	Q1 8	Q1 9	Q2 0	Q2 1	Q2 2	Q2 3	
Bakiewicz et al, 2020	Y	Y	Y	Y	Y	Y	Y																	
Oketch et al, 2019	Y	Y	Y	Y	Y	Y	Y																	
Saidu et al, 2019	Y	Y																						Y
Lee et al, 2021	Y	Y	Y	Y	Y	Y	Y																	
Rositch et al, 2012	Y	Y																	Y	N	N	Y	Y	
Ogilvie et al, 2013	Y	Y																	y	Y	Y	Y	Y	
Mitchell et 2011	Y	Y																	Y	Y	Y	Y	Y	
Mitchell et al 2017	Y	Y																	Y	Y	Y	Y	Y	
Nakalembe et al, 2020	Y	Y																	Y	Y	N	Y	N	
Manguro et al, 2018	Y	Y																	Y	Y	Y	Y	Y	

Kohler et al, 2019	Y	Y															Y	Y	N	Y	Y	
Katanga et al, 2021	Y	Y															Y	Y	N	Y	Y	
Mahande et al, 2021	Y	Y															Y	Y	Y	Y	Y	
Crofts et al, 2015	Y	Y															Y	Y	Y	Y	Y	
Mremi et al, 2021	Y	Y															Y	Y	Y	Y	Y	
Berner et al, 2013	Y	Y															Y	Y	Y	Y	Y	
Sossauer et al, 2017	Y	Y						N	Y	Y	Y	Y										
Modibbo et al, 2017	Y	Y						Y	Y	Y	Y	Y										
Obiri-Yeboah et al, 2017	Y	Y						Y	Y	Y	Y	Y										

*Y yes; *N no; C can't tell

Screening questions (for all types)

Q1: Are there clear research questions?

Q2: Do the collected data allow to address the research questions?

Qualitative

Q3: Is the qualitative approach appropriate to answer the research question?

Q4: Are the qualitative data collection methods adequate to address the research question?

Q5: Are the findings adequately derived from the data?

Q6: Is the interpretation of results sufficiently substantiated by data?

Q7: Is there coherence between qualitative data sources, collection, analysis and interpretation?

Quantitative Randomised Controlled Trials

Q8: Is randomization appropriately performed?

Q9: Are the groups comparable at baseline?

Q10: Are there complete outcome data?

Q11: Are outcome assessors blinded to the intervention provided?

Q12: Did the participants adhere to the assigned intervention?

Quantitative Non-Randomised

Q13: Are the participants representative of the target population?

Q14: Are measurements appropriate regarding both the outcome and intervention (or exposure)?

Q15: Are there complete outcome data?

Q16: Are the confounders accounted for in the design and analysis?

Q17: During the study period, is the intervention administered (or exposure occurred) as intended?

Quantitative Descriptive

Q18: Is the sampling strategy relevant to address the research question?

Q19: Is the sample representative of the target population?

Q20: Are the measurements appropriate?

Q21: Is the risk of nonresponse bias low?

Q22: Is the statistical analysis appropriate to answer the research question?

Mixed methods

Q23: Is there an adequate rationale for using a mixed method design to address the research question?

Q24: Are the different components of the study effectively integrated to answer the research question?

Q25: Are the outputs of the integration of qualitative and quantitative components adequately interpreted?

Q26: Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?

Q27: Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?