

PANACeA Formative Network Evaluation Report

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Abbreviations

PANACeA:	PAN Asian Collaborative for Evidence-based eHealth Adoption and Application
IDRC:	International Development Research Centre
DECI:	Developing Evaluation Capacity in ICT4D
ICT4D:	Information Communication Technology for Development
PCTA:	PANACeA Common Thematic Areas
MDF:	Molave Development Foundation
AKU:	Aga Khan University
UFE:	Utilization Focused Evaluation
PIUs:	Primary Intended Users
KEQs:	Key evaluation Questions
AMT:	Advisory and Monitoring Team
PL:	Project Lead
PP:	Project Partner
ST:	Supporting Team members
ISRO:	Indian Space Research Organization
IIM:	Institute of Management (Bangalore)
CST:	Canadian Society of Telehealth
GK3:	3 rd Global Knowledge Conference
eHAP:	eHealth Association of Pakistan
ISfTeH:	International Society for Telemedicine and eHealth
ATA:	American Telemedicine Association
DFID:	Department for International Development

1. Executive Summary

PANACeA is a network of health researchers and institutions belonging to 12 developing countries of Asia, funded by International Development Research Centre (IDRC) Canada as a four year project from August 2007 to July 2011.

The objective of this network is to generate evidence on how eHealth could improve the health programs and services in the member countries through collaborative multinational eHealth projects. This report illustrates the findings of formative evaluation of the network.

The purpose of PANACeA's formative evaluation is to determine how the network supported networking, capacity building, and research projects, and generate recommendations for the future.

Utilization Focused Evaluation (UFE) approach was used for the formative evaluation. All 12 steps of UFE were followed under the guidance of IDRC-DECI (Developing Evaluation capacity for ICT4D) team. PANACeA leadership identified the needs and showed readiness for the evaluation, and helped selecting Primary Intended Users (PIUs). In total, 25 PIUs were involved to identify Primary Intended Uses for the evaluation. The evaluation was conducted using in-depth interview guides to collect information from PIUs on PANACeA's role in facilitating collaboration and teamwork, knowledge management and building capacity. The findings of the evaluation were organized and analyzed using NVivo (Qualitative data analysis) software.

The major findings regarding the performance of PANACeA under the three main categories are as follows:

Collaboration and Teamwork:

Network members found diversity, collaboration and mentorship as network's strengths and recommended continuing this approach in the future. They found the network's hierarchical structure, haphazard communication, non-adherence to deadlines, informal approach, less involvement from the government sector and its focus on individuals rather than institutions, as major weaknesses. Although members enjoyed the diversity, they also found difficulties with the collective project reporting and communication within the network. This was due to members' different levels of understanding and participation, geographical distance, and time-zone differences. In order to overcome these challenges, members showed flexibility and used different communication modes to communicate within and between different projects. Network facilitated communication by ensuring understanding of common goal and common language, providing expenses and technical support, maintaining system of meetings and reporting to

mentors, providing interaction avenues, and ensuring equal opportunities and representation for both the sexes.

Capacity Building:

Network built partner's capacity in research design, improved eHealth infrastructure and enhanced their readiness for conducting independent eHealth projects by providing mentorship, courses, workshops and trainings, opportunities for collective learning and sharing, and by providing human, material and monetary resources. As a result of these initiatives, members came up with communication plans, monitoring and evaluation indicators, and successful implementation of their projects. Though members' capacity in eHealth was enhanced, some members demanded more capacity building in certain research aspects for which they suggested more time and frequency of sessions and trainings, follow-ups, ground-level training, and administrative and financial support.

Knowledge Management:

Network not only provided encouragement for dissemination but also built members' capacity in dissemination, and provided expenses for participation in dissemination conferences. This resulted in internal and external dissemination of PANACeA projects and researches by its members. Although the results of PANACeA projects are not disseminated yet, PANACeA members were able to make impact through initiatives, such as development of eHealth Association of Pakistan and influencing government and institutions in partner countries. In order to bring evident policy change, the members suggested that they should consider focused dissemination, use better marketing strategies, collaborate with government and policy makers, other NGOs and related institutions, identify funding sources, and use country specific strategies to bring policy impact in the field of eHealth.

The basic theme of UFE approach lies in its utilization. In order to ensure that the network achieves this, the evaluation team based on the actual findings of the evaluation, facilitated PIUs to list the utilization action steps and identify the personal/level responsible to carry out the steps. The PIUs are now carrying out these actions at different levels in order to bring improvements in the network.

2. Introduction and Background

2.1 Network Background:

The PAN Asian Collaboration for Evidence-based eHealth Adoption and Application (PANACeA) is a network of health researchers and institutions to conduct collaborative research on eHealth applications in Asian context. The network is funded by International Development Research Centre (IDRC) Canada as a four year project from August 2007 to July 2011. Experts from Pakistan, India, Afghanistan, Bangladesh, Nepal, Malaysia, Indonesia, Philippines, Sri Lanka, Mongolia, and Canada volunteered to be part of the network and collect evidence on how eHealth could improve the health programs and services in their countries. Eight research projects were initiated involving multi-national teams. List of these projects and along with its countries is given as appendix 1. The Key objectives of the network were:

- To support a set of multi-country research activities to address the four core research questions
 1. Which eHealth applications and practices have had most beneficial outcomes?
 2. What are the best ways for ensuring that beneficial outcomes can reach the population?
 3. What is the potential of using new pervasive technologies?
 4. What types of technologies/applications are best suited to help prepare for, or mitigate the effects of disasters, pandemics and emerging and re-emerging diseases?
- To create a theoretical model for evaluating good practice in eHealth programs in Asia
- To build research capacity amongst Asian researchers to evaluate and adopt appropriate eHealth technologies and practices and influence policy and decision makers
- To disseminate research findings widely in the regional and international research communities

PANACeA is managed by the Advisory and Mentoring Team (AMT) comprising of 6 eHealth experts from The Aga Khan University (AKU) - Pakistan, University of Calgary – Canada, Molave Development Foundation (MDF) – Philippines, Institute of Public Health – Bangalore India, and IDRC - Canada. Each AMT member is assigned 1-2 projects to provide regular mentoring and facilitation, and to enhance researchers' capacity in eHealth.

Alongside eHealth Projects, Network also came up with PANACeA Common Thematic Activities (PCTA), supervised by the AMT members that work parallel to supporting the projects in the areas of systematic reviews on Telehealth and Health Informatics, Free and Open Source Software, Readiness and Change management, Communications, Outcomes, Policy, Network management and Gender analysis.

2.2 DECI Background:

Utilization-focused and outcome oriented evaluation is very important for Information Communication Technology for Development (ICT4D) research projects; therefore, in August 2009, IDRC initiated a two year project “Developing Evaluation capacity for ICT4D” (DECI) to enhance evaluation capacity among IDRC-ICT4D project partners (http://www.idrc.ca/en/ev-149323-201-1-DO_TOPIC.html). Under the leadership of Ricardo Ramirez and Dal Broadhead, DECI team appointed a regional mentor, Mr. Chelladurrai Solomon, to support and facilitate PANACeA’s Utilization-focused formative network evaluation process.

2.3 Rationale for Network Evaluation of PANACeA:

PANACeA has its objectives defined at both Network and project levels, for which separate activities are undertaken at each level. PANACeA realizes the importance of network at both levels, but for the purpose of formative evaluation, only the activities at network level have been evaluated. Through this formative evaluation, PANACeA aims to determine how the network supported its research projects, how and what it achieved as a network and what else should be done in future, by whom, and at what level to ensure the fulfillment of the network’s objectives.

3. Methodology and Approach

Though several evaluation approaches are available, Utilization Focused Evaluation (UFE) approach as given by Michael Quinn Patton, gives a highly systematic approach which emphasizes on identification of the Primary Intended Uses and Primary Intended Users (PIUs), who hold a stake in the evaluation and who would actually use those findings. It then directs the identification of the aspects in which those primary evaluation stakeholders would intend to use the evaluation findings. With this stepwise and systematic approach, the evaluator facilitates and involves the PIUs in identification of uses of the evaluation, focusing the evaluation, selecting study designs, interpreting results, applying the evaluation findings and executing the recommendations. This active involvement in decision making and in evaluation process enhances a sense of ownership for the evaluation in the PIUs and fosters utilization of evaluation finding and process by the PIU.

Patton presented the course of UFE approach using 12 concrete steps; from the program's assessment till the utilization of findings, in which involvement of the Primary Intended Users is crucial. For PANACeA evaluation, the UFE checklist was referred and followed. The milestones for the 12 UFE steps as given in the checklist, with their timelines are as follows:

Timeline	Milestones
January 2010	Program's readiness assessment for evaluation
February 2010 <ul style="list-style-type: none"> • 1st to 4th Feb, 2010 	Identification of primary intended users <ul style="list-style-type: none"> • Annual PANACeA Workshop in Bangkok, where PIUs were identified
March 2010	Evaluator readiness and capability assessment
April 2010	Situational analysis
April 2010	Identification of primary intended uses and Focusing the evaluation
May 2010	Evaluation design
June 2010	Simulation of uses
June – August 2010	Data collection
September – December 2010 <ul style="list-style-type: none"> • October 25, 2010 	Data Analysis <ul style="list-style-type: none"> • PANACeA meeting in Colombo, where evaluation data was shared with PIUs, and PIUs revised the uses.
January 2011 onwards	Facilitation of use

Utilization Focused Steps used for PANACeA Formative Network Evaluation are as follows:

3.1 Program's readiness assessment for evaluation:

The AMT of PANACeA Network determined the need and readiness for PANACeA's formative evaluation. The leadership and the network members were committed to spend their time and resources for the evaluation since they wanted to identify the achievements of the network and were prepared to identify gaps in the overall functioning of the network for their rectification. To enhance readiness and commitment of all the network members, a workshop was organized where the evaluation mentor assessed and enhanced readiness, and gave briefings regarding the evaluation process so as to ensure understanding and enhance member's commitment for the evaluation.

3.2 Evaluator readiness and capability assessment:

After ensuring network member's preparedness for the evaluation, network identified an external evaluator who could facilitate them in carrying out the formative evaluation of PANACeA Network, so that the network could be evaluated from a neutral lens. The evaluator was assessed for capabilities and readiness for the evaluation. It was ensured that the evaluator had prior experience of research and evaluation. The evaluator was based at AKU, and was guided by the evaluation mentor throughout the process of evaluation. Evaluator was briefed regarding the structure of the network and objectives of the evaluation. It was ensured that the evaluator is ready and willing to collaborate with and engage the PIUs throughout the process of evaluation.

3.3 Identification of Primary Intended Users:

Identification of PIUs is a crucial step because they are the ones who would apply the evaluation process and its findings in the way they intend. Identification of such people who hold a stake in the evaluation and who will use the findings to improve their activities is challenging. According to Patton, PIUs should be interested, knowledgeable, open, credible, teachable, connected to important stakeholder constituency, and should be available for interaction throughout the evaluation process [1].

PANACeA Network members comprise of Network Lead, AMT members, Project Leads, Project Partners and Support Team members; all of these people collaborate with each other to produce evidence from eHealth research and to achieve network objectives. PANACeA identified all of these members as the ones who hold a very important stake in this formative evaluation because these are people who are responsible for executing the functions of PANACeA Network. During PANACeA's annual meeting from 1st to 4th February, 2010 in Bangkok, the network identified all these people as the PIUs of the evaluation, who were 25 in number, so that all of them could make use of evaluation findings with respect to their capacities and their position in the network, and hence network's functioning could be improved at all

levels and achievement of network's objective could also be ensured. During this meeting, the leadership and mentors not only identified PIUs but also ensured that they understood their role in every step of this evaluation.

3.4 Situational analysis:

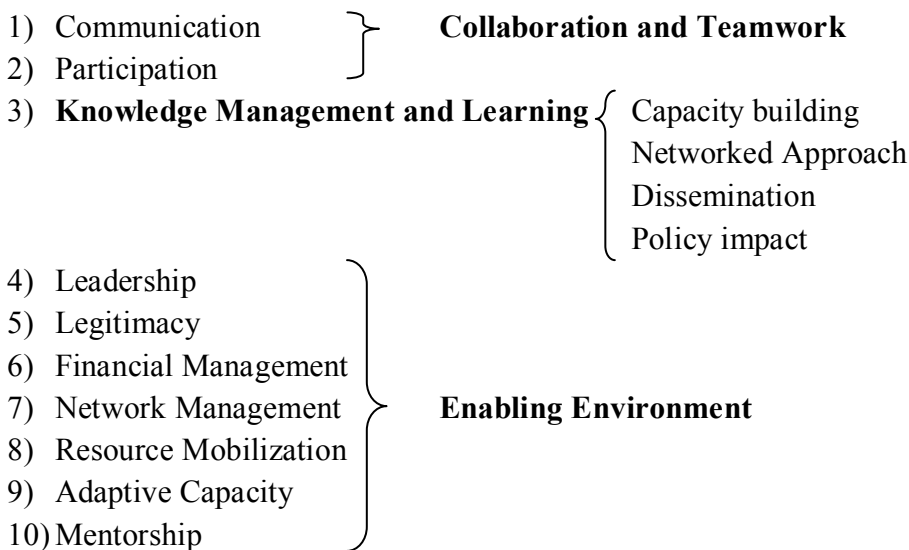
In order for evaluation to be useful, it is very important that the evaluation team along with the PIUs assess the situational factors that would affect evaluation process and usage of evaluation findings. This situational analysis not only helps in identifying existing and potential barriers but also helps in looking for favorable factors, which, in turn, enhances a partner's adaptive capacity, and fosters the utilization of the evaluation. Following were the situational factors for PANACeA formative network evaluation that could affect a user's involvement in evaluation and evaluation usage:

- Program's prior evaluation experience: PANACeA was part of "Formative Evaluation of PAN's Networking Approach" conducted by IDRC for its four PAN Networks, done by Mary Jane Real and Ricardo Wilson-Grau in July 2008. PANACeA itself as a program was undergoing explicit evaluation for the first time, so there was no documented learning on evaluation. The network members in different capacities did experience evaluation, so they were clear about the concept of evaluation, but the UFE Approach was new for all of them, which resulted in curiosities among the PIUs.
- Availability of PIUs: PANACeA tried to ensure availability, willingness and commitment of all its 25 members (AMT and project partners) as the PIUs. These PIUs were the enthusiastic, knowledgeable, cooperative and relevant to the subject.
- Availability of resources: PANACeA identified and ensured availability of enough material and monetary resources to carry out and support this evaluation.
- Availability of time: PANACeA started thinking about its formative evaluation in January 2010, but its execution was delayed, resulting in less time to carry out the evaluation process and for its usage. PANACeA adapted to this barrier by not evaluating all aspects of the network and focusing itself to some important critical aspects so that evaluation could be managed in the limited time period and its utility could also be enhanced.
- Clarity of purpose of evaluation: Participants for PANACeA evaluation were given clarity on the purpose of evaluation to enhance interest of the PIUs, which could affect evaluation usage in a constructive way.

3.5 Identification of primary intended uses:

The goal and purpose of UFE approach is the use of evaluation process and its findings, therefore the entire evaluation process revolves around primary intended uses by the PIUs. The usage could be very well defined if the user has clarity regarding the purpose of evaluation. The

purposes of PANACeA formative evaluation were to identify strengths and areas of improvement of the network, list down the lessons learnt as a network, take major decisions related to network and its activities so that improvements could be brought in the overall functioning of the network. In order to fulfill this objective, PANACeA intended to use evaluation findings to improve multiple aspects of the network, for which they referred to the evaluation aspects of “Formative Evaluation of PAN’s Networking Approach” used by Mary Jane Real and Ricardo Wilson-Grau (2008) [2]. These evaluation aspects include: Communication, Participation, Knowledge Management and Learning, Leadership, Legitimacy, Financial Management, Network Management, Resource Mobilization, Adaptive Capacity, and Mentorship. The PIUs grouped some related aspects and elaborated one aspect to come up with following three broad categories and thirteen subcategories.



The PIUs then identified certain evaluation uses under each major category. The categories with definition, subcategories and the respective uses are as follows:

Category 1: Collaboration and Teamwork

Subcategories: Communication and Participation

To collaborate is to work jointly with others or together especially in an intellectual endeavor [3]. In order to foster good collaboration and teamwork, effective communication and participation is required; therefore, the two aspects of communication and participation were grouped into Collaboration and Teamwork. The uses identified by the PIUs under this category include:

- To promote open and effective communication, participation and collaboration between and among PANACeA partners and with the external stakeholders

- To ensure participation from all partners and promoting gender equality in communication
- To enhance use of appropriate technology and tools for collaboration and clear documentation system
- To enhance availability and accessibility of software (open source) for research and collaboration
- To ensure transparency and accountability
- To explore other ways or methods of enhancing collaboration and participation among the teams and within the network.

Category 2: Knowledge Management and Learning

Subcategories: Capacity Building, Network Approach, Dissemination and Policy Impact.

The process of knowledge management and learning in a successful network includes reflection on the experiences of network, refining goals, policies and priorities based on these experiences, and sharing of the relevant and meaningful knowledge of the network within the network members, with other like-minded individual researchers and research networks, as well as with other audience groups within their immediate and extended social network [2]. Keeping in mind this broad understanding of the process of knowledge management and enhancing learning, this aspect was elaborated and subcategories of Capacity building, Network Approach, Dissemination and Policy impact were added into it. The uses identified by the PIUs under this category include:

- To enhance the eHealth knowledge of PANACeA partners
- To enhance the eHealth research capacity of PANACeA partners and their teams
- To promote research skills of PANACeA members to enable conduct of robust studies.
- To increase capacity to disseminate research findings and impact policy development; e.g. publishing in journals, conference presentations, etc.
- To build in gender equality in eHealth and eHealth research
- To increase reuse of knowledge by other advocates
- To influence policy change
- To obtain funding for similar projects
- To improve ICT infrastructure for eHealth of healthcare providers at project sites.

Category 3: Enabling environment

Subcategories: Leadership, Mentorship, Legitimacy, Financial Management, Network Management, Resource Mobilization and Adaptive Capacity.

An enabling environment is a set of interrelated conditions - such as legal, organizational, fiscal, informational, political, and cultural – that impact on the capacity of development actors to engage in development processes in a sustained and effective manner [4]. As aspects of leadership, mentorship, legitimacy, financial management, network management, resource mobilization and adaptive capacity, can contribute towards enabling environment of the Network, these aspects were merged under the category of Enabling Environment. The uses identified by the PIUs under this category include:

- To appreciate and improve the leadership and managerial strategies of the Leads and AMT members
- To strengthen relationship between network lead, project leads, AMT and network members
- To efficiently manage financial and administrative aspects of the network
- To effectively plan future activities to advance and sustain the network, such as resource mobilization and adaptive capacity.

3.6 Focusing the evaluation:

The focus of evaluation emerged from the intended uses by the PIUs. PIUs decided to focus and evaluate those aspects which they think would have best utility and which would bring the most positive outcome from the evaluation. Keeping in mind the timelines and time period for PANACeA formative network evaluation, the PIUs prioritized their needs and their intended uses, and, instead of evaluating all above mentioned evaluation categories, they shortlisted the categories to Knowledge Management and Learning, and Collaboration and Teamwork. This decision was carried out by taking votes from each intended user through online means. The choice of the majority of the PIUs was then finalized and the decision was made to keep PANACeA formative network evaluation focused on Knowledge Management and Learning, and Collaboration and Teamwork.

3.7 Evaluation design:

Selection of an appropriate evaluation design is again a very crucial step. The evaluation should be designed in such a way that it could provide useful data so that the evaluation purpose could be fulfilled. For PANACeA's formative network evaluation, a qualitative design was selected because the network was interested in gathering the views, perceptions and feelings of its members towards network functioning.

Network did not tend to measure the initiatives that it took; rather, it focused towards identification of the lessons learnt and challenges faced by the network members in the above areas. For this same reason, they collected data from all network members and hence their PIUs were actually also their data source.

In order to stimulate respondent's thinking and extract their opinions, an interview guide was designed, containing open-ended Key Evaluation Questions (KEQs) pertaining to Collaboration and Teamwork, and Knowledge Management and Learning. These KEQs Include:

Collaboration and Teamwork:

- 1) How has PANACeA facilitated communication and interaction amongst the network members?
- 2) How the network members have collectively worked towards achieving common PANACeA objectives?

Knowledge Management and Learning:

- 1) To what extent has PANACeA's Network approach benefited towards your research skills and achievements?
- 2) To what extent has PANACeA enabled capacity building among its partners?
- 3) How has PANACeA helped in disseminating the research findings inside and outside the network?
- 4) To what extent will the PANACeA Network contribute to policy change in the partner countries?

These KEQs were then circulated to all PIUs and to the mentors so that the questions could be verified.

3.8 Simulation of uses:

Before the data is collected, it is significant that the evaluation team and the PIUs be sure that the study designs and KEQs are appropriate enough to generate findings that could be utilized in the intended way by the primary intended users.

For this purpose, a simulation exercise was carried out with four available PIUs at AKU, in which those primary intended users were given the list of KEQs, two to three varied simulated responses on each KEQ and the list of primary intended uses that they identified earlier. PIUs were asked to reflect on whether the simulated data in response to the KEQ was likely to answer the uses as intended by them or not.

Through this exercise, PIUs were able to modify the interview guide by adding, deleting, merging and separating questions, to assure that these questions would be useful. The briefings

of this exercise and the modifications that were brought in the tool were discussed with all other remaining primary intended users via emails. This exercise helped finalize the key evaluation questions and enhance the sense of ownership among primary intended users. The original KEQs and the modifications brought in the KEQs along with the rationale are illustrated as Appendix 2.

3.9 Data collection:

After the finalization of the study design and data collection tool, data collection was initiated. Initially, 25 PIUs were identified but until the time of data collection, two of them left the network. Out of the remaining 23 PIUs, the evaluator was able to collect data from 22 users (95% response rate). These interviews were conducted online by the evaluator using Skype. The evaluator took consent from all the respondents and ensured confidentiality and anonymity of the data. The time period of each interview varied between 30 to 60 minutes. The interviews were recorded using ifree Skype Recorder¹, and the recordings were then used for transcription of the interviews. The transcription was then shared with the respective respondent for their review. Out of 22 PIUs, 14 sent their reviewed transcripts (63.6% response rate). Remaining transcripts were accepted in their original form.

3.10 Data Analysis:

Data analysis is not done in a single step; rather, it involves a chain of steps, which includes data organization, integration and recommendation. Through proper data management and organization, the data becomes understandable and meaningful, and hence its utilization could be facilitated.

In order to organize the data gathered from the interviews, qualitative data analysis software, QSR NVivo, was used. This software does not conduct analysis for us, but it actually facilitates the processes associated with carrying out an analysis, helps us to organize, provide structure to and elicit meaning from the data. The responsibility of coding, analysis and interpretation of the PANACeA's formative evaluation data lied on the evaluator and the PIUs, while the NVivo software enhanced evaluator's efficiency at data storage, retrieval, applying codes, and editing and revising codes.

In order to organize and analyze the data, both preset and emergent categorization was used. For the preset categorization, the evaluation categories and subcategories formulated and focused by the PIUs in step five and six were considered. During the process of data organization, the preset categorization of the evaluation aspects was also revised. The subcategory "Network Approach" was merged with category "Collaboration and Teamwork" since the questions and responses

¹ ifree Skype Recorder is a free easy-to-use tool for recording Skype to Skype calls, SkypeOut/SkypeIn calls and Skype Conference.

were basically representing the collaborative approach used for research, “Capacity Building” was made as a separate category, while category “Knowledge Management and Learning” was renamed to “Knowledge Management”. The KEQs under each subcategory were taken as the sub-subcategories, as illustrated in the diagram below:

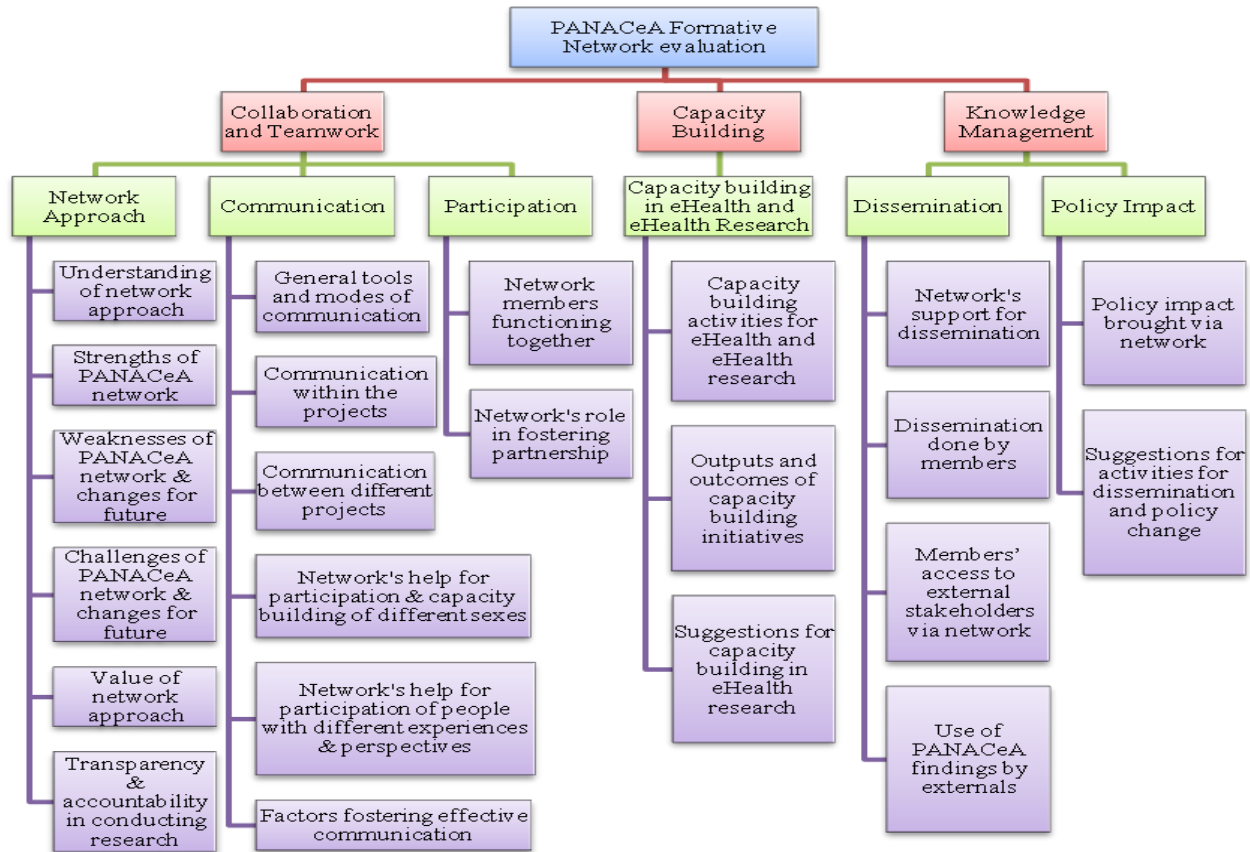


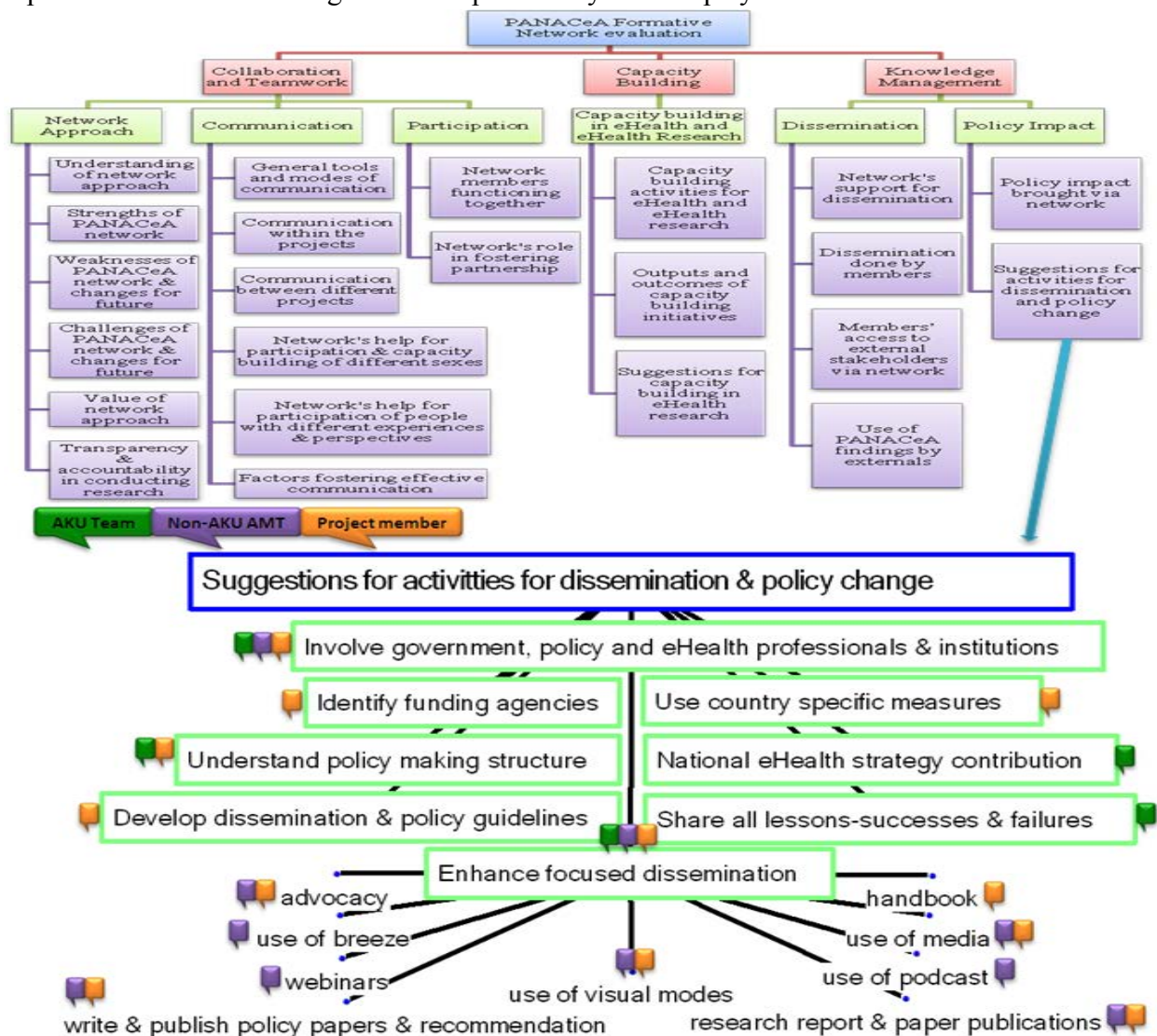
Fig1: Preset categorization (categories, subcategories and sub-subcategories)

Responses for each KEQ from each transcript were manually reviewed. These responses were manually coded in NVivo as different ideas emerged from the data. These codes were then merged, condensed and reorganized into categories, as the relevant phenomenon occurred. These emerging categories were then added into the preset sub-subcategories i.e. KEQs and hence the complete hierarchical categorization was achieved. During this step of coding and categorization, emphasis was not given to the frequency (quantification) of the responses; rather keeping the qualitative approach in mind, the focus was to gather all the views, perceptions and feelings of the respondent. The categories for each KEQ were then graphically displayed into separate models using NVivo. For the in-depth analysis, the study findings presented at the models were tagged with the attributes of the respondents. For that, 23 respondents were divided into three major groups based on their level at the network and their affiliation with AKU. This grouping was made to explore how the experiences and perspectives of AKU-based core PANACeA Management team (being the main grantee of the project) was different from those outside it, and

to look at the similarities and differences in the opinion of the mentors and the project members (project leads and project partners) working in different capacities and at different levels of the network. The three major groups are as follows:

1. Core AKU Team - This includes five members, of which three are AMT and two worked as support team members for PANACeA
2. Non -AKU AMT - This includes remaining non-AKU based four AMT members
3. Project Members (PM) - This includes remaining non-AKU based thirteen PIUs who were project leads and project partners overlapping in eight different projects.

The responses from group 1 were tagged with a small green box, from group 2 with small purple box, and from group 3 with small orange box. The example of one of such graphical representation of the findings with complete analysis is displayed below:



During the step of data analysis, the revised categorization and the preliminary findings models were shared with 13 PIUs during a face-to-face meeting of PANACeA partners (October 25, 2010, in Colombo) so that they have an idea of the data that they would be using. Along with these findings, the list of the primary intended uses that they identified initially were given to them, and they were guided to revisit and refine the intended uses. The table illustrating original and revised primary intended uses pertaining to revised categories along with the justifications/discussion points as given by the PIUs is given as appendix 3. The exercise not only helped in refining the uses but also reinforced and reminded PIUs regarding the utility of the evaluation findings as they felt a sense of ownership while revisiting these uses.

3.11 Facilitation of use:

In order to fulfill the purpose of UFE i.e. to facilitate the utilization of the PANACeA Formative Network Evaluation findings, some utilization action steps were proposed to the PIUs. Along with the action steps, timelines and members or level of the network that would be responsible to carry out the action points, was also suggested. A table illustrating these suggestions was circulated to all PIUs and based on their comments some modifications was done.

During PANACeA's fourth Annual Workshop in Kuala Lumpur, Malaysia on April 16, 2011, final comments, a consensus was regarding the action actions. Some of the utilization actions for were shifted to the second phase of PANACeA (PANACeA 2.0).

Major utilization actions points for the current phase were:

- Ensure support from institutions and maintain communication with the heads of institutions
- Improve communication between different levels of the network and promote and implement communication strategy.
- Use simple and inclusive ICT tools
- Ensure participation of members in project activities, network activities and PCTAs, and ensure that partners meet the deadlines
- Increase frequency of capacity building sessions
- Ensure dissemination and use of PANACeA findings to broader community
- Ensure policy impact through proper dissemination of PANACeA findings and policy dialogues
- Build partnerships with governments, eHealth Associations and institutions for policy change
- Members take country-specific actions for policy change

The timelines and responsible person/team/level responsible to execute these utilization actions are illustrated as appendix 5.

3.12 Meta-evaluation:

There is a plan to determine the extent to which intended and additional uses were achieved by the PIUs of PANACeA formative evaluation; this step would be conducted by the DECI team.

4. Findings

The graphical illustrations of the findings with the in-depth analysis under each KEQ are presented as models in the appendix 4. The description of the major findings under each KEQ i.e. Sub-subcategories with the uses are given in the table below. Some of the important statements of the respondents that give examples, rationale and explanation to the findings are also presented.

Category 1: Collaboration and Teamwork – Subcategories: Network approach, Communication & Participation:

<u>Primary Intended Uses</u>	<u>KEQs (Sub-subcategories)</u>	<u>Findings from the Evaluation</u>	<u>Statements</u>
1. To promote open, effective and timely communication, participation and collaboration between and among PANACeA partners and with the external stakeholders.	<u>PANACeA strengths & factors for effective communication</u>	<u>All Groups:</u> PANACeA strengths and factors for effective communication include diversity in the network and collaboration among members. This effective collaboration is because of a common goal, common language, open communication and participation, collective learning and sharing, good interpersonal relation, interest and enthusiasm of members and supervision of mentors.	<i>“By choosing network approach we are able to get the best out of people, put them together and basically they fill each other’s gap and the output that they come up with is much richer than if just one person created or attempted to create the same output.”</i> [Document 'PL 01', Section 1.1.1.2, Paragraph 13.]
	<u>Weaknesses and Challenges of PANACeA</u>	<u>Network’s weaknesses and challenged include:</u> <u>All Groups:</u> Network’s focus on individuals rather than institutions because of which individuals could give less time as they had their day jobs and they faced administrative issues. Communication gap, decreased participation from some members and issues in online communication such as technological glitches, time zone differences and use of too many ICT tools. <u>AKU team:</u> Hierarchical structure of network.	<i>“We cannot move forward with implementation as we have not yet received the operational expenses, we have already cleared our finances but the other partner countries members have not done it. So because of one or two members all other members of the research in partner countries are affected.”</i> [Document 'PL 05', Section 1.1.1.6, Paragraph 25]
2. To enhance use of appropriate technology and tools for			

documentation and collaboration, among and between project partners.		<p><u>Non AKU AMT:</u> Informal approach and absence of a legal framework.</p> <p><u>Project Members:</u> Limited training, haphazard communication, non-adherence to deadline, less expenses for face to face meeting and less involvement of government sector.</p>	
	<p><u>Changes for the future in network</u></p>	<p><u>All groups:</u> Involve institutions rather than individuals, make good blend in teams, and make following communication efforts: more encouragement to interact, more reminders to respond, more face to face meetings, use better quality internet connection, make flexibility to the routine to adjust time zone difference, use ICT tools like Twitter, Facebook, Youtube, Webinars, Webportals but choose and stick to one or two technological solutions that you find appropriate.</p> <p><u>AKU team:</u> Decrease hierarchy in network to enhance free flow of information.</p> <p><u>Non-AKU AMT:</u> Make the network more formalized.</p> <p><u>Project members:</u> Adhere to timelines, involve multi stakeholders, individualize financial reporting for each partner country, provide administrative support to individual members, arrange mandatory meetings for partners,</p>	<p><i>“if we could have brought in some project through ministry of public health than this could have created an enabling environment for ministry of public health to think how this eHealth is changing the healthcare industry, they could have learnt benefited and contributed to this and I think that was what the area I would say can be improved.” [Document 'PP 01', Section 1.1.1.3, Paragraph 15]</i></p>
	<p><u>General tools and</u></p>	<p><u>All levels:</u> Different communication tools and</p>	<p><i>“The annual face to face is most</i></p>

<p><u>modes of communication used within PANACeA</u></p>	<p>modes such as telephone, face-to-face modes (seminars, meetings, workshops and conferences), SMS and online modes (Skype, Elluminate Live!, audioconference, Facebook, website, online forums, instant messenger, emails and mailing list) were used. Out of these, telephone, face-to-face modes, Skype, emails and mailing list are the most effective ones for communication.</p>	<p><i>valuable in clarifying issues and moving forward research activity implementations.”</i> [Document 'PL 05', Section 1.1.2.9, Paragraph 59]</p>
<p><u>Network’s support for communication within the projects</u></p>	<p><u>All groups:</u> Network provided structure of reporting and meetings between AMT and project members. <u>AKU team:</u> Network provided both formal and informal communication modalities. <u>Non-AKU AMT:</u> Network supported communication via Communication PCTA. <u>Project members:</u> Network provided expenses to carryout online and face to face communication.</p>	<p><i>“Effective communication was fostered by offering relevant activities which kept us in touch with the network such as workshops, ongoing activities which were very encouraging, the incentive for us to gather was a good motivation for us to participate and communicate.”</i> [Document 'PL 06', Section 1.1.2.7, Paragraph 52]</p>
<p><u>Network’s support for communication between different projects</u></p>	<p><u>All Groups:</u> Network provided online and face to face modes, but this communication is less effective; it needs more support. <u>Non-AKU AMT:</u> Network offered project members to join PCTA and mentor it, but that didn’t work out. <u>Project Members:</u> Network provided expertise and technical support, enhanced sharing via newsletter and created a sense of accountability</p>	<p><i>“Networking itself is a big facilitator. You are in a team and when you give consent to be part of the team in a network, you give up many of your rights to hold all the results with you and make sure that you are the sole custodian of knowledge and results, so you give up with that and you start contributing, you start sharing right</i></p>

		for communication.	<i>from the beginning.” [Document 'AMT 01', Section 1.1.2.7, Paragraph 52]</i>
	<u>Network members functioning together</u>	<p><u>All Groups:</u> PANACeA members worked together as a team because they were motivated, dedicated, had good interpersonal relationship and were supervised by mentors and leader. But since the teams were unbalanced, there was less involvement from some members.</p> <p><u>Project Members:</u> Members from diverse countries and background had different expertise but they collectively learnt and shared as they had a common goal which helped them work well as a team. But time zone differences, technological glitches and busy schedule limited effective teamwork in different projects.</p>	<i>“If the teams are not made properly, and the people do not have the capacity to perform well, I don’t think they are able to actually do it no matter what they do. There are cases where everything has been done; all kind of support made available but still people could not deliver.” [Document 'AMT 01', Section 1.1.3.1, Paragraph 64]</i>
	<u>Network’s help in fostering partnership</u>	<u>All Groups:</u> Network provided interaction avenues, built capacity and ensured clear understanding of goals to foster partnership. The structure of the network along with the efforts from IDRC, AMT, PCTA, and project members also fostered effective partnership.	
3. To build in gender equality in communication and in eHealth and eHealth	<u>Network’s help for participation & capacity building of different sexes</u>	<u>All Groups:</u> Network provided equal opportunity for both sexes to communicate and to build their capacities by creating gender PCTA, ensured female representations at all levels, provided an open sharing environment, provided encouragement and gave understanding of gender	

research.		<p>issues.</p> <p><u>AKU Team and Project Members:</u> Gender balance was not achieved at network.</p> <p><u>AKU Team:</u> Network could not reach the field level to ensure participation of both sexes.</p> <p><u>Project Members:</u> Project members tried to give opportunities to both sexes at the field levels.</p>	
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Category 2: Capacity Building in eHealth and eHealth Research:

<u>Primary Intended Uses</u>	<u>KEOs (Sub-subcategories)</u>	<u>Findings from the Evaluation</u>	<u>Statements</u>
<p>1. To extend eHealth knowledge and research capability of network members and other external stakeholders.</p> <p>2. To build network capability to evaluate itself.</p> <p>3. To obtain</p>	<p><u>Capacity building activities for eHealth and eHealth research</u></p>	<p><u>All Groups:</u> Network built members' capacity in their entire research design, supported them to enhance eHealth infrastructure at their project sites and enhanced their readiness for conducting independent eHealth projects by providing mentors, courses, workshops and trainings, avenues for networking, encouragement and expenses to present in conferences, collective learning and sharing, and by providing human, material and monetary resources.</p> <p><u>Non-AKUAMT:</u> Network invited external speakers, shared information to attend webinars, provided PCTAs and also planned to initiate but could not execute plan of GeWOK (web of knowledge).</p> <p><u>All levels:</u> More capacity building in needs for</p>	<p><i>“Within our CBA group we actually have the opportunity to take one particular hospital from the pre-computer state through implementing and giving them computers to help them do a computerized registration and laboratory test analysis software package. So we have done very much for that particular site, we have very much given huge amount of infrastructure but in terms of physical infrastructure, the computers, the networking capability that we put the networking in place for them.” [Document 'AMT 04', Section 1.2.1.8, Paragraph 100]</i></p>

support for future and existing eHealth projects.		some research aspects such as: needs assessment, data collection, implementation, analysis, evaluation and report writing.	
	<u>Outputs and outcomes of capacity building initiatives</u>	<p><u>All levels:</u> The output and outcomes of these capacity building initiatives are yet to come, but because of above initiatives, we have successful implementation of PANACeA projects, development of communication plans, initiation of dissemination activities for PANACeA researches, and enhancement in the ICT usage, eHealth knowledge and hunting for new eHealth projects.</p> <p><u>Non-AKU AMT:</u> Members came up with monitoring and evaluation indicators.</p>	<p><i>“There are couple of examples come in my mind regarding the funding we obtained, one is the eHealth association of Pakistan. I think the networking we had there is originally the PANACeA team members and Pakistan started this network and actually you see 5 board members who are part of PANACeA. We took this initiative, arranged funding and now we have made it eHealth representative body of Pakistan so that was big success.” [Document 'AMT 01', Section 1.2.1.6, Paragraphs 93-94]</i></p>
	<u>Suggestions for capacity building in eHealth research:</u>	<p><u>All Groups:</u> Time and frequency of sessions and trainings for the capacity building should be increased. Institutions should be involved instead of individuals, more ground level training should be provided, and capacity building needs should be addressed earlier.</p> <p><u>Project Members:</u> There should be more follow-ups, and more administrative and financial support should be provided to the projects. Network should document learning that has occurred, increase network members’ interaction,</p>	<p><i>“... it was almost as the way we designed projects first and then asked them to go back and do their needs assessment which is not the right way to do it... we perhaps could have done better in that sense because if people tried to put a square peg into a round hole i.e. that you design research and then find a problem to fit it, so that’s not the right way, so I think that’s one thing that could have been done to give a</i></p>

		and provide more monetary and human resources for some areas because some areas are far less developed than others.	<i>perspective about the capacity building.</i> ” [Document 'AMT 04', Section 1.2.1.5, Paragraph 92]
4. To enhance availability and accessibility of software (open source) for research and collaboration.		Findings similar to the response of the KEQ“General tool sand modes of communication used within PANACeA” as described in category 1 findings.	
5. To extend existing project interventions on a large scale. 6. To increase uptake of expertise from network members resource pool.		Use added later – data not collected explicitly on it. This used could be postponed till summative evaluation.	

Category 3: Knowledge Management – Subcategories: Dissemination and Policy Impact:

<u>Primary Intended Uses</u>	<u>KEQs (Sub-subcategories)</u>	<u>Findings from the Evaluation</u>	<u>Statements</u>
1. To build capacity to disseminate	<u>Network’s support for dissemination and dissemination</u>	<u>All Groups:</u> Network provided encouragement for dissemination, built members’ dissemination capacity, and provided information and expenses	<i>“The first newsletter was designed intentionally so that it can be disseminated basically within the</i>

<p>research findings, communicate to policy makers and inform policy development e.g. publishing in journals, conference presentations, etc.</p>	<p><u>done by members</u></p>	<p>for participation in dissemination conferences; this resulted in internal and external dissemination of PANACeA projects, researches, and literature reviews by the AMT members, PLs and PPs via publications, conferences, seminars, workshops, IDRC events, social networking, emails, website, newsletter, website, digital stories, posters, media, wikis, web portals, brochures, field visits, meetings and discussion with internal and external institutions and agencies.</p>	<p><i>network partners and their institutions for awareness at that level; for the second newsletter it is planned to be disseminated more widely, via conferences and forums where we would be disseminating newsletter.”</i> [Document 'AMT 05', Section 1.3.1.1, Paragraph 124]</p>
<p>2. To disseminate/ share knowledge to network and (others) relevant stakeholders</p>	<p><u>Member’s access to external stakeholders via network and use of PANACeA findings by externals</u></p>	<p><u>All Groups:</u> Through PANACeA, members were able to get hold of journals and libraries, external groups and institutions, different professional experts, and government and policy people. <u>All Groups:</u> The use of PANACeA findings by externals is yet to be done. <u>AKU Team & Non-AKU AMT:</u> As a result of sharing of PANACeA activities, institutes in Africa, S. America and polar region have started thinking about eHealth research network. <u>Non-AKU AMT & Project Members:</u> As a result of PANACeA researches there has been enhancement in eHealth in different institutions of Afghanistan, India and Philippines.</p>	<p><i>“I have been able to share this with four other nursing and medical schools in the Philippines, the application we use is iPath so because of this project we have learnt how to use iPath, how to configure iPath and we have taught this in 3 medical schools and one nursing school on how to use the application so I think they will use the application in their respective curriculums not yet may be at policy level but for training their own medical and nursing students in Tele-medicine.”</i> [Document 'PL 01', Section 1.3.1.5, Paragraph 139]</p>
<p>3. To systematically document the results/learning/ lessons from the dissemination</p>	<p><u>Policy impact brought via</u></p>	<p><u>All Groups:</u> Policy impact yet to be brought, but PANACeA members have developed eHealth</p>	<p><i>“I know that TBDOTS have been speaking themselves to policy and</i></p>

<p>activities (i.e. policy influence, reuse of knowledge, feedbacks, etc)</p>	<p><u>network</u></p>	<p>Association of Pakistan and have got major influence in different institutions of the partner countries via external dissemination. PANACeA members have also started taking steps for policy change which includes collaboration with government and policy makers, provision of infrastructure, and enhancement in eHealth knowledge and awareness in its partner countries.</p>	<p><i>decision makers in their own countries and raising awareness and speaking about their preliminary results... Pakistan does not formally have TBDOTS committees together, I think this is going to be significant impact within Pakistan.</i>" [Document 'AMT 04', Section 1.3.2.1, Paragraph 147]</p>
	<p><u>Suggestions for activities for dissemination and policy change:</u></p>	<p><u>All Groups:</u> Network should involve and collaborate with government, policy makers, NGOs, eHealth associations and other relevant external institutes. <u>AKU Team:</u> Members should contribute to national eHealth strategy and should share successes and failures of the network. <u>Project Members:</u> Members should understand policy structure and take country specific measures. There should be proper dissemination guidelines, measures to identify and attract funding sources. <u>Non-AKU AMT & Project Members:</u> Members should enhance the dissemination through publishing research papers, reports and policy papers, via visual modes, media, and advocacy and via use of modes like handbook, breeze, podcast etc.</p>	<p><i>"For policy impact I think very important thing would be to build relationship with policy makers, especially government officials. You can never publish anything or put something on website or do one seminar or a forum and expect a change in policy at government level; you have to work with the governments, so it is very important that we work with government in different countries, build relationship with them, have them understand what PANACeA is and why researches conducted by PANACeA should be made part of policy or should contribute to not just at institutional level but also at national level in the countries where we are working."</i> [Document 'AMT 01', Section 1.3.2.3, Paragraph 150]</p>

5. Reflections on the process from the evaluator

Utilization Focused approach accentuates identification of uses by the PIUs, and the usage of evaluation findings/processes by them to fulfill the uses. For PANACeA's Formative Network Evaluation, 12 UFE steps were referred because the evaluation team and the PANACeA Network found these steps helpful to carry out a systematic and rigorous evaluation. They found these steps promising in terms of enhancing evaluation utility, as these steps encourage the involvement of PIUs, which in turn increases their sense of ownership for this evaluation.

There was a diverse pluralistic group of 23 PIUs for this evaluation, who were involved at different levels at each step of the UFE. These PIUs were from different countries, different cultures and had different professional expertise. Their expert opinion and involvement strengthened the process, increased their sense of ownership and brought richness to the evaluation uses and findings, but on the other hand, there were some delays and communication challenges because the PIUs had time zone differences, they had different level of involvement because of their busy schedule, and their understanding about the UFE was not very clear from the beginning of the process. In order to overcome these challenges good rapport was built with the PIUs, encouragement and timely reminders were sent to them, and adjustments in the timelines were made according to their needs and circumstances.

The formative evaluation of the PANACeA Network was initiated in January 2010 and took about one year to complete the whole process. As the PANACeA project concludes in July 2011, there remained very less time for PIUs to fully utilize the evaluation findings. It was a challenge for the evaluation team to facilitate full utilization and for PIUs as well to carry out complete usage; it was suggested to park some utilization actions for the phase two of PANACeA.

6. Conclusion

The PANACeA Network was evaluated in the aspects of Collaboration and Teamwork, Capacity building and Knowledge management. The major strengths of the Network include: diversity, effective communication, good interpersonal relations, increased eHealth understanding, and initiation of dissemination activities. The major areas of improvement that were identified were: participation of the members on equal footing and less hierarchical structure, blending of the team with similar interests, involvement of institutions rather than individuals, capacity building in eHealth research and evaluation, ground level training, and working towards bringing a policy impact.

The formative evaluation used utilization focused approach to conduct the evaluation. This approach directed the users of the evaluation to focus on the utilization of the findings right from the start of the process. The evaluation team also involved PIUs in all steps of UFE and facilitated them to plan and take specific actions, based on these findings, to bring improvement in the network. The network members at different levels have already started implementing these action steps. For future, the network plans to evaluate the results of these utilization action steps by assessing the changes and improvement brought in the Network, this assessment would be conducted via summative evaluation of PANACeA Network. The utility of this evaluation is also planned to be evaluated i.e. Meta-evaluation (evaluation of this evaluation), which would be conducted by DECI team.

Due to time limitation, network did not evaluate the third identified area of enabling environment which includes sub areas such as leadership, legitimacy, financial management, network management, resource mobilization, adaptive capacity and mentorship. These areas are expected to be evaluated during the summative evaluation of the network.

This PANACeA formative evaluation experience and findings can act as a corner stone and be shared and used by other similar current networks and future collaborations.

References

- [1] Patton, MQ. *Utilization-Focused Evaluation* 2008; 4th ed, USA: SAGE Publications.
- [2] Real MJ, Wilson-Grau R. *Formative Evaluation of PAN's Networking Approach*, IDRC Report, 2008.
- [3] *Merriam-Webster's online dictionary*, Retrieved November 15, 2009 from <http://www.merriam-webster.com/dictionary/collaborate>
- [4] Thindwa J. *Enabling environment for Civil Society in CDD Projects*, Washington, DC: World Bank, Social Development Family, CDD Learning Module, 2001. Retrieved November 20, 2009 from <http://www.worldbank.org/participation/enablingenvironment/EnablingenvironmentCECDD.pdf>

Appendix 1: List of Projects

Projects	Leading Country	Other Partners
Multi institutional study on the cost benefit of hospital automation (patient registration and laboratory systems).	Pakistan	Philippines India Afghanistan
Portable system for Telemedicine and Health Informatics in rural and remote areas.	Malaysia	Sri Lanka Nepal Afghanistan
Improving maternal health care services by using ICTs for remote consultation and education.	Mongolia	Philippines
A framework to identify gaps in the use of eHealth in primary health care settings.	India	Pakistan Philippines
Exploratory intervention research on eHealth for the visually challenged.	Bangladesh	Philippines India
Online TB diagnostic committees for clinically suspected sputum negative patients in the TB-DOTS program.	Philippines	Pakistan
A systematic review of current ICT applications in Disaster: A potential for integrating TM.	Indonesia	Philippines India
Community-based eHealth promotion for safe motherhood: Linking community maternal health needs with health services system.	Philippines	Pakistan Indonesia

Appendix 2: Key Evaluation Questions

Original Key Evaluation Questions	Revised Key Evaluation Questions	Rationale
Category 1: COLLABORATION AND TEAM WORK (Communication and Participation)		
<u>Communication</u> 1) How has PANACeA facilitated communication and interaction amongst the network members?	<u>Communication</u> 1) How has PANACeA facilitated communication and interaction amongst the network members?	No change.
a) How has the network supported communication between the project partners, project leads and the AMT? Which communication method was effective?	a) How has the network supported communication between the project partners, project leads and the AMT? Which communication method was effective? Can you think of any technology or tool?	The question is further specified by the addition of technology component as PIUs wanted to utilize evaluation findings to enhance use of appropriate technology and software (open source) for research and collaboration as illustrated in Original Use Category B use number 6 and in Category C use 3.
b) How has the network supported communication between different partners? Which communication method was more effective?	b) How has the network supported communication between partners from different projects? Which communication method was more effective?	Question is further specified.
c) How has the network facilitated the participation of different sexes, experiences and perspectives to engage at all levels of the network? Do you feel that certain partners were not included for communication by the network?	c) How has the network facilitated the participation of different sexes, experiences and perspectives to engage at all levels of the network? Do you feel that certain partners were not included for communication by the network?	No change.
	d) How has the network supported communication with people external to the	Question added because PIUs wanted to utilize evaluation findings to promote

	network?	communication with external stakeholders as well as illustrated in Original Use Category C use number 1.
d) What factors enhanced network's ability of fostering effective communication?	e) What factors enhanced network's ability of fostering effective communication?	No change.
e) What factors hindered network's ability of effective communication? How did network respond to them?	f) What factors hindered network's ability of effective communication? How did network respond to them?	No change.
	g) What other methods of communication would you suggest to enhance collaboration among PANACeA members?	Question added because PIUs wanted to utilize evaluation findings to explore other ways or methods for enhancing collaboration and participation among and within the network as illustrated in Original Use Category C use number 6.
<u>Participation</u> 2) How the network members have collectively worked towards achieving common PANACeA objectives?	<u>Participation</u> 2) How the network members have collectively worked towards achieving common PANACeA objectives?	No change.
a) How well are the network members functioning together?	a) How well are the network members functioning together?	No change.
b) To what extent the network helped towards achieving the objectives of individual projects?	b) To what extent the network helped towards achieving the objectives of individual projects?	No change.

Category 2: KNOWLEDGE MANAGEMENT AND LEARNING (Capacity Building, Network Approach, Dissemination and Policy Impact)		
<u>Network Approach</u> 1) To what extent has PANACeA's Network approach benefited towards your research skills and achievements?	<u>Network Approach</u> 1) To what extent has PANACeA's Network approach contributed to the development of your research skills and management (or conducting) of your research?	Question is further specified.
a) What is your understanding of network approach?	a) What is your understanding of network approach?	No change.
b) What is the contribution of the network in designing, planning, implementing, analysis and facilitating your research?		Deleted as it was a repetition to question 2a.
c) What are the strengths and weaknesses of the network approach adopted by PANACeA?	b) What are the strengths and weaknesses of the network approach adopted by PANACeA?	No change.
d) Do you think Network Approach adopted by PANACeA is a better way of conducting research?	c) Do you think Network Approach adopted by PANACeA is a better way of conducting research?	No change.
e) Would you recommend Network Approach for future research initiatives? Why? If not, what would you change next time around?	d) Would you recommend Network Approach for future research initiatives? Why? If not, what would you change next time around?	No change.
	e) Do you feel the network approach increases the transparency and accountability in conducting research?	Question added because PIUs wanted to utilize evaluation findings to ensure transparency and accountability in the

	Please explain.	network as illustrated in Original Use Category B use number 5.
<u>Capacity Building</u> 2) To what extent has PANACeA enabled capacity building among its partners?	<u>Capacity Building</u> 2) To what extent has PANACeA enabled capacity building in eHealth and eHealth research among its partners?	Question is further specified.
a) To what extent PANACeA supports its researchers in research design - hypothesis, feasibility, contextual relevance, research questions, methodology, implementation, analysis, reporting etc?	a) To what extent PANACeA supports its researchers in research design - hypothesis, feasibility, contextual relevance, research questions, methodology, implementation, analysis, reporting etc?	No change.
b) What is the nature of these capacity building activities– in knowledge & skills?	b) To what extent PANACeA supports its researchers in developing eHealth research methodologies?	Question change because PIUs wanted to focus on eHealth research methodologies and eHealth research methodologies are different from other research methodologies.
c) To what extent the knowledge and skills of the capacity relevant to the researches being undertaken?	c) To what extent the knowledge and skills of the capacity building activities, relevant to eHealth being enhanced through PANACeA?	Question is further specified.
d) What are the outputs and outcome thus far from the capacity building support?	d) What are the outputs and outcome thus far from the capacity building in eHealth and eHealth researches?	Question is further specified.
e) Based on your experience with PANACeA, how ready do you feel that you are in carrying out an	e)Based on your experience with PANACeA, how ready do you feel that you are in carrying out an independent	No change.

independent eHealth project i.e. hypothesis, designing, data collection, analysis and reporting?	eHealth project i.e. hypothesis, designing, data collection, analysis and reporting?	
f) Is there anything that PANACeA could have done do increase partner capacity building? Suggest specific activities.	f) Is there anything that PANACeA could have done do increase partner capacity building? Suggest specific activities.	No change.
	g) How PANACeA helped you in writing other eHealth proposals and in obtaining funding?	Question added because PIUs wanted to utilize evaluation findings to obtain funding for similar projects as illustrated in Original Use Category B use number 4.
	h) How does PANACeA allow equal opportunity for members from both sexes to build capacity in eHealth and eHealth research?	Question added because PIUs wanted to utilize evaluation findings to ensure gender equality in all aspects of learning and knowledge management as illustrated in Original Use Category C use number 4.
	i) How has PANACeA helped in enhancing eHealth infrastructure at the project sites?	Question added because PIUs wanted to utilize evaluation findings to improve ICT infrastructure for eHealth in project sites as illustrated in Original Use Category B use number 5.
<u>Dissemination</u> 3) How has PANACeA helped in disseminating the research findings inside and outside the network?	<u>Dissemination</u> 3) How has PANACeA helped in disseminating the research findings inside and outside the network?	No change.
a) What dissemination activities have you done till now of PANACeA	a) What dissemination activities have you done till now of PANACeA research	No change.

research findings?	findings?	
b) How PANACeA supports dissemination of research findings through different methods or forums? Do you propose any other forum or medium?	b) How PANACeA supports dissemination of research findings through different methods or forums? Do you propose any other forum or medium?	No change.
c) What groups of stakeholders could you (or will you) access through PANACeA that you may not have accessed individually?	c) What groups of stakeholders could you (or will you) access through PANACeA that you may not have accessed individually?	No change.
	d) How have your findings been used by others to strengthen eHealth research program or policy?	Question added because PIUs wanted to utilize evaluation findings to increase reuse of knowledge by other advocates as illustrated in Original Use Category A use number 2.
<u>Policy Impact</u> 4) To what extent will the PANACeA Network contribute to policy change in the partner countries?	<u>Policy Impact</u> 4) To what extent will the PANACeA Network contribute to policy change in the partner countries?	No change.
a) Has PANACeA Network brought a policy impact in the partner countries? Please specify with examples?	a) Has PANACeA Network brought a policy impact in the partner countries? Please specify with examples?	No change.
b) What were the dissemination activities adopted by the Network that might prove potential to bring policy influence in eHealth? How?	b) What were the dissemination activities adopted by the Network that might prove potential to bring policy influence in eHealth? How?	No change.
c) What activities should be adapted	c) What activities should be adapted by	No change.

by PANACeA to further bring the policy impact in its respective countries?	PANACeA to further bring the policy impact in its respective countries?	
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Appendix 3: Revised Primary Intended Uses with justifications

Category 1: Collaboration and Teamwork

Original	Revised	Discussion Points
1. To promote open and effective communication, participation and collaboration between and among PANACeA partners and with the external stakeholders.	1. To promote open and effective and timely communication, participation and collaboration between and among PANACeA partners and with the external stakeholders.	Not a major change, PIUs just want to ensure timely communication.
2. To ensure participation from all partners and promoting gender equality in communication.		It is not dropped; they have included it in revised third use.
3. To enhance use of appropriate technology and tools for collaboration, clear documentation system.	2. To enhance use of appropriate technology and tools for documentation and collaboration, among and between project partners.	Not a major change. Exclusion of words, such as “clear” and “system” do not change the meaning/use significantly. They have brought specification by adding among and between project partners that was missing earlier.
4. To build in gender equality in eHealth and eHealth research.	3. To build in gender equality in communication and in eHealth and eHealth research.	It is now more specific.
5. To ensure transparency and accountability.		PIUs collectively came to the point that this time this use was not their focus, so it was removed.
6. To explore other ways or methods of enhancing collaboration and participation among and teams and within the network.		It is not dropped; this is already covered in the first revised one.

Category 2: Capacity building

Original	Revised	Discussion points
1. To enhance the eHealth knowledge of PANACeA partners.	1. To extend eHealth knowledge and research capability of network members and other external stakeholders.	„External stakeholders’ refers to those individuals and teams, who are not PANACeA partners, but are involved in designing and implementing the projects. PANACeA is actively involved in improving both eHealth Knowledge and Research Capability of researchers involved in the projects.
2. To enhance the eHealth research capacity of PANACeA partners and their teams.	2. To build network capability to evaluate itself.	Research capacity is now covered in the first point. This point talks about capacity in evaluation, which itself is a crucial area in research.
3. To promote research skills of PANACeA members to enable conduct of robust studies.		Already included in the first two points.
4. To obtain funding for similar projects.	3. To obtain support for future and existing eHealth projects.	No major change.
5. To improve ICT infrastructure for eHealth of health care providers in project sites.		PIUs found it out of their scope for this time.
6. To enhance availability and accessibility of software (open source) for research and collaboration.	4. To enhance availability and accessibility of software (open source) for research and collaboration.	No change.
	5. To extend existing project interventions on a larger scale.	Towards the end of their project, PANACeA researchers found it important to measure

		scalability and sustainability of their research. In case sufficient data is not available on this use, it will be postponed till the final evaluation
	6. To increase uptake of expertise from network members resource pool.	The main purpose for adding this use is to measure the use of capacity built among PANACeA partners. In case sufficient data is not available on this use, it will be postponed till the final evaluation
	7. To build capacity to communicate to policy makers.	It is an extension on A1, focusing specifically on capacity building for policy change.

Category 3: Knowledge Management

Original	Revised	Discussion points regarding revised Uses as discussed by the PIUs
1. To build capacity to disseminate research findings and impact inform policy development e.g. publishing in journals, conference presentations, etc.	1. To build capacity to disseminate research findings and inform policy development e.g. publishing in journals, conference presentations, etc.	Not a major change; the idea was that since PANACeA projects are pilot projects, especially with regard to developing countries, it is difficult to claim policy impact. Based on their research, the partners can inform policy developments through policy recommendations and publications.
2. To increase re-use of knowledge by other advocates.	2. To disseminate/share knowledge to network and (other) relevant stakeholders.	Others would reuse the knowledge only if it is disseminated well. PIUs considered dissemination important, because good dissemination would lead to re-use by others.
3. To influence policy change.	3. To systematically document the	As pointed out in the first point, PANACeA

	<p>results/learning/lessons from the dissemination activities (i.e. policy influence, re-use of knowledge, feedbacks, etc)</p>	<p>cannot bring policy change on its own. But through proper dissemination (point 1) it can influence policy makers and trigger a change process through informed use (or re-use) of the knowledge. It is important to carefully document such changes.</p>
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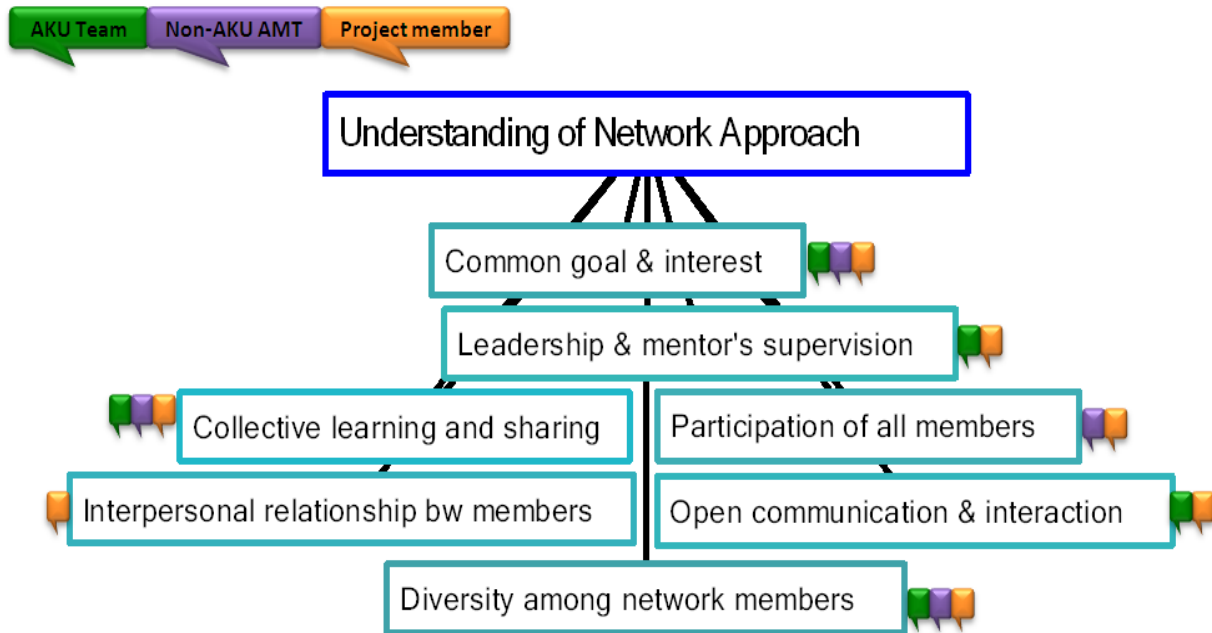
Appendix 4: Models with Analysis for each KEQ i.e. Sub-subcategories

The graphical illustrations of the findings with the analysis under each KEQ are presented below. The change in shape from rectangle to bullets illustrates change in the level of categorization. There is no significance to the change in color of the rectangles in different models.

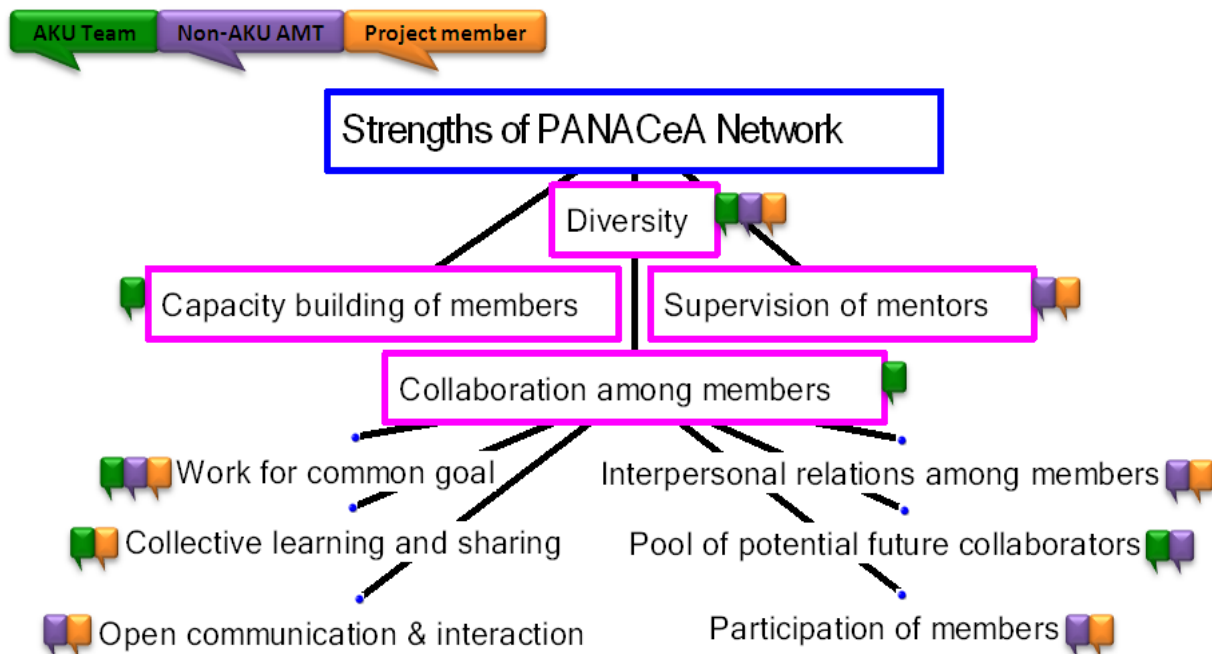
5.1 Category 1: Collaboration and Teamwork

5.1.1 Subcategory: Network Approach

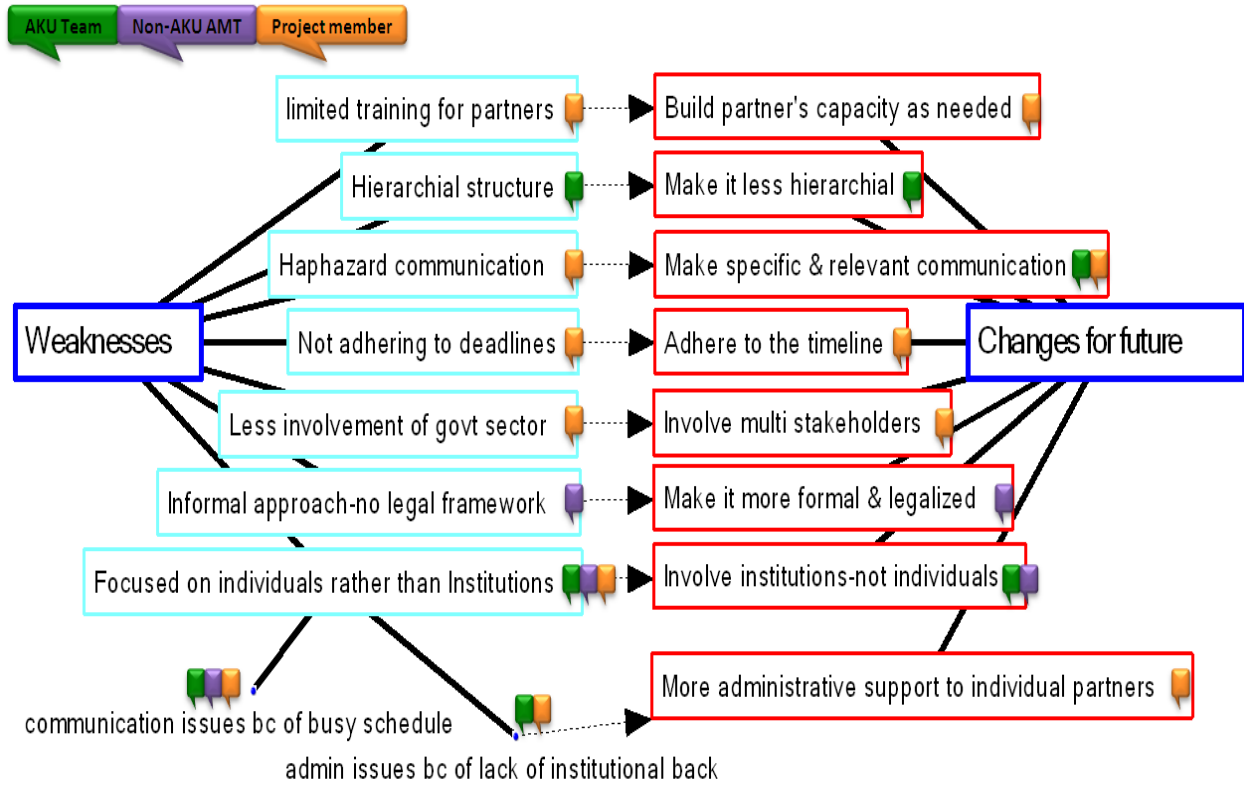
5.1.1.1 Sub-subcategory:



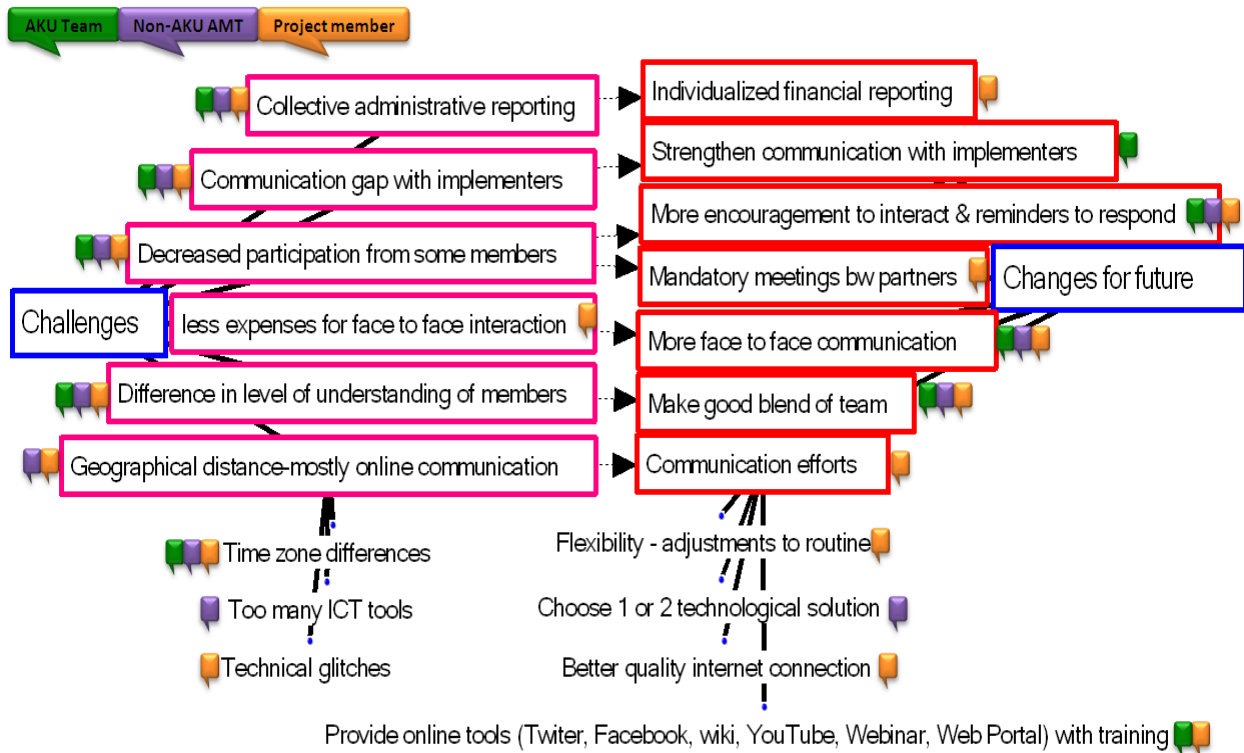
5.1.1.2. Sub-subcategory:



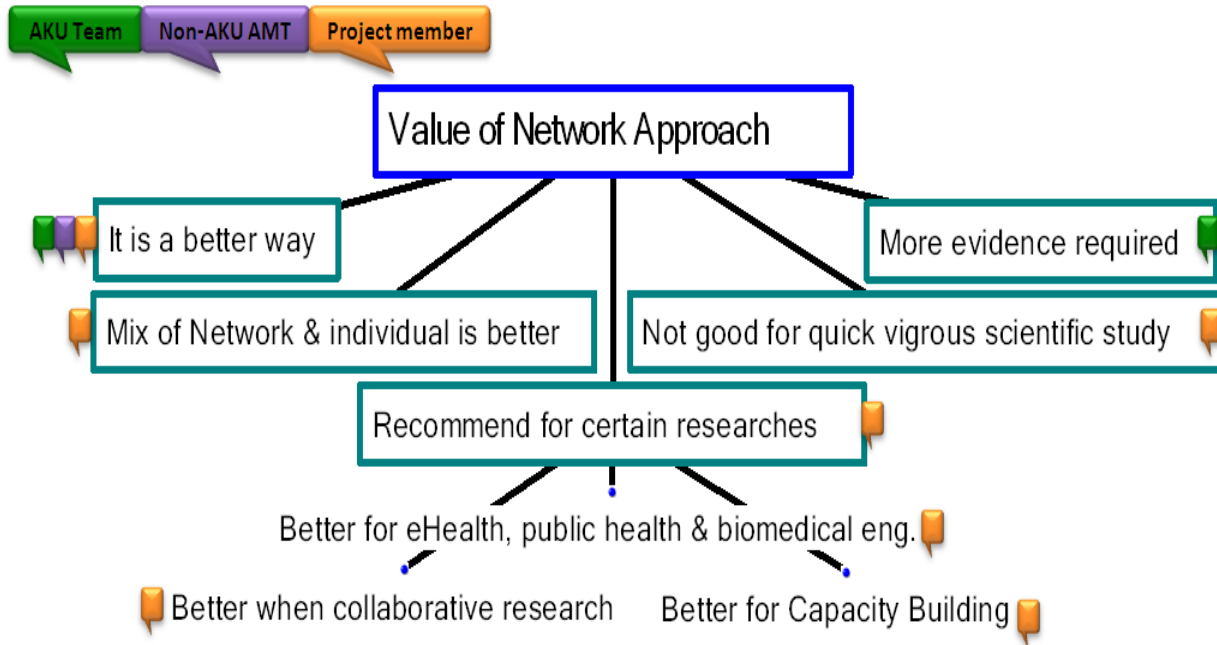
5.1.1.3. Sub-subcategory:



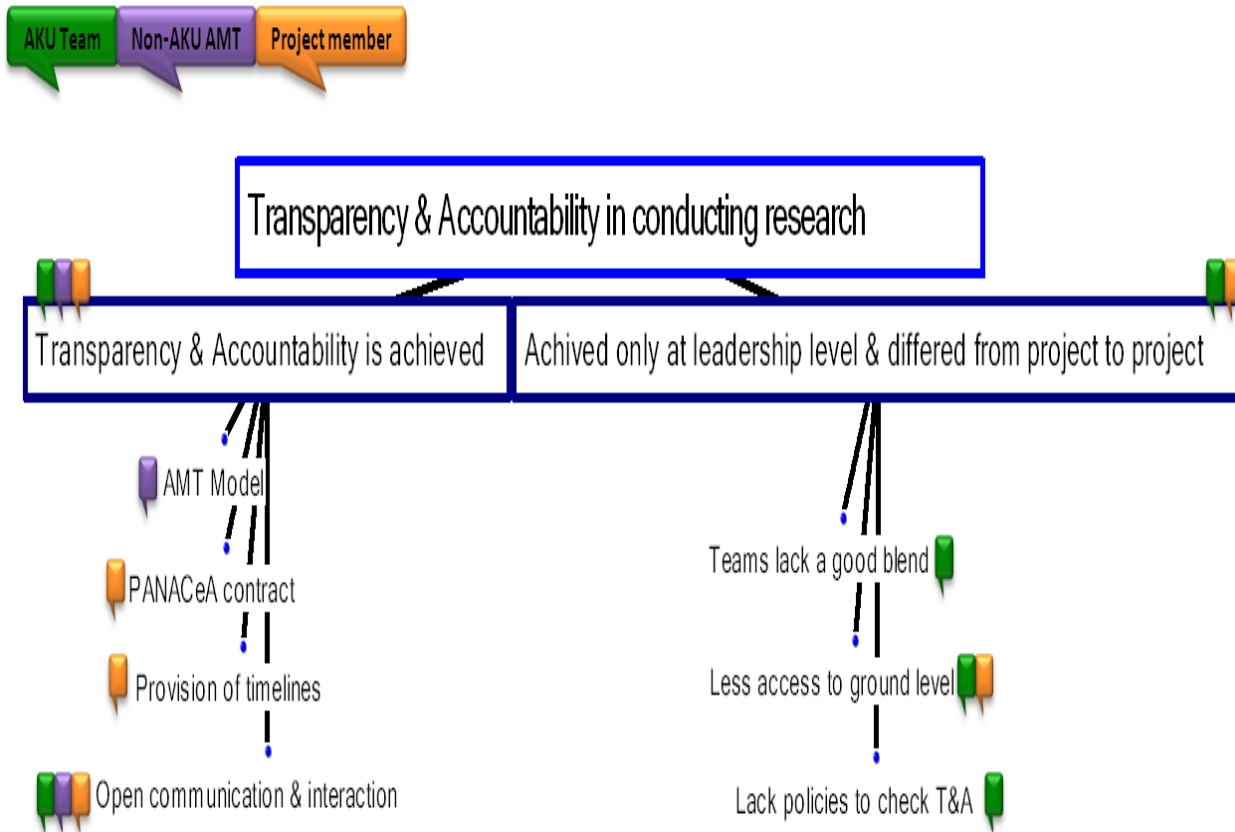
5.1.1.5. Sub-subcategory:



5.1.1.5. Sub-subcategory:



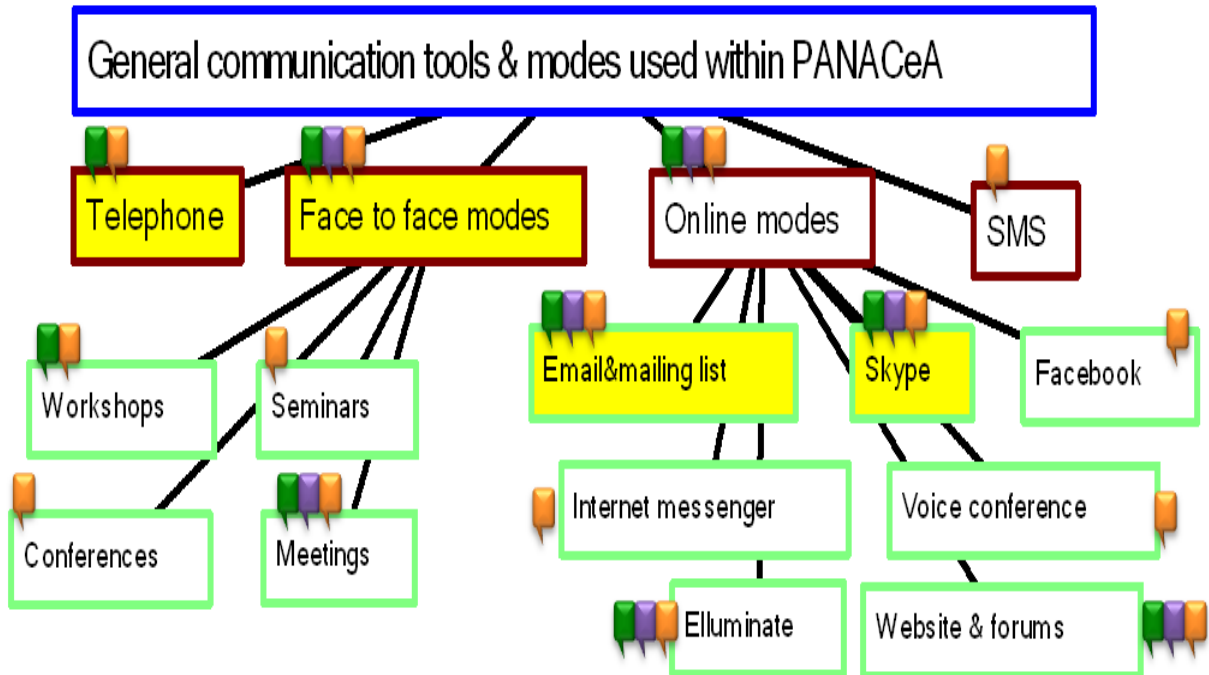
5.1.1.6. Sub-subcategory:



5.1.2 Subcategory: Communication

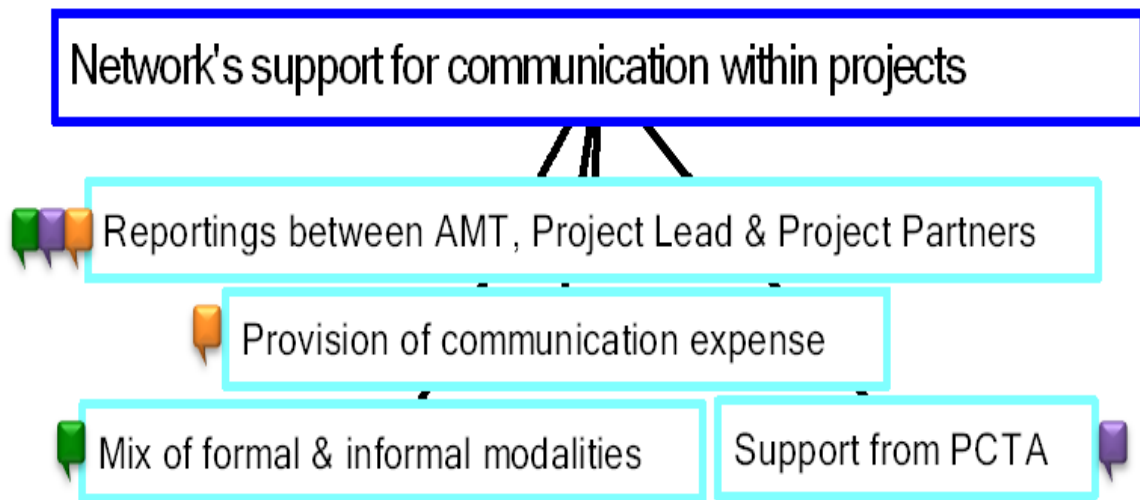
5.1.2.1 Sub-subcategory:

AKU Team Non-AKU AMT Project member Highlighted are the effective ones!

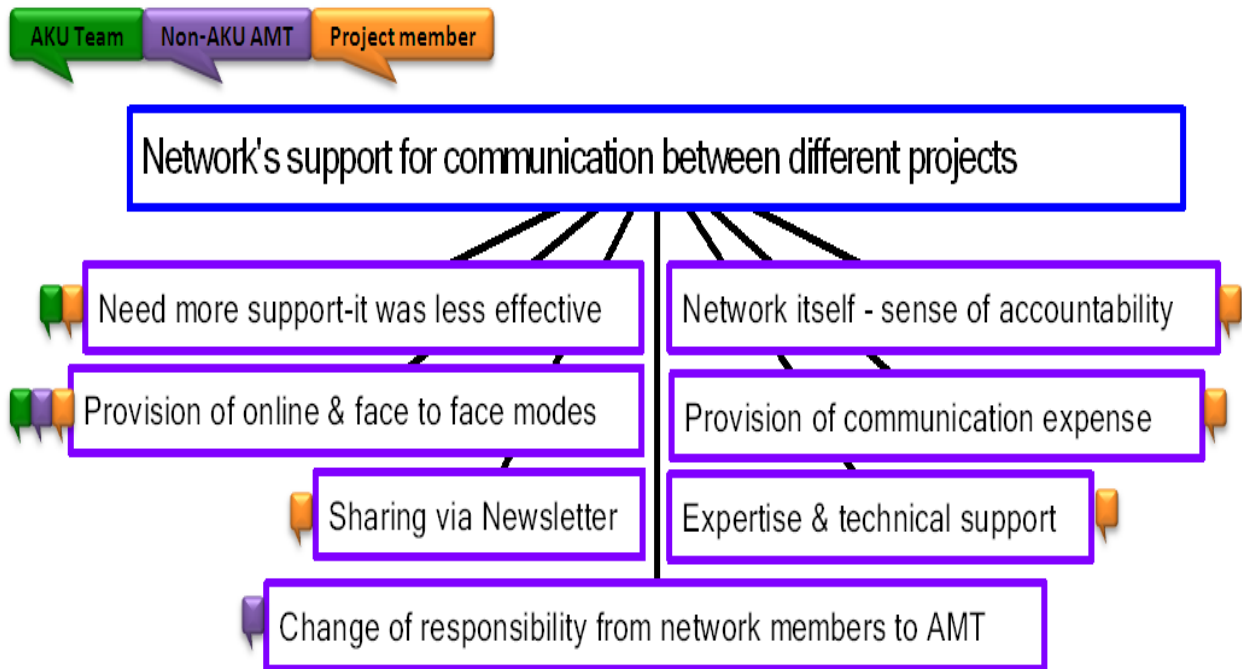


5.1.2.2. Sub-subcategory:

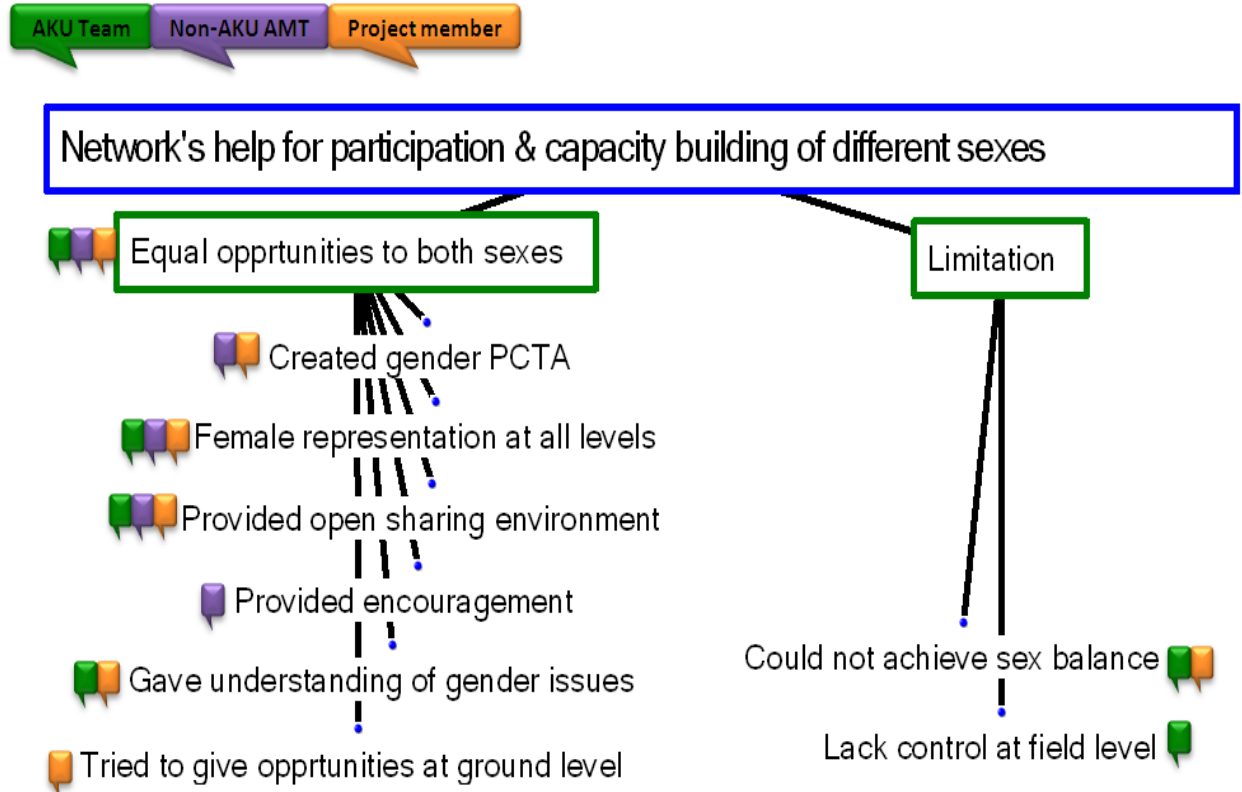
AKU Team Non-AKU AMT Project member



5.1.2.3. Sub-subcategory:



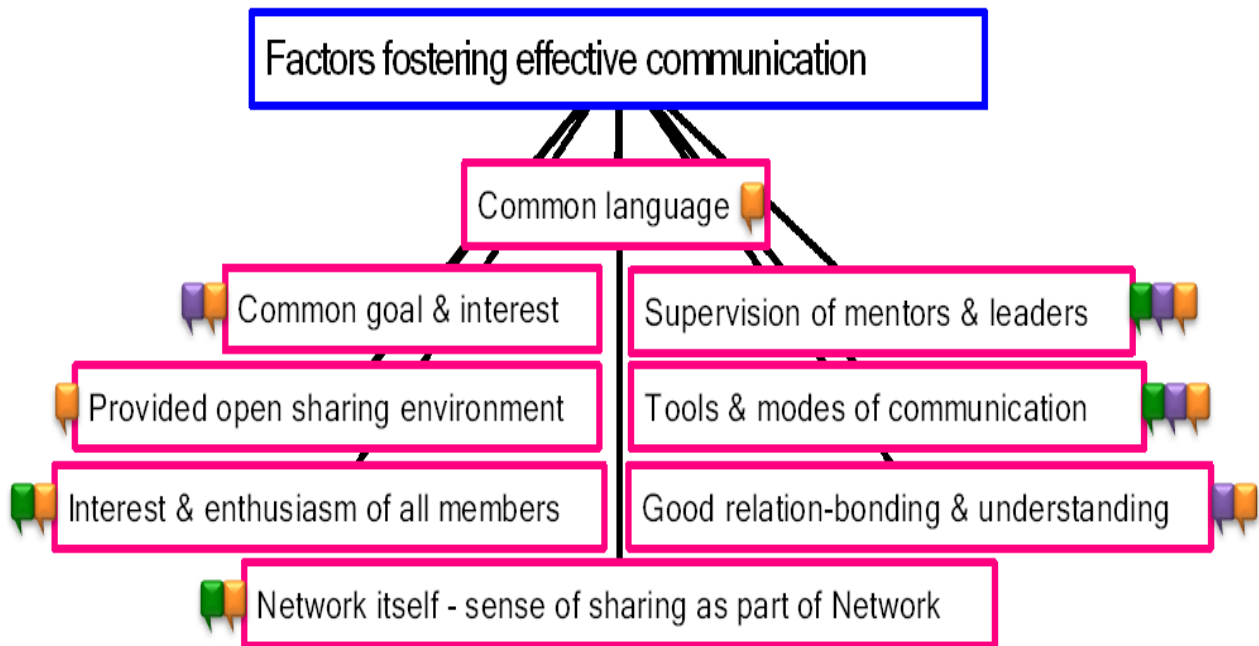
5.1.2.5. Sub-subcategory:



5.1.2.5. Sub-subcategory:

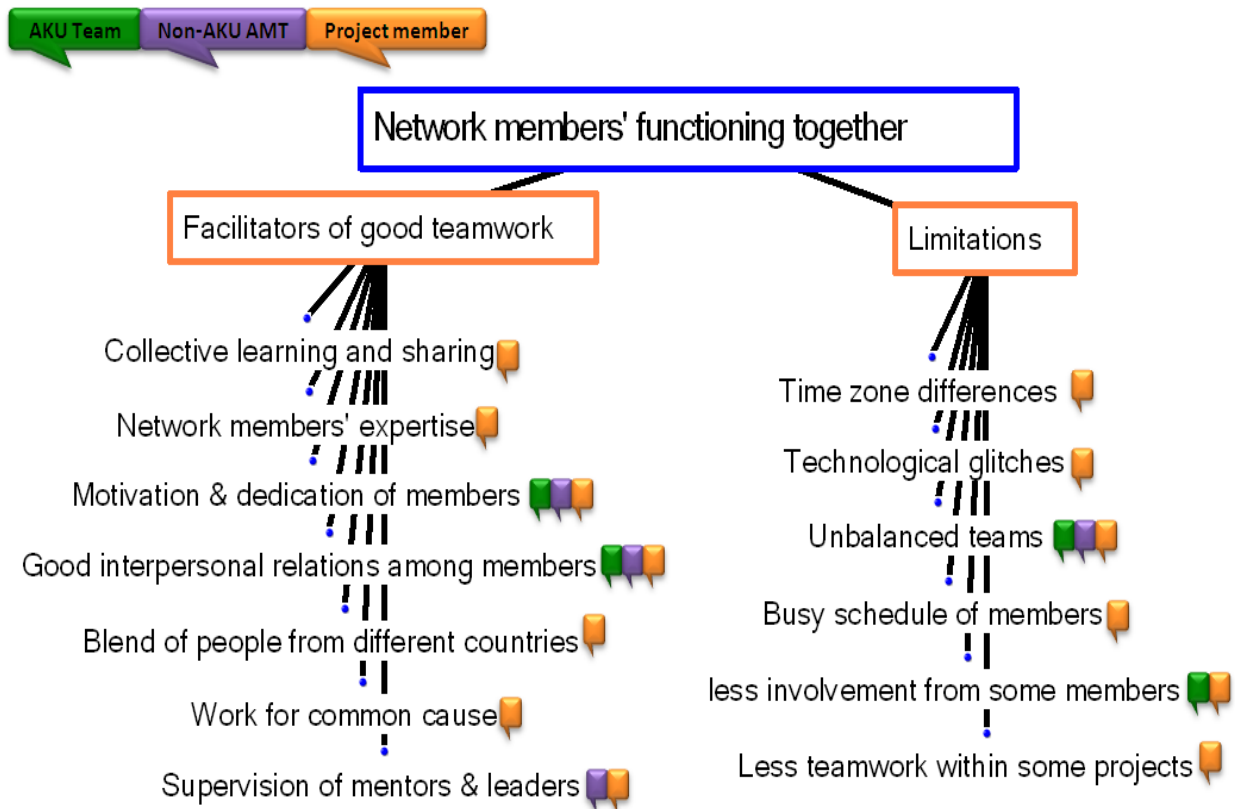


5.1.2.6. Sub-subcategory:

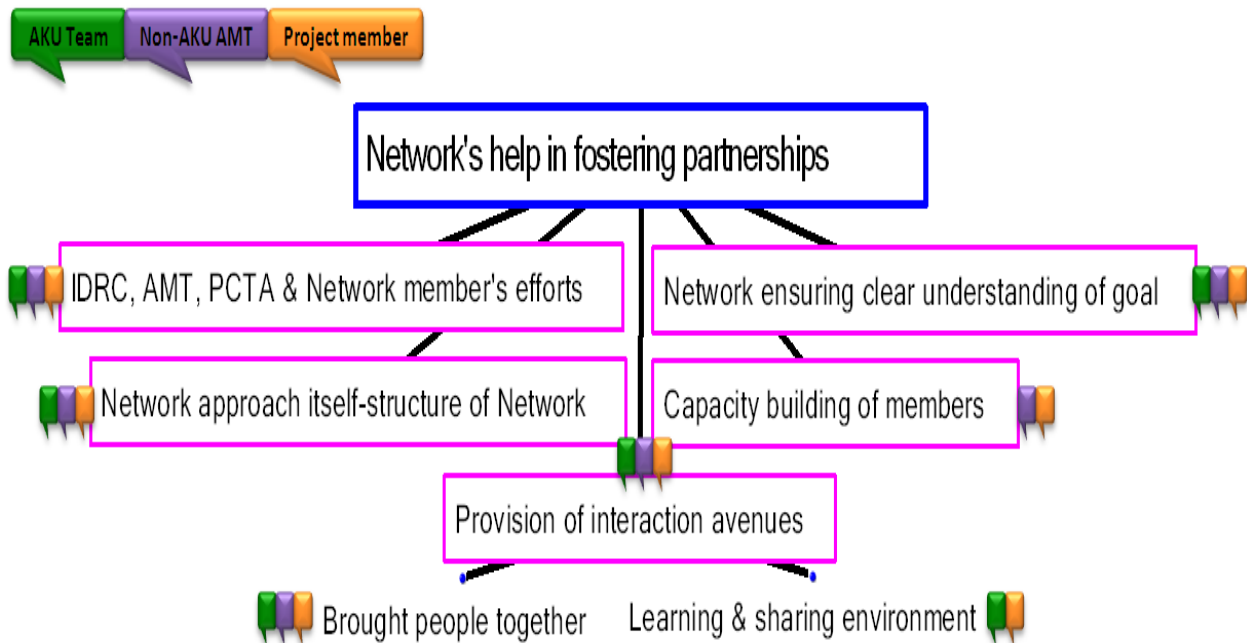


5.1.3 Subcategory: Participation

5.1.3.1 Sub-subcategory:



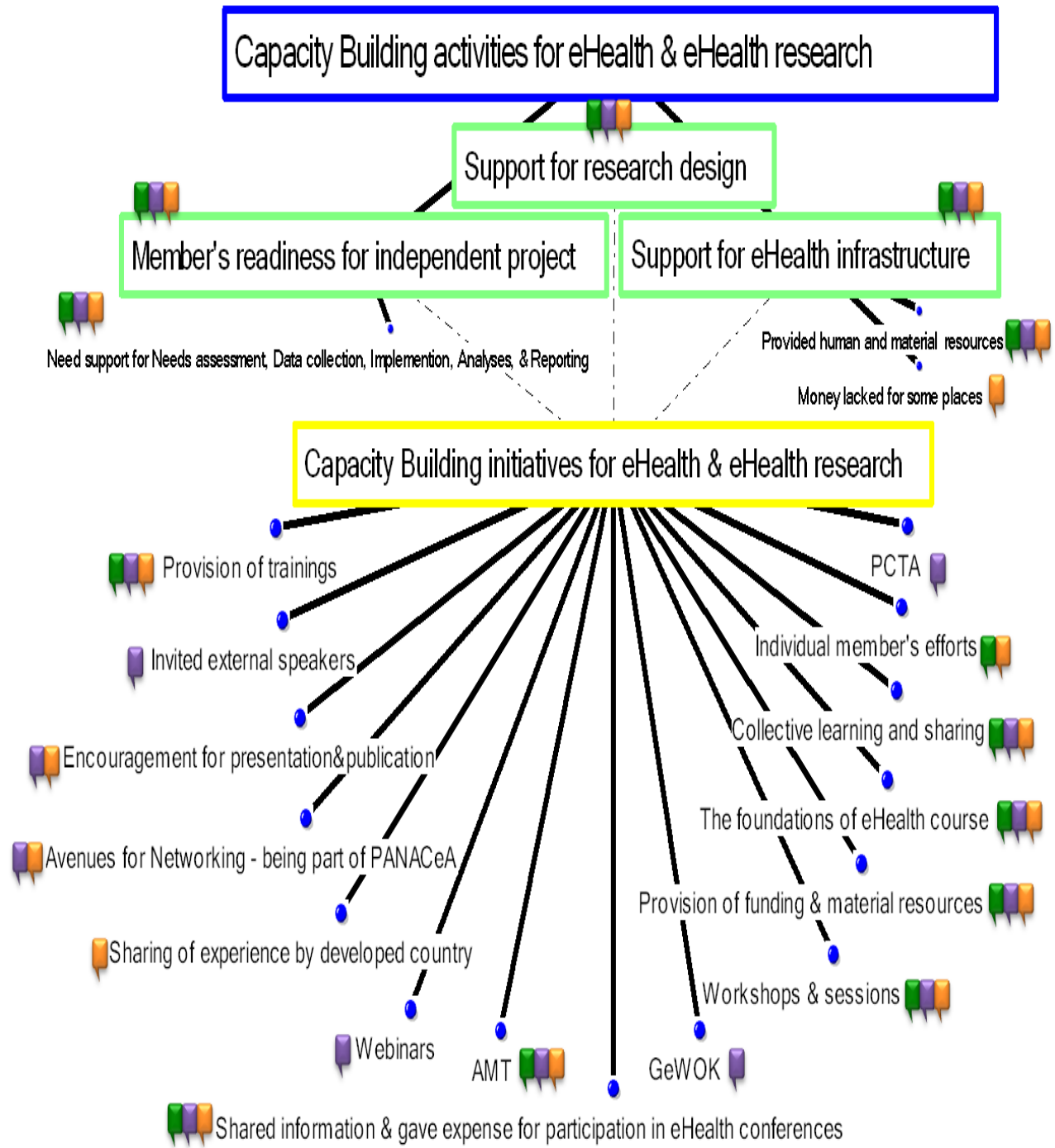
5.1.3.2. Sub-subcategory



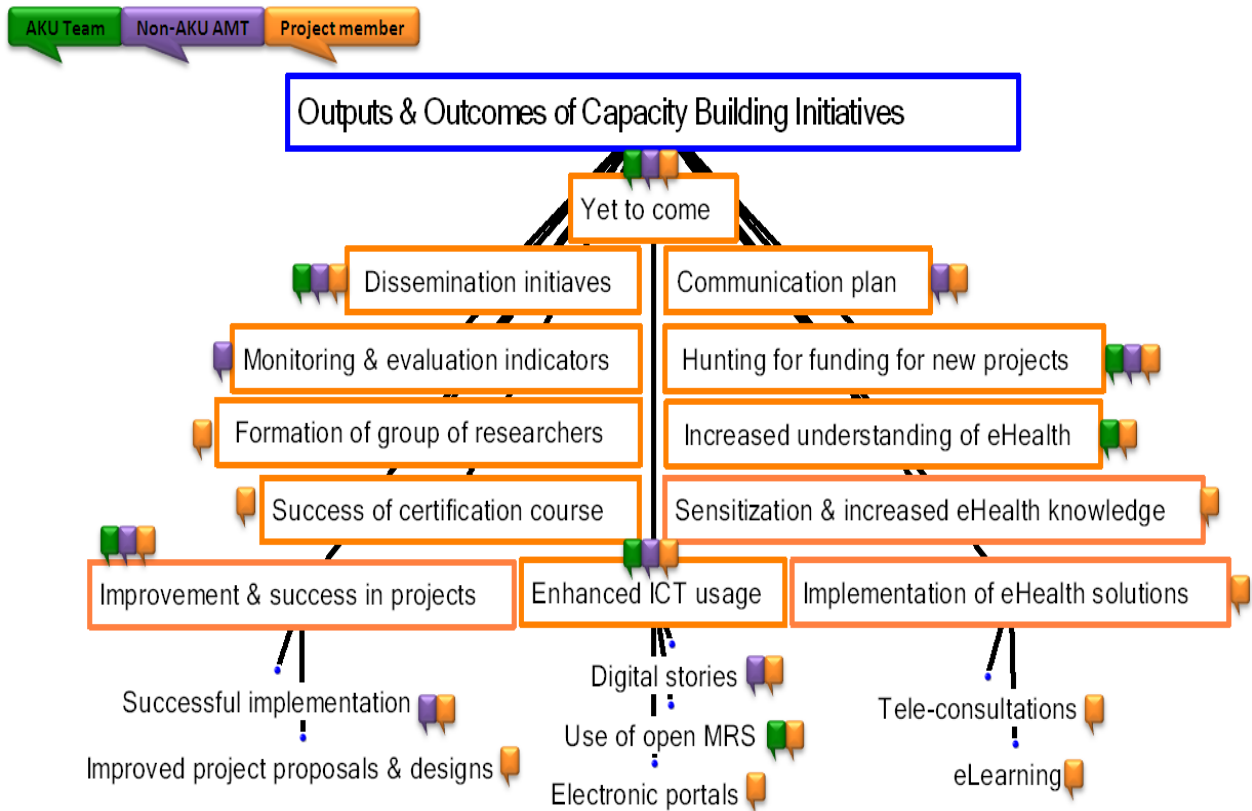
5.2 Category 2: Capacity Building

5.2.1 Subcategory: capacity building in eHealth and eHealth Research

5.2.1.1 Sub-subcategory:



5.2.1.2. Sub-subcategory:



5.2.1.3. Sub-subcategory:



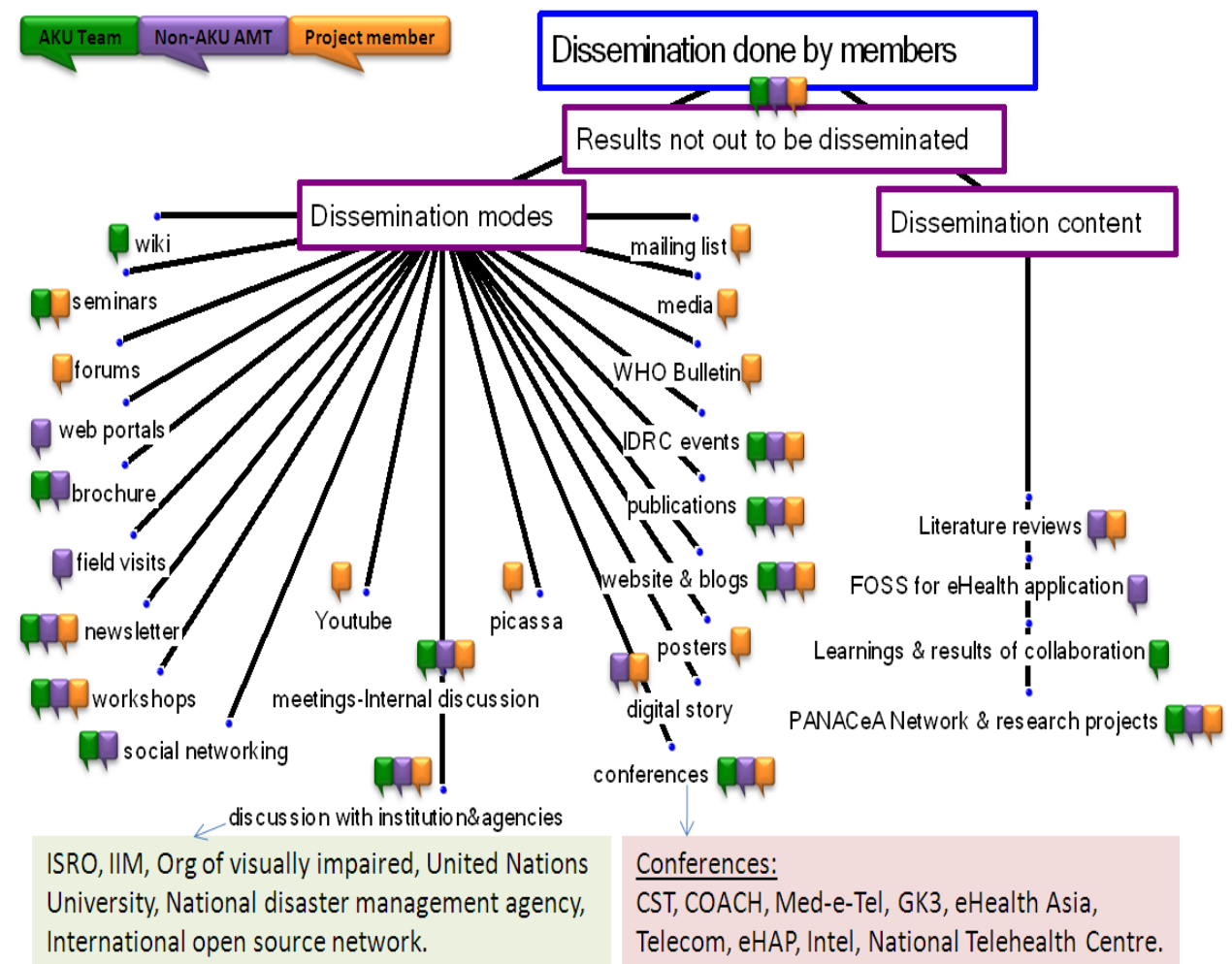
5.3 Category 3: Knowledge Management:

5.3.1 Subcategory: Dissemination

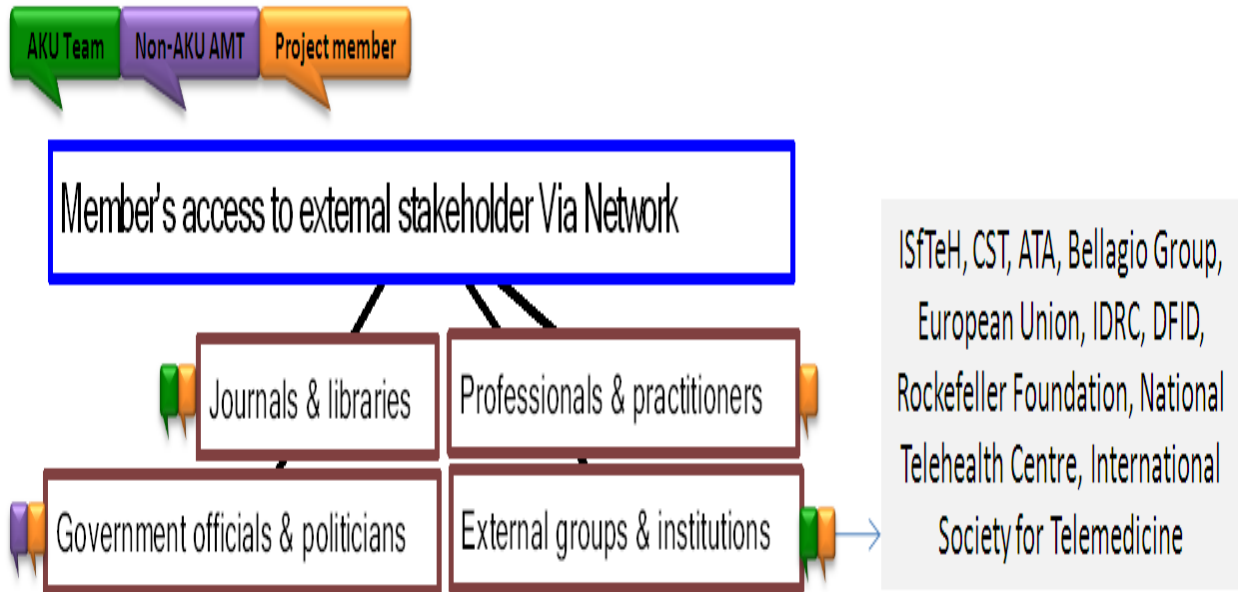
5.3.1.1 Sub-subcategory:



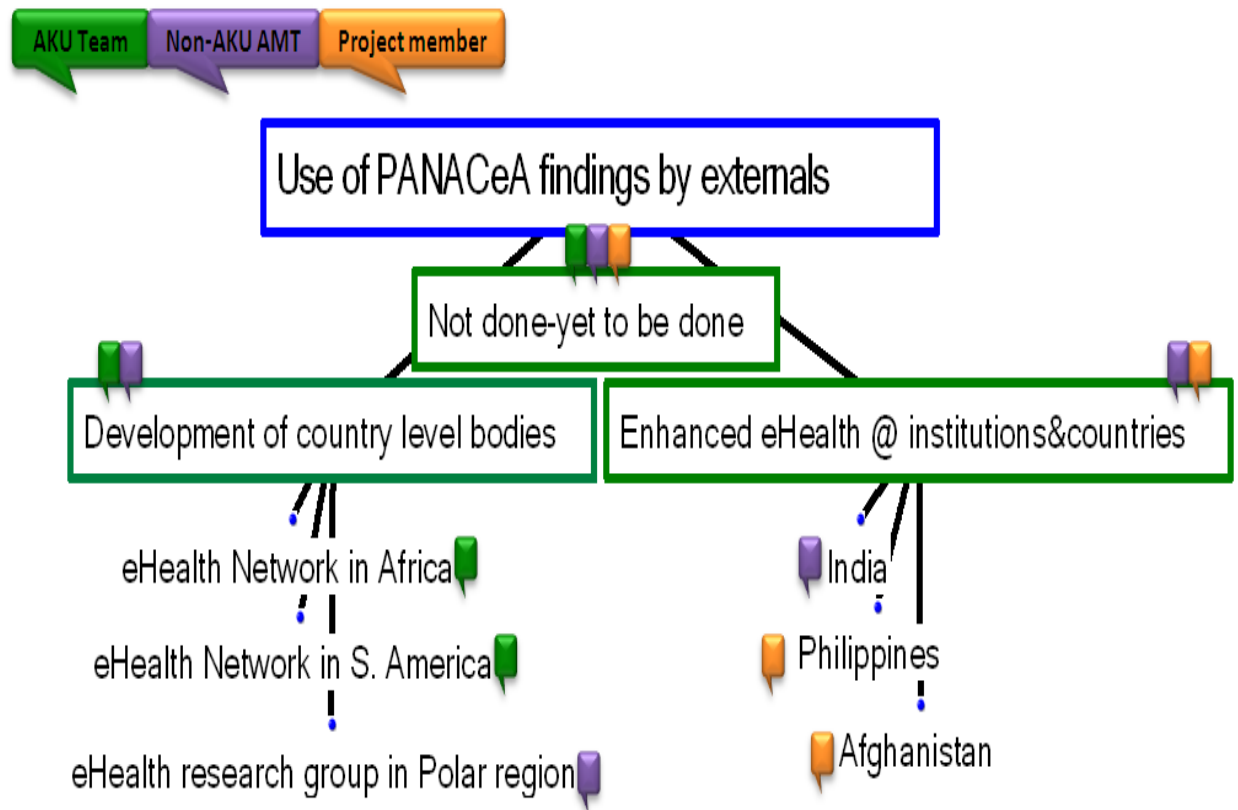
5.3.1.2. Sub-subcategory:



5.3.1.3. Sub-subcategory:



5.3.1.5 Sub-subcategory:

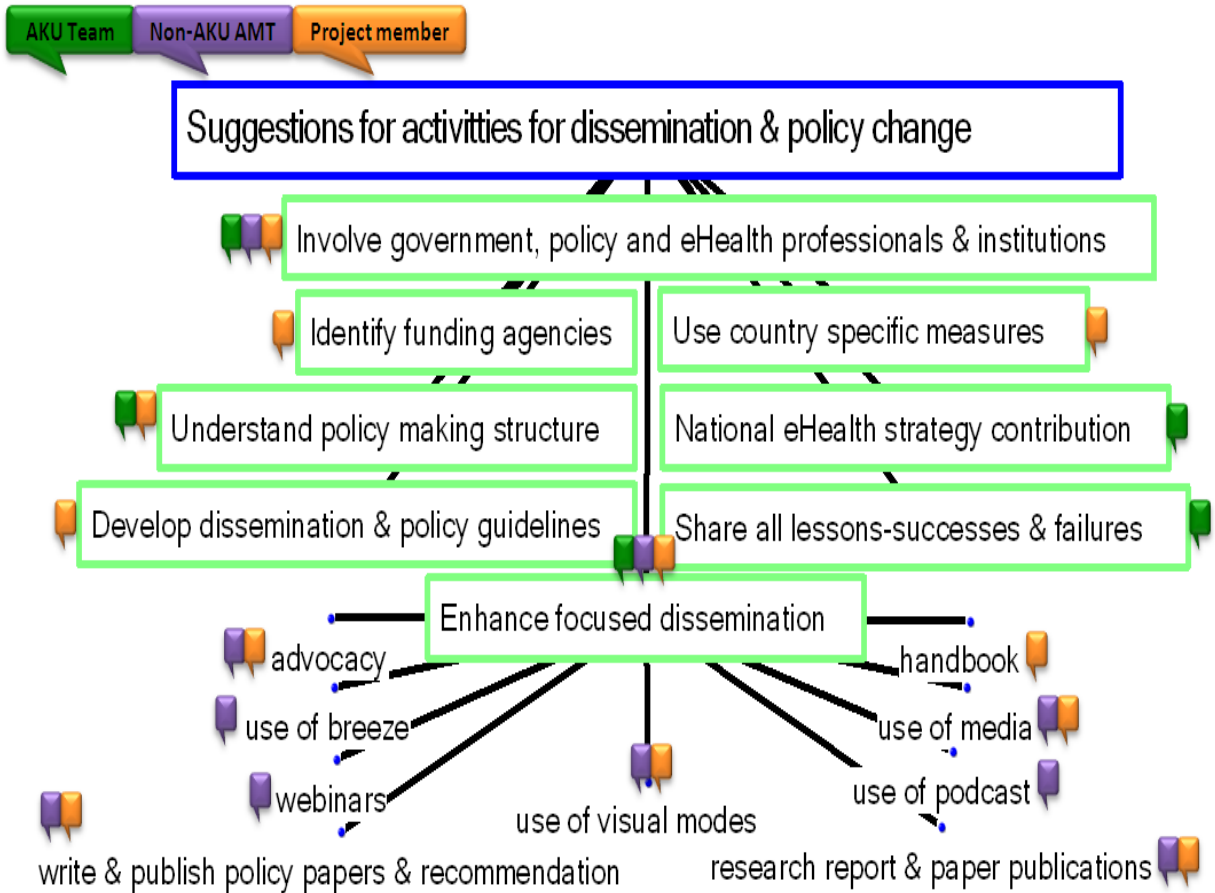


5.3.2 Subcategory: Policy Impact

5.3.2.1. Sub-subcategory:



5.3.2.1. Sub-subcategory:



Appendix 5: Table for Utilization Action Steps

The utilization action along with the suggested Network level that is responsible for carrying out particular utilization with an approximate time is presented in the table below:

Category 1: Collaboration and Teamwork – Subcategories: Network approach, Communication & Participation

<u>Utilization Action</u>	<u>Responsible level for execution</u>	<u>Approximate time of execution</u>	<u>Specific tasks</u>
Ensure and encourage diversity among partners.	Interim steering committee for PANACeA 2.0	PANACeA 2.0	This could be ensured via membership guideline for PANACeA 2.0
Ensure support from institutions and maintain communication with the heads of institutions	Project leads, project partners and IDRC	(March-July 2011)	PP and PL will talk to institutional heads and would share project results and reports with them. After PL and PP have contacted their institutional heads and disseminated project results, IDRC will be asked to write letter of thanks/acknowledging Institution's work in eHealth research
Improve communication between different levels of the network and promote and implement communication strategy.	All levels	(March-July 2011)	Communication PCTA (AJR & SN) will update the mailing list. They will also re-circulate communication protocol. Everybody will take responsibility to share the lessons learnt and project achievements and findings among the network members.
Use simple and inclusive ICT tools	All Levels	(March-July 2011)	Continue using email, Skype and Elluminate.
Ensure participation of members in project activities, network activities and PCTAs, and ensure that partners meet the deadlines	AMT and Project leads	(March-July 2011)	AMT will encourage and send more reminders to the project leads and project leads will also encourage and send more reminders to the partners for participation and meeting deadlines.
Balance project teams for better coordination & teamwork – in	Interim steering committee for	PANACeA 2.0	

terms project's requirement.	PANACeA 2.0		
Ensure gender balance at all levels.	Interim steering committee for PANACeA 2.0	PANACeA 2.0	

Category 2: Capacity Building in eHealth and eHealth Research

<u>Utilization Action</u>	<u>Responsible level for execution</u>	<u>Approximate time of execution</u>	<u>Specific tasks</u>
Enhance formal learning opportunities for network partners	Interim steering committee for PANACeA 2.0	PANACeA 2.0	Formal learning opportunities would be added in the proposal for PANACeA 2.0
Plan for GeWOK (web of knowledge) to be implemented	Interim steering committee for PANACeA 2.0	PANACeA 2.0	GeWOK or a similar platform (knowledge repository) for PANACeA 2.0
Increase frequency of capacity building sessions	AMT and PCTA leads	(March-July 2011)	Invitations of CMEs from different member institutions will be extended to PANACeA members. PANACeA members will participate in eHealth Educational Sessions organized by AKU.
Provide administrative training to project partners	Interim steering committee for PANACeA 2.0	PANACeA 2.0	Trainings for administration and technical aspects of eHealth project would be added in the proposal for PANACeA 2.0

Category 3: Knowledge Management – Subcategories: Dissemination and Policy Impact

<u>Utilization Action</u>	<u>Responsible level for execution</u>	<u>Approximate time of execution</u>	<u>Specific tasks</u>
Ensure dissemination and use of	All levels	April onwards	Every Project will make their dissemination plan

PANACeA findings to broader community			and accordingly will write papers, reports and policy briefs and would take steps to share it outside PANACeA to relevant institutions, government officials, decision makers and policy makers. This sharing of results and lessons learnt will be done in a cohesive fashion.
Ensure policy impact through proper dissemination of PANACeA findings and policy dialogues	All Levels	April onwards	RES along with AMT for each project to keep on guiding project members on making and dissemination of policy briefs.
Build partnerships with governments, eHealth Associations and institutions for policy change	All Levels for PANACeA 1.0 and Interim steering committee for PANACeA 2.0	April onwards And for PANACeA 2.0	Share PANACeA findings, results and learning with relevant institutions, associations, government officials, decision makers and policy makers. Involve policy and decision makers on board for PANACeA 2.0
Members take country-specific actions for policy change	All levels	April onwards	Project members will organize and share their project findings, results and learning with relevant institutions, associations, government officials, decision makers and policy makers in their own countries AMT will take responsibility to check the content of dissemination before project members share/disseminate.