PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Community based health insurance and healthcare service utilization, North-West, Ethiopia: a comparative cross-sectional study
AUTHORS	Atnafu, Desta; Tilahun, Hiwot; Alemu, Yihun Mulugeta

VERSION 1 – REVIEW

REVIEWER	Abdur Razzaque Sarker University of Strathclyde, UK
REVIEW RETURNED	17-Oct-2017

GENERAL COMMENTS	This paper addresses an important topic about the assessment of impact of Community Based Health Insurance (CBHI) on healthcare utilization of informal workers in Ethiopia. Therefore, the research is important and could be influential for policy decisions. I have however some important concerns that I think could improve the paper and I describe in detail below. GENERAL COMMENTS Perhaps the most important comment is that the writing needs to be improved. It is often difficult to understand what the text is trying to convey. As this paper targeted as informal sector worker therefore it might be reflected on the tile of this paper. My main concern is about the methodological issues related, as the authors claimed that objective of this paper is to compare the status of healthcare utilization among insured vs uninsured households, my concern is the selection of matched uninsured household..! What are the matching criteria? How the authors control the effect of socio-demographic variables, under five children, economic status and even the diseases condition and health status during selection of households? For example, if an insured household has a member with chronic disease such as diabetes/cancer, to compare this you should select an uninsured household of similar condition. Again considering perceived healthcare it is not clear that if both insured and uninsured responded did not received any care (last six month), what is the role of CBHI here, similarly if one received care during ill and other not due good health, what will be the interpretation here, this issues is validate in the term of perceived quality of care. The authors need to clarify this properly. SPECIFIC COMMENTS ♣ The abstract is poorly written. I did not find any takeaway message with this abstract and should be re-written. ♣ The introduction section should be revised with latest cited related articles to address the quality paper rather using outdated references. ♣ Line 56…"OOP results in massive financial barriers and impoverishment in households"… this is not true for high SES.

	♣ Line 57…face catastrophic expenditure..” for what? Due to healthcare expenditure? ♣ Page 11, line 36 what are the income range? ♣ Page 11, lines 196-199…” Fifty one of uninsured respondents were identified as not been healthy compared to 39 among the insured …. was statistically significant” Unless matching how you compare healthy vs non healthy dimensions? If that particular responded did not receive care (las six moth)? Clarify. ♣ If the respondent did not attend how he/she scored perceived quality of care? Therefore the table 4 is useless if those are not addressed properly. ♣ Pahe 13 line 20, premium is included in healthcare costs? If yes, what is the amount? Need to clarify the CBHI benefit package in methodology section. ♣ Page 15 line 228….baseline variable” means what? Where is the end line variable? ♣ In discussion section, it is difficult to readable the results until linked with discussions. I strongly suggested, the authors could revised the discussion section rather than statement. ♣ Page 16 lines 239-246..” what is the basis of this text? How it comparable with your study? ♣ Page 16 lines 248-249… HHs who perceive their own health condition as good were more likely to be enrolled in the CBHI scheme than who leveled their own health as underprivileged..” I don’t understand it how it comparable? As you considered only responded not other members therefore the responded must be utilized the healthcare in past six month (clarify inclusion criteria of respondent), therefore, their health is relatively better which might be the effect of CBHI (I am not sure) as you don’t know the status of that respondent before joining to the scheme which might jeopardize your explanation. ♣ Page 17 line 260….CBHI increases HC utilization...” for whom? For all members of households or only HHs? ♣ Page 17 line 265-269……seems redundant…what is the basis? ♣ In concussions, it’s not clear what the take-home message is.

REVIEWER	Adriana Castelli Centre for Health Economics, University of York, England (UK)
REVIEW RETURNED	26-Oct-2017

GENERAL COMMENTS	The Authors find a significant difference in the rate of utilisation of healthcare services between the insured and uninsured households interviewed. They also find a significant variation in the likelihood of healthcare service utilisation by sex, level of education, the presence of a chronic condition, income and whether or not insured. The Authors conclude that the based on their findings, utilisation of healthcare services is significantly higher in people enrolled in a CBHI scheme and that increasing the enrolment in CBHI schemes could have a positive impact on systematic underutilisation of healthcare services by the population. The area of the research is very important for low and low-middle income countries as they often lack the ability to establish national

	health insurance programmes and one way to obviate to this, as proposed by health economists, policy makers and international organisations, such as the World Bank, is through the establishment of the CBHI schemes. So, the paper submitted for review is very timely and interesting. However, the paper in its present state is not ready for publication in BMJ Open, and I strongly advise the authors to consider the following points for review. <u>Major points</u> 1. Overall, the paper is written in non-academic English, I would advise the Authors to send their paper to a professional proof-reader before re-submitting the paper to BMJ Open. 2. p.3, row 59, please specify which six OECD countries your statement refers to. The report referenced, nr (5) refers to Low and Middle income countries and to the impact of health insurance coverage on the use of maternal care services. I have scanned through the paper and have not been able to find a reference to your statement. 3. P.4, rows 67 – 74, the paragraph starts off by explaining the importance of reducing the reliance on direct payments for healthcare services to reduce financial risks, but then produces examples showing the increase in healthcare utilisation. I feel that the examples offered do not follow / support the statement posed. 4. P.4, row 74, correct typo “courtiers” with “countries”. 5. P.4, row 85, “[…] spending accounted only 4.65%” of what? GDP? Then, the Authors continue to compare this figure to per capita healthcare expenditure figures for the Philippines. Not very clear, please amend. 6. P.5, row 95, add “workers”? after “[…] informal sector”? (if you do add workers, drop the s in sectors).

	7. P.5, row 98, something is missing after verb "intended". Perhaps, it should read "intended **to make** healthcare services more…"? 8. P. 6, row121, not sure what a "design effect of 2" means. Please provide explanation. 9. P.7, row 142, reference missing for Ronald Andersen behaviour model. 10. P. 7, row 150, the Authors talk about a household wealth index and principle components analysis, but they 1) do not provide any further information on how the household wealth index was computed and 2) I cannot seem to find any further reference in their paper. The Authors talk about household income (see also Table 2), classified in poor, medium and rich (how did these groupings came about is unknown to me) and somewhere else in the paper (p. 10, row 189), they talk about income quintiles (I cannot find these in the study)!!! In Table 4, the Authors refer to Household wealth index! Urgent clarification needed regarding the use of household income. 11. P.7, row 152, what is a "mustered book"? 12. P.10, row 190, household quintiles?!?!? See my comment 10. 13. P.11, row 196, word percentage and sign % missing from the sentence. 14. P.11, row 199, I don't understand what the Authors mean by "Self-selection for enrolment was normal (adverse selection was lower). 15. P.12, rows 201 – 202, the Authors state that "The main reason for the more visiting of healthcare facility by enrolled HHs (93.94%) was the perceived quality of healthcare as well as cost of current treatment (Table 3)." How is this statement arrived at/inferred from the figures reported in said Table? Did the Authors asked a specific question on this regard to the interviewees? Please address. (Note: you have not used this acronym before!, so please specify it somewhere else first and then use it, and more generally be

	consistent in your paper!) 16. P.12, Table 3, the Authors report a dichotomous current health status variable, but on p. 7, rows 145 -148, they state that "[…] respondent's report about their health status […]: very good, good, medium, poor and very poor". How was the dichotomous health status variable reported in the table calculated? Please explain. 17. Overall, the discussion section needs to be improved, especially in the use of English language, to make it more understandable to the reader. As it stands, it is very difficult, if not impossible, to follow the implications of the Authors' findings with those found in other/previous studies. For example, P.15, row 220, this is the first time that the Authors state that their study was to evaluate the healthcare service utilization for individuals in the informal sector. Please clarify. P.15, row 224 - 225, please explain what the first sentence means. P.15, row 229 – 238, I fail to understand what the Authors intend to convey in this paragraph. P.16, rows 239 – 246, please explain why the uptake of CBHI is not affected by adverse selection? Your current explanation is not complete nor clear. P.16, row 249 – 252, the statement made by the Authors on the weak link between own health status perception and rate of enrolment is not clear. P.17, rows 262 -263, income categories and quintiles are NOT the same thing!

VERSION 1 – AUTHOR RESPONSE

Dear BMJ Open

Thank you very much for your responses.

Editor comments and Authors response

1. Inquire: Please edit the title so that the second half contains the study design.
Response. The title is revised as follows: Community based health insurance and healthcare service utilization among insured and uninsured households in South Achefere District, North West, Ethiopia: a comparative cross-sectional study
2. Inquire: Please ensure that your manuscript is thoroughly proofread by a native English speaker prior to resubmission, to check for errors in language. You may want to consider using a copy-editing agency for this.
Response: The language is thoroughly edited by subject expert and the track change is uploaded as supplementary file.
3. Inquire: Please discuss the limitations of the study in the discussion section.
Response: limitation of the study is added at the end of the discussion section and reflected in the revised version of the manuscript
Reviewer: 1 comments and authors response
General comments
1. Inquire: perhaps the most important comment is that the writing needs to be improved. It is often difficult to understand what the text is trying to convey.
Reponses: the language is thoroughly edited by subject expert and the track change is uploaded as supplementary file
2. Inquire: as this paper targeted as informal sector worker therefore it might be reflected on the title of this paper
Reponses: community based health insurance is reflected on the title. In the background section the targeted members to community based health insurance were described. It would be nonspecific and vague if informal sector is added to the title.
3. Inquire: my main concern is about the methodological issues related, as the authors claimed that objective of this paper is to compare the status of healthcare utilization among insured vs uninsured households, my concern is the selection of matched uninsured household...! What are the matching criteria? How the authors control the effect of socio-demographic variables, under five children, economic status and even the diseases condition and health status during selection of households? For example, if an insured household has a member with chronic disease such as diabetes/cancer, to compare this you should select an uninsured household of similar condition.
Reponses: we did not match insured vs uninsured households based on under-five children, economic status, disease condition factors and health status; hence, we do not identify significant difference of enrollment to community based insurance based on under-five children, economic status, disease condition factors and health status. From your comment we noticed that limited relevance of table four and we amend table four.
4. Inquires: again, considering perceived healthcare it is not clear that if both insured and uninsured responded did not received any care (last six month), what is the role of CBHI here, similarly if one received care during ill and other not due good health, what will be the interpretation here, this issue is validate in the term of perceived quality of care. The authors need to clarify this properly.
Reponses: operational definition of healthcare utilization is revised in the following way: utilization of healthcare was measured as the number of visits made by at least one household member at least once in the previous six months for health services (any diagnostic or treatment). Anyone who was sick or not as long as visiting the heath institution for treatment or diagnostic purpose was consider as utilizing the healthcare. The role of CBHI is hypothesized that those who were enrolled to the CBHI visited the health institution for purpose of treatment and diagnostic when they need health services in higher rates than those who do not enrolled to CBHI. Hence, those who already have enrolled to CBHI don't asked out-pocket money.
Specific comments
1. Inquire: the abstract is poorly written. I did not find any take away message with this abstract and should be re-written.
Response: thank you very much, the abstract re-written in the following way and reflected in the revised version of the manuscript

ABSTRACT
Objectives: The objective of this study were to compare the difference in healthcare utilization between community based health insurance member households and non- member households and to identify factors for community based health insurance enrollment in South Achefer District.
Study Design: Comparative cross-sectional study
Settings: Community based
Participants: A total of 652selected households (326 insured and 326 uninsured households) ware participating in the study.
Method: A two sample t-tests (for proportions) and chi-square (for categorical data) were computed.
Main Outcome measure: Utilization of healthcare.
Results: There was a significant difference in rate of healthcare utilization between insured (50.5%) and uninsured (29.3%) households (x2=27.864, P-value <0.001). Significant variations of enrollment status to community based health insurance were observed in the following variables: educational status, family size, occupation, marital status, time travel to the nearest health institution, perceived quality of care, first choice of place for treatment during illness and expected health care cost of recent treatment.
Conclusions: Utilization of health services among insured household in community based health insurance was higher. Educational status, family size, occupation, marital status, time travel to the nearest health institution, perceived quality of care, first choice of place for treatment during illness and expected health care cost of recent treatment should be emphasized for enhancing community health insurance enrollment.
2. Inquires: The introduction section should be revised with latest cited related articles to address the quality paper rather using outdated references.
Response: the background sections are rewritten and recent references are cited .
3. Inquires: Line 56…" OOP results in massive financial barriers and impoverishment in households" … this is not true for high SES.
Responses: thank you very much; the preceding sentence is revised as for lower socioeconomic group. This is reflected in the background section of revised version of the manuscript.
4. Inquires: Line 57…faces catastrophic expenditure." for what? Due to healthcare expenditure?
Response: thank you very much, due to health care expenditure. This is reflected in the revised version of the manuscript.
5. Inquires: page 11, line 36 what are the income range?
Responses: household income was estimated from wealth index; wealth index was calculated by using principal component analysis. Although there were large data sets, principal component analysis is a technique for reducing the dimensionality of large datasets. The wealth-index was assessed by asking the following components of assets: livestock, crops production, infrastructure (radio, modern bed, matters, phone, water pump, and modern stove), latrine, housing condition (number of room, roof), and total farm size. The wealth-index of study households ranges from poor to rich. The phrase written in the manuscript "household income" is now substituted by the phrase ''household wealth-index''; this is reflected in the revised version of the entire manuscript.
6. Inquire: page 11, lines 196-199…" Fifty-one of uninsured respondents were identified as not been healthy compared to 39 among the insured …. was statistically significant" Unless matching how you compare healthy vs non- healthy dimensions? If that particular responded did not receive care (las six moth)? Clarify.
Response: This is reflected in the response of general inquires 3.
7. Inquire: If the respondent did not attend how he/she scored perceived quality of care? Therefore, the table 4 is useless if those are not addressed properly.
Response:This is reflected in the response of general inquires 3.
8. Inquire: Page13 line 20, premium is included in healthcare costs? If yes, what is the amount? Need

to clarify the CBHI benefit package in methodology section.
Response: premium is not included in the health care cost. The ‘’ health care cost’’ which is written on table three is expected health care cost. Participants who were insured in community based health care are not pay for health care cost; however, the health care cost is calculated for the purpose of healthcare financing. The community based health care insurance agency remembrances the health care cost to the governmental health institutions where the patient receiving healthcare. This is reflected in the revised version of manuscript table 3 and methodology section (study settings).
9. Inquire: Page 15 line 228…. baseline variable” means what? Where is the end line variable?
Response: thank you very much the phrase “base line variable” is substituted by “socioeconomic variable”. This is reflected in the revised version of the manuscript.
10. Inquire: In discussion section, it is difficult to readable the results until linked with discussions. I strongly suggested, the authors could revise the discussion section rather than statement.
Response: thank you very much; we do agree that we revise the entire discussion. This is reflected in the revised version of the manuscript.
11. Inquire: Page 16 lines 239-246. ‘’ what is the basis of this text? How it comparable with your study?
Response: the text on page 16 line 239 – 246 is revised; this is reflected in the revised version of the manuscript.
12. Inquires: page 16 lines 248-249… HHs who perceives their own health condition as good were more likely to be enrolled in the CBHI scheme than who leveled their own health as underprivileged.” I don’t understand it how it comparable? As you considered only responded not other members therefore the responded must be utilized the healthcare in past six month (clarify inclusion criteria of respondent), therefore, their health is relatively better which might be the effect of CBHI (I am not sure) as you don’t know the status of that respondent before joining to the scheme which might jeopardize your explanation.
Respondents: inclusion criteria for respondents were household heads whose age were 18 years old and more. Health care utilization in the past six months was the operational definition for “healthcare utilization”. The explanation for the finding healthy households enrolled to CBHI than unhealthy household heads is revised. That is reflected in the revised version of the manuscript.
13. Inquire: Page 17 line 260…. CBHI increases HC utilization...” for whom? For all members of households or only HHs?
Response: the statement on page 17 line 260 is revised as “health care utilization was higher among insured (member to CBHI) households than uninsured households (not member for CBHI).
14. Inquire: Page 17 line 265-269……seems redundant…what is the basis?
Response: statement on page 17 line 265 -269 is revised and reflected in the revised version of the manuscript
15. Inquire: In concussions, it’s not clear what the take-home message is.
Response: the conclusion is revised based on the study findings and reflected in the revised version of the manuscript
Reviewer-two comments and authors response
1. Inquire: overall, the paper is written in non-academic English, I would advise the Authors to send their paper to a professional proof-reader before re-submitting the paper to BMJ Open.
Response: thank you very much; the entire manuscript is edited by senior researcher and subject experts.
2. Inquire: p.3, row 59, please specify which six OECD countries your statement refers to. The report referenced, nr (5) refers to Low and Middle-income countries and to the impact of health insurance coverage on the use of maternal care services. I have scanned through the paper and have not been able to find a reference to your statement.
Response: the sentence is revised in the following way: seven to thirteen percent of households in six Middle East & North African countries also suffered catastrophic medical expenditure. Specific reference (5) is cited. This is reflected in the revised version of the manuscript.
3. Inquire: P.4, rows 67-74, the paragraph starts off by explaining the importance of reducing the

reliance on direct payments for healthcare services to reduce financial risks, but then produces examples showing the increase in healthcare utilization. I feel that the examples offered do not follow / support the statement posed.
Response: thank you very much, statement on page 4 line 67 to 74 was one paragraph but discuss about two main points. The example sated was about increased health care utilization because of increased insurance coverage but not for reducing financial risk because of direct payment for health care. The paragraph is separated and rewritten; this is reflected on the revised version of the manuscript
4. Inquire: P.4, row 74, correct typo “courtiers” with “countries”.
Response: word “courtiers” on page 4 line 74 corrected as “countries”
5. Inquires: P.4, row 85, “[…] spending accounted only 4.65%” of what? GDP? Then, the Authors continue to compare this figure to per capita healthcare expenditure figures for the Philippines. Not very clear, please amend.
Response: the Ethiopia health care expenditure was 4.65% of total GDP; this is reflected on the revised version of the manuscript. Comparison to Philippines in the background section is entirely amended.
6. Inquire:P.5, row 95, add “workers”? after “[…] informal sector”? (if you do add workers, drop the s in sectors).
Response: thank you very much, we revised and reflect on the revised version of the manuscript
7. Inquire: P.5, row 98, something is missing after verb “intended”. Perhaps, it should read “intended to make healthcare services more…”?
Response: the verb “to make” is inserted and reflected in the revised version of the manuscript
8. Inquire: P. 6, row121, not sure what a “design effect of 2” means. Please provide explanation.
Response: hence the sampling procedure was multi stage sampling: the first stage was the kebeles and then the second stage was households within the kebele; we used the design effect 2. This is reflected on the revised version of the manuscript.
9. Inquire: P.7, row 142, reference missing for Ronald Andersen behavioral model.
Response: reference for Ronald Andersen behavioral model is cited and reflected in the revised version of the manuscript
10. Inquire: P. 7, row 150, the Authors talk about a household wealth index and principle components analysis, but they 1) do not provide any further information on how the household wealth index was computed and 2) I cannot seem to find any further reference in their paper. The Authors talk about household income (see also Table 2), classified in poor, medium and rich (how did these groupings came about is unknown to me) and somewhere else in the paper (p. 10, row 189), they talk about income quintiles (I cannot find these in the study)!!! In Table 4, the Authors refer to Household wealth index! Urgent clarification needed regarding the use of household income
Response: household income was estimated from wealth index; wealth index was calculated by using principal component analysis. Although there were large data sets, principal component analysis is a technique for reducing the dimensionality of large datasets. The wealth-index was assessed by asking the following components of assets: livestock, crops production, infrastructure (radio, modern bed, matters, phone, water pump, modern stove), latrine, housing condition (number of room, roof), and total farm size. The wealth-index of study households ranges from poor to rich. The phrase written in the manuscript “household income” is now substituted by the phrase ‘’household wealth-index’’; this is reflected in the revised version of the entire manuscript.
11. Inquire: P.7, row 152, what is a “mustered book”?
Response: registration book that indicated whether a household is member of CBHI or not; this is reflected on the revised version of the manuscript.
12. Inquire: P.10, row 190, household quintiles?!?!? See my comment 10.
Response: reflected in the response of inquire 10.
13. Inquire: P.11, row 196, word percentage and sign % missing from the sentence
Response: the word percent is added in the sentence
14. Inquire: P.11, row 199, I don’t understand what the Authors mean by “Self-selection for enrolment

was normal (adverse selection was lower).
Response: the statement is described in simplistic way “The payment to enroll to CBHI per year is less than 10 dollars. The poorest can afford the year based payment. Therefore, wealth in this circumstance could not be a factor for enrollment to CBHI. In descriptive statistics still higher proportion of household wealthiest enrolled, this could be higher awareness of the higher income group about CBHI than lower income group.” The detailed discussion is reflected in the revised version of the manuscript in the discussion section.
15. Inquire: P.12, rows 201-202, the Authors state that “The main reason for the more visiting of healthcare facility by enrolled HHs (93.94%) was the perceived quality of healthcare as well as cost of current treatment (Table 3).” How is this statement arrived at/inferred from the figures reported in said Table? Did the Authors asked a specific question on this regard to the interviewees? Please address. (Note: you have not used this acronym before! so please specify it somewhere else first and then use it, and more generally be consistent in your paper!)
Response: the statement is revised and reflected in the revised version of the manuscript.
16. Inquire: P.12, Table 3, the Authors report a dichotomous current health status variable, but on p. 7, rows 145 -148, they state that “[…] respondent’s report about their health status […]: very good, good, medium, poor and very poor”. How was the dichotomous health status variable reported in the table calculated? Please explain.
Response: the variable current health status was collected as “very good, good, medium, poor and very poor” but in analysis, the model was not fit for five scale variables because of small number of respondents per cell. Therefore, we obligated to dichotomize the variable in order to get stable number of respondents per cell.
17. Inquire: overall, the discussion section needs to be improved, especially in the use of English language, to make it more understandable to the reader. As it stands, it is very difficult, if not impossible, to follow the implications of the Authors’ findings with those found in other/previous studies. For example,
a. Inquire: P.15, row 220, this is the first time that the Authors state that their study was to evaluate the healthcare service utilization for individuals in the informal sector. Please clarify.
Response: overall, the discussion is revised in terms of language and the main findings are discussed thoughtfully. The sentence revised “This study aimed to compare the difference in healthcare utilization between community based health insurance member households and households who were not member to community based health insurance and the study identified factors for community based health insurance enrollment” this is reflected in the revised version of the manuscript”.
b. Inquire: P.15, row 224 - 225, please explain what the first sentence means.
Response: the sentence is rewritten in simplistic way “the rate of health service utilization is greater than ever being a member to any risk sharing institution such as tax based health insurance, social health insurance, private health insurance and national health insurance, employer paid insurance”.
c. Inquire: P.15, row 229-238, I fail to understand what the Authors intend to convey in this paragraph.
Response: Page 15, line 229-238 is revised.
d. Inquire: P.16, rows 239-246, please explain why the uptake of CBHI is not affected by adverse selection? Your current explanation is neither complete nor clear.
Response:P.16; line 239 – 238 of the revise manuscript is revised in the following way:
a research finding identified that higher number of study subjects with chronic illnesses were observed among insured households than uninsured household8; this finding was similar with our research finding. Adverse selection is a critical concern for voluntary based health insurance. Community based health insurance is a targeted subsidy to the poor households. As the same time this targeted subsidy to the highest risk group increase adverse selection. Therefore, plan to bridge the financial gap because of adverse selection is crucial so as to continue community based health insurance serves to the community34.
e. Inquire: P.16, row 249-252, the statement made by the authors on the weak link between own health status perception and rate of enrolment is not clear.

Response: the statement is revised as follows: Higher proportion study interviewed household head who were enrolled to CBHI could have better awareness and practice in prevention of disease, health seeking behavior and general health status. As a result, the cumulative perceived health status would be better among enrolled household heads. This is reflected in the revised version of the manuscript.
f. Inquire:P.17, rows 262-263, income categories and quintiles are NOT the same thing!
Response: The statements are revised by the word wealth-index in the entire manuscript.

VERSION 2 – REVIEW

REVIEWER	Abdur Razzaque Sarker Health Economics and Financing Research, International Centre for Diarrheal Disease Research, Bangladesh (icddr,b)
REVIEW RETURNED	11-Dec-2017

GENERAL COMMENTS	The manuscript is much improved now although some limitations are associated such as the study does not follow the matching criteria for insured vs uninsured households, therefore it should be mentioned in the separate paragraph in limitation section. However, I found some minor typos error in revised version and the title looks too long. I decided to accept the revised version, however, the authors should be focused on these issues.

REVIEWER	Adriana Castelli Centre for Health Economics, University of York, UK
REVIEW RETURNED	18-Jan-2018

GENERAL COMMENTS	I'm afraid the paper is still written in poor English and should be thoroughly proof-read by a native English speaker, as already suggested in my previous review of the paper and also by the Editor. Despite the importance of the study subject in order to determine whether access to and utilization of health care services is improved through individuals' and families' participation in Community Based Health Insurance Schemes, especially for the poorer people of society who are also more likely to need and benefit from access and utilization of said health care service, I don't think that the paper in its current state is ready to be re-submitted to BMJ to be considered for publication. This is mainly due to the poor quality of the English grammar and language of the manuscript, which makes it extremely difficult to read. The whole paper is full of quite remarkable grammatical mistakes, please see examples below. p. 4, line 19 "[…] suffered with catastrophic…" should be "from". p. 4, line 45, subject and verb are not conjugated correctly. p. 4, line 51, "[…] is an emergency alternatives…", should be singular. p. 5, line 38, what do the Authors intend here with the noun or indeed verb "remembrances"? p. 8, line 5, "A total of 594 households were participated…" drop the "were". p. 9, lines 41 – 46, "Time travel to the nearest health institution is significantly varied […] and household wealth index were not significantly varied with […]". This should be "Time travelled to the nearest health institution varies significantly with a household's CBHI

	enrolment status […] and household wealth index does not vary significantly with […]". Regarding the content, I found that the Authors decided to either cut a lot of the previous text out rather than address the questions asked by both reviewers or to answer to the reviewers' queries letting us know how the text has changed in the new revised version of their manuscript but then do not fully incorporate or report the changes made in the version they re-submitted. I don't think that this is the best strategy to review a paper properly. I accept that the Authors may change entire sections, cutting text out that they think is not relevant or has become redundant. But these should be clearly sign-posted to the Editor and Reviewers. The Authors have done a very poor job on this regard. In particular, the Authors refer in their reply to the reviewers not to the paper that they re-submitted to BMJ but the further Word doc which they uploaded. This is confusing, as in my role of reviewer I do not know what to consider as correct and final. I even raised the issue with the editor who advised me to use the 'clear' copy instead. Well, this is a substantially different paper, with many parts cut out from the paper I initially reviewed and which does not include the responses to reviewers' queries. Overall, I don't think the Authors have done a good job in considering and answering to the reviewers' comments in their revised paper and given that current manuscript is still lacking in terms of language used and ease of reading. I do not think that in its current form it is ready to be accepted for publication.

VERSION 2 – AUTHOR RESPONSE

Response for inquires

A. Reviewer: 1

Inquiry

1. The manuscript is much improved now although some limitations are associated such as the study does not follow the matching criteria for insured vs uninsured households, therefore it should be mentioned in the separate paragraph in limitation section. However, I found some minor typos error in revised version and the title looks too long. I decided to accept the revised version; however, the authors should be focused on these issues.

Response

1. Thank you very much, we include''This study not used matching criteria for insured and uninsured household'' as a separate paragraph in the limitation section. The type error is revised. Title is edited as "Community based health insurance and healthcare service utilization among insured and uninsured households in South Achefere District, North-West, Ethiopia: a comparative cross-sectional study''. Limitation "This study not used matching criteria for insured and uninsured household'' is added in the separate and last paragraph of discussion section. These are reflected in the revised version of the manuscript.

B. Reviewer: 2

Inquiry

1. I'm afraid the paper is still written in poor English and should be thoroughly proof-read by a native English speaker, as already suggested in my previous review of the paper and also by the Editor.

Response

1. The paper is proof edit by native English Speaker

Inquiry

2. This is mainly due to the poor quality of the English grammar and language of the manuscript, which makes it extremely difficult to read. The whole paper is full of quite remarkable grammatical mistakes, please see examples below.
p. 4, line 19 “[…] suffered with catastrophic…” should be “from”.
Response: thank you very much, page 4, line 19, suffered with catastrophic is corrected as suffered from catastrophic

3. Inquiry
p. 4, line 45, subject and verb are not conjugated correctly.
Response
Thank you very much, P. 4 line 5 subject verb agreement is corrected as the “The existing health insurances cover….
4. Inquiry
p. 4, line 51, “[…] is an emergency alternatives…”, should be singular.
Response
Thank you very much, P.4 line 51 corrected as “…is an emerging alternative “
5. Inquiry
p. 5, line 38, what do the Authors intend here with the noun or indeed verb “remembrances”?
Response
Thank you very much, P 5 line 38, we wanted to say “reimburse”and we corrected as “community based health insurance reimburse health care cost…. “
6. Inquiry
p. 8, line 5, “A total of 594 households were participated…” drop the “were”.
Response
Thank you very much, p. 8 line 5 corrected as “ a total of 594 households participated….”
7. Inquiry
p. 9, lines 41 – 46, “Time travel to the nearest health institution is significantly varied […] and household wealth index were not significantly varied with […]”. This should be “Time traveled to the nearest health institution varies significantly with a household’s CBHI enrollment status […] and household wealth index does not vary significantly with […]”.
Response
P. 9, line 41- 46, corrected as “Time travel to the nearest health institution varies significantly with a household’s CBHI enrollment status. However, type of nearby health institution and household wealth index do not vary significantly vary with a household’s community based health insurance enrollment status. ‘’