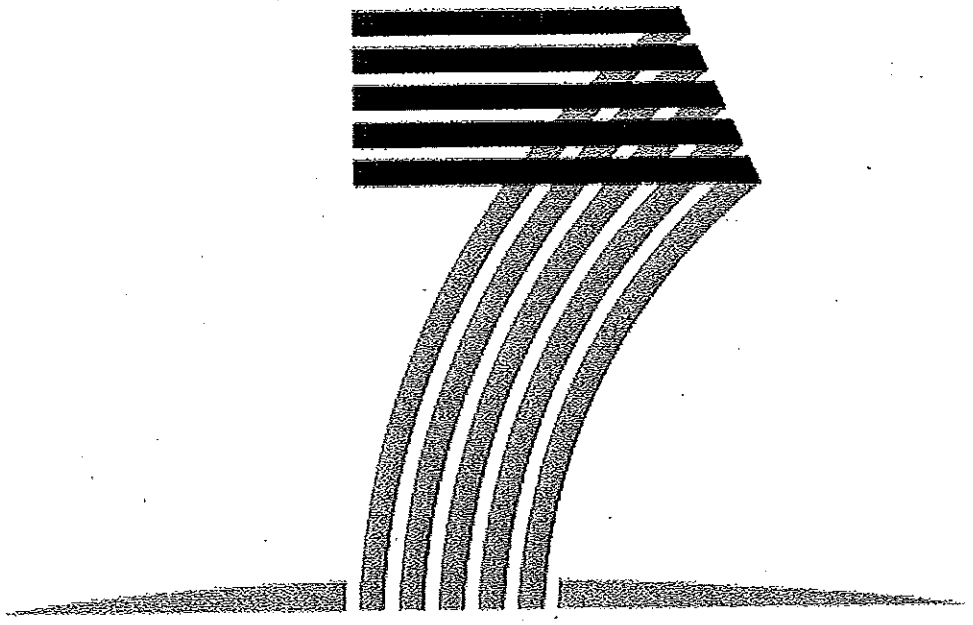


SEVENTH FRAMEWORK PROGRAMME

THEME [HEALTH.2012.3.4-1]
[Research on health systems and services in low- and middle-income countries]

Grant agreement for: Collaborative project

Annex I - "Description of Work"

Project acronym: Equity-LA II

Project full title: " The impact of alternative care integration strategies on Health Care Networks' performance in different Latin American health systems "

Grant agreement no: 305197

Version date: 2012-11-06

Table of Contents

Part A

Workplan Tables

A1:
Project summary

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One form per project

General information			
Project title [3]	The impact of alternative care integration strategies on Health Care Networks' performance in different Latin American health systems		
Starting date [4]	01/08/2013		
Duration in months [5]	60		
Call (part) identifier [6]	FP7-HEALTH-2012-INNOVATION-1		
Activity code(s) most relevant to your topic [7]	HEALTH.2012.3.4-1: Research on health systems and services in low- and middle-income countries		
Free keywords [8]		Health care integration; Quality of health care; Health policy; Health services; Quantitative and qualitative methods; Best practices; Capacity building; Health workers training	

Abstract [9]

Health services fragmentation is one of the main obstacles to effective health care in Latin-America, particularly for chronic diseases. This research builds upon results from Equity-LA (FP7-B-223123) and focuses on one of the most promoted policies to respond to fragmentation in LA, the development of Integrated Health Care Networks (IHN). The general objective is to evaluate the effectiveness of different care integration strategies in improving coordination and quality of care of IHN in different health care systems in Latin America, with particular reference to chronic diseases. Methods: The study adopts a quasi-experimental design, with a participatory action-research approach. In each country, two comparable IHN will be selected -one acting as the intervention and the other as the control area. It is structured in four phases: 1) a base-line study using qualitative and quantitative methods to carry out an initial evaluation of IHN performance; 2) design and implementation of an intervention focused on care coordination and quality of care; and based on health professionals training; 3) evaluation of effectiveness and limitations of interventions and associated contextual factors; and; 4) cross-country comparative analysis and elaboration of tools for getting research into policy. In each country, a research steering committee will be set up to lead the project, composed by health care professionals, managers, users and researchers. Results and relevance: The project will contribute to FP7 Cooperation Work Programme Health (SICA)'s objectives by: 1) generating evidence-based policies to improve integration of care in Latin American countries; 2) strengthening research capacity of all involved institutions in order to enhance knowledge development on care integration in their countries; and by 3) contributing to skills improvement and motivation of health workforce, through training programs aimed at improving care coordination and quality.

A2:
List of Beneficiaries

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

List of Beneficiaries

No	Name	Short name	Country	Project entry month [10]	Project exit month
1	CONSORCI DE SALUT I D'ATENCIO SOCIAL DE CATALUNYA	CSC	Spain	1	60
2	PRINS LEOPOLD INSTITUUT VOOR TROPISCHE GENEESKUNDE	ITM	Belgium	1	60
3	COLEGIO MAYOR DE NUESTRA SENORA DEL ROSARIO	URosario	Colombia	1	60
4	INSTITUTO DE MEDICINA INTEGRAL PROFESSOR FERNANDO FIGUEIRA	IMIP	Brazil	1	60
5	FUNDACAO UNIVERSIDADE DE PERNAMBUCO	UPE	Brazil	1	60
6	UNIVERSIDAD DE CHILE	UChile	Chile	1	60
7	UNIVERSIDAD VERACRUZANA	UV	Mexico	1	60
8	UNIVERSIDAD NACIONAL DE ROSARIO - UNR	UNR	Argentina	1	60
9	UNIVERSIDAD DE LA REPUBLICA	UDELAR	Uruguay	1	60

A3:
Budget Breakdown

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One Form per Project

Participant number in this project [11]	Participant short name	Fund. % [12]	Ind. costs [13]	Estimated eligible costs (whole duration of the project)					Requested EU contribution
				RTD / Innovation (A)	Demonstration (B)	Management (C)	Other (D)	Total A+B+C+D	
1	CSC	75.0	F	815,137.20	0.00	230,116.80	126,210.10	1,171,464.10	967,679.80
2	ITM	75.0	T	695,732.80	0.00	9,000.00	238,670.40	943,403.20	769,470.00
3	URosario	75.0	F	808,972.80	0.00	9,000.00	130,346.40	948,319.20	746,076.00
4	IMIP	75.0	F	585,248.40	0.00	9,000.00	101,791.20	696,039.60	549,727.50
5	UPE	75.0	F	119,132.40	0.00	0.00	3,384.00	122,516.40	92,733.30
6	UChile	75.0	T	755,137.60	0.00	9,000.00	153,819.20	917,956.80	729,172.40
7	UV	75.0	S	643,576.00	0.00	9,000.00	126,756.00	779,332.00	618,438.00
8	UNR	75.0	T	759,113.60	0.00	9,000.00	140,352.00	908,465.60	718,687.20
9	UDELAR	75.0	T	765,923.20	0.00	9,000.00	151,510.40	926,433.60	734,952.80
Total				5,947,974.00	0.00	293,116.80	1,172,839.70	7,413,930.50	5,926,937.00

Note that the budget mentioned in this table is the total budget requested by the Beneficiary and associated Third Parties.

*** The following funding schemes are distinguished**

Collaborative Project (if a distinction is made in the call please state which type of Collaborative project is referred to: (i) Small of medium-scale focused research project, (ii) Large-scale integrating project, (iii) Project targeted to special groups such as SMEs and other smaller actors), Network of Excellence, Coordination Action, Support Action.

1. Project number

The project number has been assigned by the Commission as the unique identifier for your project, and it cannot be changed. The project number **should appear on each page of the grant agreement preparation documents** to prevent errors during its handling.

2. Project acronym

Use the project acronym as indicated in the submitted proposal. It cannot be changed, unless agreed during the negotiations. The same acronym **should appear on each page of the grant agreement preparation documents** to prevent errors during its handling.

3. Project title

Use the title (preferably no longer than 200 characters) as indicated in the submitted proposal. Minor corrections are possible if agreed during the preparation of the grant agreement.

4. Starting date

Unless a specific (fixed) starting date is duly justified and agreed upon during the preparation of the Grant Agreement, the project will start on the first day of the month following the entry into force of the Grant Agreement (NB : entry into force = signature by the Commission). Please note that if a fixed starting date is used, you will be required to provide a detailed justification on a separate note.

5. Duration

Insert the duration of the project in full months.

6. Call (part) identifier

The Call (part) identifier is the reference number given in the call or part of the call you were addressing, as indicated in the publication of the call in the Official Journal of the European Union. You have to use the identifier given by the Commission in the letter inviting to prepare the grant agreement.

7. Activity code

Select the activity code from the drop-down menu.

8. Free keywords

Use the free keywords from your original proposal; changes and additions are possible.

9. Abstract

10. The month at which the participant joined the consortium, month 1 marking the start date of the project, and all other start dates being relative to this start date.

11. The number allocated by the Consortium to the participant for this project.

12. Include the funding % for RTD/Innovation – either 50% or 75%

13. Indirect cost model
- **A: Actual Costs**
- **S: Actual Costs Simplified Method**
- **T: Transitional Flat rate**
- **F :Flat Rate**

Workplan Tables

Project number

305197

Project title

Equity-LA II—The impact of alternative care integration strategies on Health Care Networks' performance in different Latin American health systems

Call (part) identifier

FP7-HEALTH-2012-INNOVATION-1

Funding scheme

Collaborative project

WT1
List of work packages

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

LIST OF WORK PACKAGES (WP)

WP Number [63]	WP Title	Type of activity [64]	Lead beneficiary number [65]	Person-months [66]	Start month [67]	End month [68]
WP 1	Theoretical framework and research tools	RTD	1	114.00	1	6
WP 2	Base-line study	RTD	1	288.00	7	24
WP 3	Design and implementation of interventions	RTD	2	254.00	19	36
WP 4	Evaluation of interventions	RTD	1	209.00	34	45
WP 5	Cross-country comparative analysis	RTD	1	225.00	46	57
WP 6	Capacity building and dissemination of research results	OTHER	2	345.00	1	60
WP 7	Project management and coordination	MGT	1	60.00	1	60
			Total	1,495.00		

WT2:
List of Deliverables

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

List of Deliverables - to be submitted for review to EC

Delive-rable Number [61]	Deliverable Title	WP number [63]	Lead benefi-ciary number	Estimated indicative person-months	Nature [62]	Dissemi-nation level [63]	Delivery date [64]
D1.1	Research plan and analytical framework	1	1	110.00	O	PU	6
D1.2	Ethical approval by the committees in the countries involved	1	1	4.00	O	PU	6
D2.1	Final qualitative analysis plan	2	1	14.00	R	PU	14
D2.2	Qualitative results of base-line study	2	1	120.00	R	PU	19
D2.3	Quantitative results of base-line study	2	1	120.00	R	PU	24
D3.1	Intervention design and implementation plan	3	2	94.00	O	PU	22
D3.2	Progress report on intervention process	3	2	160.00	O	PU	31
D4.1	Intra-country comparison plan	4	1	5.00	R	PU	38
D4.2	Final results on evaluation of interventions (intra-country analysis)	4	1	204.00	R	PU	45
D5.1	Cross-country comparative analytical plan	5	1	6.00	R	PU	50
D5.2	Results on cross-country analysis	5	1	219.00	R	PU	57
D6.1	Project web site	6	1	1.00	O	PU	3
D6.2	Capacity building strategy	6	2	5.00	O	PU	6

WT2:
List of Deliverables

Deliverable Number [61]	Deliverable Title	WP number [63]	Lead beneficiary number	Estimated indicative person-months	Nature [62]	Dissemination level [63]	Delivery date [64]
D6.3	Report on the capacity building activities	6	1	59.00	R	PU	27
D6.4	Guide for national and International policy makers	6	2	80.00	O	PU	58
D6.5	Best practices report	6	2	80.00	R	PU	58
D6.6	Papers to peer review journals	6	1	120.00	O	PU	60
			Total	1,401.00			

WT3:
Work package description

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One form per Work Package

Work package number [53]	WP1	Type of activity [54]	RTD
Work package title	Theoretical framework and research tools		
Start month	1		
End month	6		
Lead beneficiary number [55]	1		

Objectives

This WP addresses the following objectives
- to finalise the common theoretical framework
- to elaborate the research plan
- to develop preliminary tools for data collection
- to set up research teams and committees
- to start capacity building activities

and contributes to research objectives a), b), c) and d)

Description of work and role of partners

This work package is oriented at preparing the onset of the project by finalising the common theoretical framework and elaborating the research plan and preliminary research tools. The following tasks will be carried out:

- Completion of the literature review on the international evidence on coordination and quality of care with a particular focus on the existing evidence in the participating Latin American (LA) countries. The literature review will focus on the interventions to improve coordination and quality of care, tools and indicators to assess the interventions, with particular attention to the two tracer conditions: type 2 diabetes and COPD. Among others, it will look at informational, managerial and administrative coordination. Continuity of care will be analysed by means of the three types: relational, informational and managerial. Quality of care will be analysed by including structure, process or performance and outcome measures.

- Finalization of the analytical framework based on the literature review. The formulation of a common terminology and the development of a conceptual framework will allow participants to analyse systematically the areas of interest and enhance comparability across countries.

- Development of a research plan to ensure timing and scientific quality of all aspects of the project.

- Development of preliminary research tools. Tools for both qualitative and quantitative studies will be those designed in the Equity-LA project (topic guides for interviews and focus groups; questionnaires). Other needed tools will be adapted from those developed by participants, or obtained from the scientific literature, e.g. questionnaires addressed to health professionals. This WP will particularly focus on the development of preliminary qualitative research tools in order to ensure an on time onset of the base-line study.

During this work package, research country teams and committees will be set up:

1) Each participant will set up its project country team: appoint research assistants, contact with all organisations involved in the project and if necessary adapt the location of the project office.

2) The national steering committee will be set up in each LA country. It will be composed of no more than seven members, representing all stakeholders involved in healthcare, thus consisting of healthcare professionals, managers, users of the involved IHNs, local policy makers, and researchers. This combination aims at avoiding a fragmented account of problems and solutions and ensuring an equal relationship between researchers

and other participants. Researchers will act as facilitators and catalysts. The national steering committee of each country will participate in all project phases and will be in charge of the design and implementation of interventions (more details in WP3). The committee will be active for the five fears of the project and trained in carrying out three action research activities: analysis of situation, refining intervention measures and in-service training, and will promote a bottom-up strategy in both the design and implementation of interventions.

3) The international scientific committee will be formally established by the project management committee (M3), consisting of experts in the field of research. The committee will meet annually and the timing of the meeting will coincide with the project workshop. The international scientific committee is in charge of reviewing and commenting on methods, assuring quality of the scientific work and advising on the scientific aspects of the project. The committee will act as an independent arbitrator within the consortium on scientific matters.

4) A national scientific committee will be established in each Latin American country (M4) made up of stakeholders: policy makers, health providers representatives, professionals and civil society representatives related with the field of the research. Scientific officers of the EC representation in each country will also be invited to participate. The committees will provide support to the country research team, address emerging issues throughout the project and contribute to the dissemination of findings along the research.

In order to ensure that all partners are acting as a team and there is effective scientific coordination, a series of mechanisms will be put in place by Participant 1. Coordination mechanisms will include scientific workshops, the project web site and permanent communication (e-mails, video-conferences, etc.). These mechanisms will ensure that similar data sets are collected and a common methodology and explanatory framework is developed so that comparative analyses of the results are possible. Regarding to health services networks that constitute the study areas, an ad hoc long standing collaboration agreement will be established.

During this work package, two meetings will be organised, 1st Workshop at the start of the project (M1) in Colombia and 2nd Workshop towards the end of this work package (M6) in Brazil. The 1st Workshop will take place in order to reach an agreement on the main aspects of the theoretical framework and research tools, whereas the 2nd Workshop targets to finalise the framework, the research plan and the qualitative research tools.

The workshops along the project, in addition to contribute to build capacity, intend to facilitate an optimal transfer of results from the previous phase to the subsequent one. Moreover, they should allow for identification of problems that have emerged while working on the different work packages and are part of the project review about its advancement. The organisation and location of the workshops will alternate between the Latin American countries.

Capacity building

Capacity building which is a transversal component of the project will already start during this WP in two domains: research and policy making. This will take place by the exchange among all researchers and the beginning of policy makers' needs appraisal. This includes selection of junior researchers, permanent communication and debate, workshops on research framework, methods and tools and joint work among the teams.

Role of participants
Participant 1 (CSC) will lead this WP. However every participant will contribute to complete the analytical framework, research plan, with special emphasis according to their field of expertise: CSC (Spain): integration and coordination of care, COPD; ITM (Belgium), quality of care; URosario (Colombia) and IMIP (Brazil): access to health services, type 2 diabetes; UChile (Chile): gender analysis; UV (Mexico): type 2 diabetes; UNR (Argentina): health workers training; UDELAR (Uruguay): action-research

Person-Months per Participant

Participant number[10]	Participant short name[11]	Person-months per participant
1	CSC	12.00
2	ITM	6.00
3	URosario	16.00

WT3:
Work package description

Person-Months per Participant

Participant number [10]	Participant short name [11]	Person-months per participant
4	IMIP	16.00
6	UChile	16.00
7	UV	16.00
8	UNR	16.00
9	UDELAR	16.00
	Total	114.00

List of deliverables

Delive-rable Number [61]	Deliverable Title	Lead benefi-ciary number	Estimated indicative person-months	Nature [62]	Dissemi-nation level [63]	Delivery date [64]
D1.1	Research plan and analytical framework	1	110.00	O	PU	6
D1.2	Ethical approval by the committees in the countries involved	1	4.00	O	PU	6
		Total	114.00			

Description of deliverables

D1.1) Research plan and analytical framework: Detailed description of the conceptual framework and the overall plan of research of the project [month 6]

D1.2) Ethical approval by the committees in the countries involved: Certificate of the ethical approval granted by the ethical committees in the involved countries [month 6]

Schedule of relevant Milestones

Milestone number [59]	Milestone name	Lead benefi-ciary number	Delivery date from Annex I [60]	Comments
MS1	Research plan	1	6	Research plan developed and agreed upon
MS2	Preliminary qualitative research tools	1	6	Topics guides developed and adapted in Spanish and Portuguese
MS3	National steering committees	1	6	National steering committee set up in each LA country

WT3:
Work package description

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One form per Work Package

Work package number [53]	WP2	Type of activity [54]	RTD
Work package title	Base-line study		
Start month	7		
End month	24		
Lead beneficiary number [55]	1		

Objectives

This WP mainly addresses research objective a)
- to analyse the integrated healthcare networks' performance with respect to coordination and quality of care in different healthcare systems in Latin America and associated factors in each particular context

and contributes to research objectives b), c) and d)

Description of work and role of partners

In this work package an assessment of the performance of the intervention and control IHNs will be carried out in all six Latin American participating countries to set the base-line for the later evaluation of the interventions.

This base-line study will concentrate on coordination, continuity and quality of care, adopting a gender perspective, and will:
- provide information on the performance of the intervention and control IHNs with respect to care coordination, continuity and quality;
- address the question of contextual factors influencing coordination and quality of care;
- identify and address the gender issues linked to health services performance.

Data will be collected by a combination of qualitative and quantitative methods in order to obtain base-line information on the provision of care to the general population and to patients with tracer conditions (COPD and type 2 diabetes).

This work package is made up of four components, encompassing the following activities:

1. Qualitative study (M7-18): Focus groups and individual interviews will be carried out in order to investigate care coordination, continuity and quality of care. Research tools (topic guides) have been finalised previously.

The study subjects of the qualitative research will be:
- Healthcare professionals to get an insight into their perspectives of coordination and quality of care in the IHN by means of focus groups. Healthcare professionals will be selected according to age, sex and care level.
- Managers to obtain their opinions on coordination of care and quality in the IHN by means of individual interviews.
- Patients with tracer conditions, their relatives and carers to explore their opinions and experiences on continuity across care levels and quality by means of focus groups. Patients will be selected according to age, sex, distance to health services and health condition.

All interviews (individual and focus groups) will be audio-recorded and transcribed verbatim. A narrative content analysis will be conducted with support of the software Atlas-ti 5.0, and a mixed generation of thematic categories will applied, that means categories are either derived from the conceptual framework reflected in the topic guides or identified within the data analysis.

2. Quantitative study (M13-21): Two questionnaire surveys will be conducted: a) One survey will be conducted among users of the healthcare system in order to determine their perceptions of continuity and quality of care, and b) the other survey will be conducted among health professionals in order to determine their perceptions of

the degree of coordination and quality of care. As a first step, the questionnaire, adjusted according to the results of the qualitative study, will be piloted and afterwards corrected for its use in the data collection.
Sample. Simple random samples of health professionals and users will be selected in both (intervention and control) IHNs under investigation in each country.
The sample size will be calculated according to the controlled before and after design of the study. With respect to health professionals, a sample size of 692 (173 for each IHN and phase) is estimated in order to ensure the detection of a 15% variation in professionals' perception of coordination and quality of care between phases and IHNs. For the users' survey, a sample size of 1,568 (392 patients per IHN and phase) is estimated in order to ensure the detection of a 10% variation in patients' perception of continuity of care between phases and IHNs. In both cases, sample size is calculated on the basis of a power of 80% ($\alpha = 0.20$) and a confidence level of 95% ($\beta = 0.05$) in a bilateral contrast. Descriptive analyses will be carried out, and t-tests and x2 tests will be used to compare differences in outcomes between the base-line and the evaluation phases, and within and between IHNs. In addition, multivariable analysis will be conducted in order to explore the effects of potential explanatory variables on the outcome. Statistical software such as SPSS 18.0, SAS and SPAD will be used. Post-test differences in outcome measures may be adjusted for baseline measures by using analysis of covariance.

3. Final analysis of base-line study (M19-24): The analysis of the base-line study will be completed by combining the preliminary results of the qualitative study with those of the quantitative study. Results will be used for the design of interventions in the intervention's IHNs of each country. They will further serve as the basis of the before-after and the intervention-control comparison.
During this work package, the 3rd Workshop will take place in Chile (M13) for finalising the quantitative research analysis plan and tools (questionnaire adapted to findings of the qualitative study).
The discussion of the overall results of the preliminary base-line study will be the first part of the agenda of the 4th Workshop (M19) in Mexico (WP3).

Capacity building (M7-24)

During this work package, capacity building will continue adding to the activities started in WP1 and activities of WP6 following specific activities:

- Specific training of junior researchers to develop the knowledge and skills required for the development of the base-line study. Workshops and seminars organised by senior researchers in collaboration with the participant(s) with expertise in the area and the specific support of Partner 2 (ITM). The minimum estimated number of trainees is of 24 junior researchers (3-4 trainees per country). However, other participants that will benefit are: pre- and post graduate students, other interested juniors researchers and health personnel that may collaborate at different moments of the base line study. Contents of the seminars include: the research analytical framework, health care integration, action research and qualitative and quantitative research methods. The training, based on a needs assessment, will take place throughout the work package according to research needs. On-line materials and support will be used when adequate.

- The national steering committee will continue to acquire the necessary skills, as described in WP6.

- Scientific support to Participants 6-9 provided by participants of the previous Equity-LA (1-4) to obtain a common understanding among all the partners of the main research elements related to the base-line study. The scientific back-up will be given by in-situ support, the use of on-line and other communication channels (web site, e-mails, phone calls and periodical workshops).

- Exchange among researchers that includes permanent communication and debate, workshops on research methods, and join work among the teams.

Role of participants
Participant 1 (CSC) will be overall responsible for this work package; however every Latin American country team (Participants 3-9) will lead and carry out the base-line study in their own country. Participant 2 (ITM) will lead the researchers' capacity building process. Previous participants of Equity-LA (Participants 1-5) will provide scientific support to one of the new participants (Participants 6-9). Furthermore, each participant is responsible for some scientific areas (specific dimensions) in which they possess the most expertise.

WT3:
Work package description

Person-Months per Participant

Participant number [10]	Participant short name [11]	Person-months per participant
1	CSC	30.00
2	ITM	16.00
3	URosario	40.00
4	IMIP	28.00
5	UPE	14.00
6	UChile	40.00
7	UV	40.00
8	UNR	40.00
9	UDELAR	40.00
	Total	288.00

List of deliverables

Deliverable Number [61]	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature [62]	Dissemination level [63]	Delivery date [64]
D2.1	Final qualitative analysis plan	1	14.00	R	PU	14
D2.2	Qualitative results of base-line study	1	120.00	R	PU	19
D2.3	Quantitative results of base-line study	1	120.00	R	PU	24
		Total	254.00			

Description of deliverables

D2.1) Final qualitative analysis plan: Plan for the analysis of the qualitative research results (including, objectives; phases; categories and subcategories of analysis) [month 14]

D2.2) Qualitative results of base-line study: Report on the main results of the qualitative base-line study in each of the Latin American countries [month 19]

D2.3) Quantitative results of base-line study: Report on the main results of the qualitative base-line study in each of the Latin American countries [month 24]

Schedule of relevant Milestones

Milestone number [59]	Milestone name	Lead beneficiary number	Delivery date from Annex I [60]	Comments
MS4	Final quantitative research tools	1	16	Questionnaires for a) users and b) health professionals developed and piloted in Spanish and Portuguese

WT3:
Work package description

Schedule of relevant Milestones

Milestone number [59]	Milestone name	Lead beneficiary number	Delivery date from Annex I [60]	Comments
MS5	Preliminary analysis of base-line study	1	23	Qualitative and quantitative data collection completed and preliminary analysis available in all LA countries

WT3:
Work package description

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One form per Work Package

Work package number [53]	WP3	Type of activity [54]	RTD
Work package title	Design and implementation of interventions		
Start month	19		
End month	36		
Lead beneficiary number [55]	2		

Objectives

This WP mainly addresses research objective b)
- to design, implement and benchmark a set of organisational interventions aimed at improving care coordination and quality in different IHN in Latin America, with a focus on health workers and management of chronic care

and contributes to research objectives a), c) and d)

Description of work and role of partners

This WP has two main parts: first, the design of interventions and second, its implementation in one IHN in each country.

Based on the results of the base-line study and the identified problems in the IHNs' performance regarding coordination and quality of care, the national steering committees of each country will be in charge of designing and implementing the interventions, i.e. to identify the problems that are priority in hampering care coordination in the IHN, to define remedial actions and to implement, monitor and evaluate these. They will be further responsible for recruiting and training participants in their countries, throughout the process. During this work package, these members will undergo a process of learning by doing and will be coached in carrying out these actions in their network by Participant 2. The six national steering committees will build a shared vision on care coordination and continuity to identify problems hampering quality of care.

1. Design of interventions (M19-21)

Interventions will be designed for one IHN in each Latin American country. Based on the results of qualitative and quantitative baseline studies, a list of priority interventions at micro-level will be established. In each country, the national steering committees will come up with and test clinical management strategies that help to improve care quality across the network, through the improvement of care coordination, in the domain of chronic diseases (COPD and type 2 diabetes). The top three intervention priorities of each country will be selected to get implemented and evaluated (WP4). The selected strategies will be conceived to motivate health professionals to participate on a voluntary basis. Any activity should be part of their regular duties, as the proposed interventions should be affordable for local authorities.

Identified interventions will target care coordination (informational, managerial and administrative) and quality of care (technical quality, communication skills) through micro-level interventions, which may refer to the introduction of a single mechanism (e.g. referral system) or a combination of mechanisms in a comprehensive program (e.g. disease and case management programs). A set of indicators will be defined to monitor the interventions, adopted from those used in Equity-LA, or developed by Participants 1 (CSC) and 2 (ITM) in the context of other studies. The following list of potential interventions to improve coordination and quality of care is not exhaustive but just an example, since the final selection of interventions will depend on the results of the base-line study and the final decision made by each national steering committee.

Coordination interventions may encompass:

a) Programming strategies: rationalization tools for clinical decision making in handling COPD and type 2 diabetes (clinical guidelines, development of care maps or clinical pathways), the development of an expert system and start-up training programs, the support to local knowledge transfer mechanisms such as

hospital rotations for primary care physicians, the promotion of informal channels of communication, and the development of multidisciplinary working groups to heighten the experience exchanges between health professionals.
b) Feedback strategies: establishment of care managers and liaison professionals, the implementation of in-service supervision and vertical information systems.

Quality of care interventions will focus on:

Knowledge development techniques to improve for instance, physician-patient communication, the problem solving capacity of primary care providers; introduction of expert systems including local knowledge transfer mechanisms, hospital rotations for general practitioners, supervision and individual coaching; clinical guidelines or pathways regarding COPD and type 2 diabetes.

2. Implementation of interventions (M22 to 36)

The introduction of interventions will
a) be bottom up, in order words, IHN health professionals will play a central role in introducing the changes (Ham, 2011; Unger, 2010);
b) be based on human resources training (Unger, 2010);
c) assure a balance between rationalization of clinical decision making and the individual health professional's therapeutic freedom (Unger, 2010).

The national steering committee, that has been previously trained (WP6), will be in charge of monitoring the process of the intervention and will receive support by the more experienced participants. Each member of the national steering committee will supervise one or two participating facilitie(s) of the IHN during 18 months. Initially, a project coach will accompany him/her to teach the job on the spot. When introducing the intervention, particular attention will be paid to the rate of uptake and the stability of the intervention. The constant monitoring will facilitate the adaptation of the intervention to achieve optimal effectiveness, for example if the proposed intensity or duration of the intervention are found to be unacceptable to participants(Campbell, 2000). The process will be based on learning by doing, which will provide sustainability to the process after the end of the project.

Interventions will be implemented in the intervention IHN in each country, and introduced in the control IHNs (comparative arm) at the end of the country study, in order to prevent changes occurring too early and thereby hindering detection of differences.

At the beginning of this WP (M19), the 4th Workshop in Mexico will take place with two main aspects to be discussed: firstly, the preliminary results of the base-line study (WP2) and secondly, potential interventions based on those results. Furthermore, the 5th Workshop in Argentina (M25) will be hold in order to analyse the uptake of the intervention and discuss potential adjustments according to local circumstances that need to be undertaken for achieve optimal effectiveness.

Capacity building (M19-36)

All those activities described above – in-service training, supervision and monitoring - contribute to capacity building of researchers, national steering committee and health professionals in an on-going learning process.

In addition to those and the activities described in WP6, several specific training activities will be organised with the different target groups lead by Partner 2 (ITM):

- Junior researchers to develop knowledge and skills to support and coach the members of the national steering committee in their activities. Workshops will be organised by the senior researchers in close collaboration with Partner 2 (ITM). The estimated number of trainees is 24 junior researchers (3-4 trainees per country). However, other participants that will benefit are: pre- and post graduate students, other interested junior researchers and health personnel that may collaborate at different moments of the intervention. During this work package, special emphasis will be put on aspects related to the interventions to be implemented (care coordination mechanisms and strategies for their use; quality of care, tracer conditions management, etc.).The training will take place more intensively at the beginning of the workpackage, and will then be adapted to needs.

- National steering committee on the main research elements necessary for the design, implementation and monitoring of interventions in IHN, by means of workshops conducted by junior researchers with support of senior researchers and paired-partners in each LA countries (more details in WP6).

- Health professionals to obtain expected capacities for the introduction of interventions in the IHN of each LA country. Training will be conducted by the senior researchers and the national steering committee with the support of the junior researchers. It will be lead by Participant 2 (ITM). The estimated number of trainees is 120 (20 professionals per intervention IHN). The course will be interactive, built upon the participants' experience, their knowledge and professional problems and challenges. It will use many pedagogic techniques (role play, instant-group discussions, problem-solving methods, discussion of critical readings, mini-seminars, group exercises, on-line support materials and tools, etc.). The project analytical framework will be used to analyse the problems in coordination and quality of care of the IHN to come up with a set of interventions to improve them. Special emphasis will be put on strategies to facilitate the introduction of interventions in the IHN, and the use of coordination strategies and quality of care techniques. The training will be organised after the design of the implementation (M22), to address the specific training needs of the professionals related to those. Periodical updates will be carried out according to needs during the work package.

- In addition to specific trainings, exchange among researchers to obtain a common understanding among all the partners of the main action-research elements necessary for the design, implementation and monitoring of the interventions.

Role of participants
Participant 2 (ITM) with the support of Participant 1 (CSC) will lead the overall design and implementation of interventions; however every Latin America participant (Participants 3-9) will be responsible for successfully implementing the intervention in their own country and for the supervision of the intervention. Previous participants of Equity-LA (Participants 1-4) will provide scientific support to one of the new participants (Participants 6-9).

Person-Months per Participant

Participant number [10]	Participant short name [11]	Person-months per participant
1	CSC	26.00
2	ITM	16.00
3	URosario	36.00
4	IMIP	36.00
6	UChile	35.00
7	UV	35.00
8	UNR	35.00
9	UDELAR	35.00
	Total	254.00

List of deliverables

Deliverable Number [61]	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature [62]	Dissemination level [63]	Delivery date [64]
D3.1	Intervention design and implementation plan	2	94.00	O	PU	22
D3.2	Progress report on intervention process	2	160.00	O	PU	31
		Total	254.00			

Description of deliverables

WT3:
Work package description

D3.1) Intervention design and implementation plan: Description of the selected interventions and the objectives, phases and activities to implement them in each of the Latin American countries [month 22]

D3.2) Progress report on intervention process: Description of the activities implemented, objectives achieved, problems encountered and adjustments introduced [month 31]

Schedule of relevant Milestones

Milestone number [59]	Milestone name	Lead benefi-ciary number	Delivery date from Annex I [60]	Comments
MS6	Preliminary interventions' design and implementation plan	2	20	Selected interventions designed and implementation plan developed in all LA countries
MS7	Adjustment of interventions	2	27	Interventions adapted according to identified needs in each LA country

WT3:
Work package description

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One form per Work Package

Work package number [53]	WP4	Type of activity [54]	RTD
Work package title	Evaluation of interventions		
Start month	34		
End month	45		
Lead beneficiary number [55]	1		

Objectives

This WP addresses the research objective c)
- to test the effectiveness and limitations of the various interventions in improving coordination and quality of care in IHN and to identify the factors that determine the applicability in different contexts

and contributes to research objectives a), b) and d)

Description of work and role of partners

This work package will be dedicated to assessing the effectiveness of the intervention, recognizing its limitations and identifying factors that determine the applicability in different contexts. Apart from measuring the impact of the interventions, factors that may hinder or enable the implementation of that intervention will be identified for each setting. Evaluations will focus on improvements in care coordination, continuity and quality of care.

This second evaluation will follow the same design as the one used in the base-line study and also combine qualitative and quantitative methods. Main analysis dimensions of coordination, continuity and quality of care are those used in the base-line study (specified in the analysis framework, WP1).

The following activities will be realized:
1. Qualitative study (M34-42) data collection by means of focus groups and individual interviews and its analysis;
2. Quantitative study (M34-42): data collection by means of questionnaire survey and analysis;
3. Final analysis and two intra-country comparisons.
a) before and after comparison: this analysis compares performance in both the intervention and control IHNs, before and after the intervention period
b) intervention-control comparison: this analysis measures differences in performance between the intervention and control IHN

At the beginning of WP4, 6th Workshop will be organised in Uruguay (M34) in order to develop an intra-country comparison plan. The 7th Workshop in Colombia (M40) will discuss the preliminary results and identify issues where more data collection or analysis is needed.

Capacity building (34-45)

During this work package, a series of capacity building activities will be developed:

- Specific training of junior researchers to develop the research knowledge and skills required for the evaluation of interventions. Workshops will be organised by senior researchers in close collaboration with paired-partners and the specific support of Partner 2 (ITM). The estimated number of trainees is 24 junior researchers (3-4 trainees per country). However, other participants that will benefit are: pre- and post graduate students, other interested juniors researchers and health personnel that may collaborate at different moments of the analysis. During this work package, special emphasis will be put on research aspects related to research methodologies for before and after comparisons and intervention-control comparisons. The training will take place throughout the work package according to needs.

- Scientific support to Participant 6-9 provided by participants of the previous Equity-LA (1-5) to obtain a common understanding among all the partners of the main elements necessary for evaluation and comparisons of the interventions.

- Exchange among researchers that include permanent communication and debate, workshops on research plan and results of the interventions' evaluation and joint work among the teams.

Role of participants
Participant 1 (CSC) will be overall responsible for that WP; however every Latin American country team (Participants 3-9) will lead and carry out that WP in their own country. Participant 2 (ITM) will lead researchers' capacity building process Previous participants of Equity-LA (Participants 1-5) will provide scientific support to one of the new participants (Participants 6-9). Furthermore, each participant is responsible for the scientific areas (specific dimensions) in which they have the most expertise. The final intra-country analysis will be led by Participant 1 with the contribution of all participants.

Person-Months per Participant

Participant number [10]	Participant short name [11]	Person-months per participant
1	CSC	24.00
2	ITM	12.00
3	URosario	29.00
4	IMIP	18.00
5	UPE	14.00
6	UChile	28.00
7	UV	28.00
8	UNR	28.00
9	UDELAR	28.00
	Total	209.00

List of deliverables

Deliverable Number [01]	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature [02]	Dissemination level [03]	Delivery date [04]
D4.1	Intra-country comparison plan	1	5.00	R	PU	38
D4.2	Final results on evaluation of interventions (intra-country analysis)	1	204.00	R	PU	45
		Total	209.00			

Description of deliverables

D4.1) Intra-country comparison plan: Plan for the analysis of intervention and control IHN results: both within (before and after) and between IHNs in each Latin American countries (objectives, dimensions, variables and statistical analysis) [month 38]

D4.2) Final results on evaluation of interventions (intra-country analysis): Description of the intervention and control IHN results: both within (before and after) and between IHNs in each Latin American countries [month 45]

WT3:
Work package description

Schedule of relevant Milestones

Milestone number [59]	Milestone name	Lead benefi-ciary number	Delivery date from Annex I [60]	Comments
MS8	Preliminary analysis plan for intra-country comparison	1	34	Preliminary analysis plan for assessing the effectiveness of the intervention developed in each LA country
MS9	Before-after analysis in all IHN	1	44	Before and after analysis finalized in both the intervention and control IHN in all LA countries
MS10	Intervention-control analysis in all countries	1	45	Intervention-control comparison finalized and results available for all LA countries

WT3:
Work package description

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One form per Work Package

Work package number [53]	WP5	Type of activity [54]	RTD
Work package title	Cross-country comparative analysis		
Start month	46		
End month	57		
Lead beneficiary number [55]	1		

Objectives

This WP addresses the research objective c)
- to test the effectiveness and limitations of the various interventions in improving coordination and quality of care in IHNs and to identify the factors that determine the applicability in different contexts

and contributes to research objectives a), b) and d)

Description of work and role of partners

This work package is dedicated to the cross-country comparison among participating countries and with international evidence which will result in a better understanding of the link between different interventions and their outcomes, and the associated factors in each health system and healthcare setting. Results will be used to identify and document best practices in care integration, to establish best tools and guidelines for the translation of evidence on best practice into policies.

During this work package the following task will be carried out:

Cross-country comparison analysis (M46-57) Comparisons of results from the intra-country analysis will be done at the following different levels:
i) across involved Latin American countries and
ii) with international experiences, such as those from Catalonia (Spain) where IHNs have been evaluated.

The comparative analysis will focus on drawing transversal conclusions to be applied to different contexts. The final results of coordination and quality of care will be analysed through the main dimensions of the study (see WP1). The analysis will be conducted from a gender perspective.

At the beginning of this work package (M46), the 8th Workshops in Brazil will be held in order to the present the final results of the intra-country analysis and to develop a common cross-country comparative analytical plan.

Capacity building (M46-57)

During this work package, a series of capacity building activities will be developed:

- Specific training of junior researchers will be conducted in order to develop the knowledge and research skills required for the cross-country comparative analysis and the elaboration of policy-makers tools. Workshops and seminars will be conducted by the senior researchers in collaboration with Partner 2 (ITM). The estimated number of trainees is 24 junior researchers (3-4 trainees per country). However, other participants that will benefit are: pre- and post graduate students, other interested junior researchers and health personnel that may collaborate at different moments of the analysis. During this work package, special emphasis will be put on research aspects related to research methodology for cross-country analysis and tools to translate evidence on best practice of integration of care into polices and practices. The training will take place throughout the work package according to needs.

- Exchange among researchers that include permanent communication and debate, workshops on research plan and results, and join work among the teams.

WT3:
Work package description

Role of participants
This work package will be led by Participant 1 (CSC) together with Participant 2 (ITM), with all other participants contributing to specific areas of interest. Latin American country teams (Participants 3-9) will contribute to develop the policy tools for their national policy-makers.

Person-Months per Participant

Participant number [10]	Participant short name [11]	Person-months per participant
1	CSC	25.00
2	ITM	12.00
3	URosario	32.00
4	IMIP	32.00
6	UChile	31.00
7	UV	31.00
8	UNR	31.00
9	UDELAR	31.00
	Total	225.00

List of deliverables

Delive-rable Number [61]	Deliverable Title	Lead benefi-ciary number	Estimated indicative person-months	Nature [62]	Dissemi-nation level [63]	Delivery date [64]
D5.1	Cross-country comparative analytical plan	1	6.00	R	PU	50
D5.2	Results on cross-country analysis	1	219.00	R	PU	57
		Total	225.00			

Description of deliverables

D5.1) Cross-country comparative analytical plan: Plan for the analysis of intervention and control IHN results between Latin American countries (objectives, dimensions, variables and statistical analysis) [month 50]

D5.2) Results on cross-country analysis: Description of the intervention and control IHN results between Latin American countries [month 57]

Schedule of relevant Milestones

Milestone number [59]	Milestone name	Lead benefi-ciary number	Delivery date from Annex I [60]	Comments
MS11	Preliminary cross-country analysis plan	1	46	Cross-country analysis
MS12	Preliminary cross-country analysis	1	54	Comparisons of results from the intra-country analysis completed and available

WT3:
Work package description

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One form per Work Package

Work package number [53]	WP6	Type of activity [54]	OTHER
Work package title	Capacity building and dissemination of research results		
Start month	1		
End month	60		
Lead beneficiary number [55]	2		

Objectives

- to develop and carry out a capacity building strategy addressing young researchers and health professionals
- to disseminate the acquired knowledge on care coordination and quality of care to the international scientific community and relevant stakeholders
- to develop tools to translate evidence on best practice of integration of care into innovative and effective policies for a better organisation of IHNs in Latin America (research objective d)

Description of work and role of partners

This work package has two main parts: one relates to capacity building and the other concentrates on a specific dissemination of results.

Capacity building (M1-60)

Capacity building is a transversal component of the project that will take place throughout its implementation in three main areas: (1) policy making capacity building for the planning, management and organisation of health systems by involving key stakeholders from the beginning of the project; generating evidence based tools for the development of policy; and, through research dissemination (described below) (2) strengthen research capacity of all involved institutions in health system research through specific training of junior researchers and exchange of knowledge and experiences among senior researchers; and (3) improve health professional knowledge and skills on care coordination and quality of care through in-service training programmes.

In addition to generating evidence to inform policy making and tools to translate the knowledge into policy making, specific activities will be developed to build capacity. The process will be lead by participant 2 (ITM).

A common capacity building strategy will be developed at the beginning of the project by Partner 2 in close collaboration with all partners on the basis of needs exposed in the first workshop (M6). The training will be structured in: I. Need assessment: skills and knowledge required; II Preparation of training plan and III Training implementation. At the beginning of the project, each partner will assess the specific training needs of the various actors involved -researchers and national steering committee members-, through meetings, workshops and interviews. However, this preliminary needs assessment will be updated at the beginning of each work package. Moreover, needs assessment of health professionals will only take place once the interventions have been designed (WP3, M22). This also means that the capacity building strategy will be updated according to emerging needs. The strategy will address a) policy makers, b) researchers and c) health professionals.

a) Policy makers' capacity building

- Specific training to enhance the active participation of the national steering committee in the action research process. Continuous training will be conducted by junior and senior researchers. The estimated number of trainees is 42 (7 per country). Contents include: project's analytical framework, health care integration, action research, results of the base-line study and aspects related to the interventions to be implemented (coordination mechanisms and strategies; techniques to improve quality of care, etc). Training will take place throughout the project, according to the need, although it will be more intensive before the interventions' design and implementation.

- Participation of national steering committee members in all activities of the project (learning by doing training), which include, among others, the dissemination actions -presentations of results and workshops in their respective countries - and the elaboration of deliverables linked to the implementation of the intervention, capacity building and dissemination addressed to policy makers.

- Capacity building strategy is not restricted to the members of the national steering committee, but also extended to the national and regional policy makers by means of the dissemination of the knowledge generated by means of different mechanisms to provide evidence on best practices to improve the integration of health services addressed to decision-makers – best practices report, round tables and workshops of key findings and policy recommendations, policy guidelines, etc.

b) Research capacity building of the involved institutions

- Specific training (formal training) of junior researchers by means of workshops and seminars in order to develop research skills, organised by the LA participant in close collaboration with participant(s) with expertise in the area (more details in WP 2, 3, 4)

- Participation of young researchers in all activities of the project to develop necessary research skills (learning by doing training)

- Exchange of kowledge and experiences among researchers that include permanent communication and debate, workshops on research methods and tools, joint work of the teams and when necessary, training in areas relevant to the project and to share knowledge and skills (in Latin America and also in Europe)

- Close monitoring by senior researchers in each country team

- On-line and in-situ support by paired-partners

c) Health professionals' capacity building

The interventions that will be introduced in the intervention IHN will focus on the health professionals and will be based on health professionals training (more details in WP3). This will imply:
- Specific training on aspects relating care coordination and quality of care for health professionals, according to identified needs
- On the job training and close monitoring during the implementation of interventions by national steering committee

By employing this capacity building strategy, it is expected that health workers will be more motivated to remain in their workplaces, while improving their performance and training.

Dissemination of results (M1-60)

Common weaknesses of knowledge management and poor dissemination of results can lead to an insufficient impact on policy. Therefore, the second part of this work package is dedicated to adequately conduct research knowledge management and to develop a dissemination strategy in order to ensure that findings are disseminated to the greater public and that changes conducive to better coordination and more quality of care are implemented into policy practice, and thus, contributing to policy making capacity building.

A management of intellectual property agreement will be developed and signed by all participants (M3). In addition, participants will make their best effort to ensure free access to peer-reviewed articles resulting from the project. They will further ensure that results can be made available as public domain files on the Internet for better distribution. The dissemination activities will encompass:

- Development of a dissemination strategy at the first Workshop (M6), involving policy makers and other relevant stakeholders in the Latin American countries (national scientific committee).
- Building networks with the diverse range of interest groups and stakeholders involved in the project, as well as networks such as, the Latin American Association of Social Medicine (ALAMES) and other international networks that will promote the distribution of results. It is expected that collaborative links established in each country and between countries (EU-LA and South-South cooperation links) will continue after completion of this project.
- Organisation of round tables and short reports addressing national key actors
- Dissemination of results by means of the project website

- Presentation of results at relevant national and international events (M17-60)
- Elaboration and submission of research papers on partial results by all participants for international, national and regional peer-review journals (M17-60)
- Elaboration of best practices report on care integration
- Translation of recommendations into policy guidelines, which are presented and discussed with policy makers of the relevant decision level
- Introduction of successful interventions in other organisations in the country led by an expert institution, academic or professional, together with members of the local executive team of the healthcare network. The best staff belonging to the IHNs should at a later stage supervise and coach the implementation

In order to facilitate the implementation of elaborated policy guidelines and tools and to obtain the maximum impact on local, regional and national health policy levels in the involved Latin American countries, policy makers are involved from beginning on in the project and teams will work in close collaboration with relevant stakeholders.

During the project, annual national scientific committee meetings will be organised by each participant in order to identify and incorporate key elements to increase the appropriateness of the results for varied social, political and economic contexts (M6, M19, M34, M46, M54)

The 9th Workshop will be held in Chile (M54) in order to discuss the elaboration of best practices report and policy tools and guidelines. Moreover, the workshop targets the preparation of the final International Conference (M60) for the regional dissemination of results which will take place in Mexico, under the lead of Participant 2 (ITM).

Role of participants
Participant 2 will be in charge of developing the capacity building strategy at the beginning of the project and to supervise its implementation. In addition, Participant 2 in close collaboration with the other participants will develop a knowledge management and dissemination strategy, at local and national levels, taking into account the needs of different stakeholders, to ensure getting research into practice and policy.

Person-Months per Participant

Participant number [10]	Participant short name [11]	Person-months per participant
1	CSC	20.00
2	ITM	25.00
3	URosario	50.00
4	IMIP	50.00
6	UChile	50.00
7	UV	50.00
8	UNR	50.00
9	UDELAR	50.00
	Total	345.00

List of deliverables

Delive-rable Number [61]	Deliverable Title	Lead benefi-ciary number	Estimated indicative person-months	Nature [62]	Dissemi-nation level [63]	Delivery date [64]
D6.1	Project web site	1	1.00	O	PU	3
D6.2	Capacity building strategy	2	5.00	O	PU	6

WT3:
Work package description

List of deliverables

Deliverable Number [61]	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature [62]	Dissemination level [63]	Delivery date [64]
D6.3	Report on the capacity building activities	1	59.00	R	PU	27
D6.4	Guide for national and international policy makers	2	80.00	O	PU	58
D6.5	Best practices report	2	80.00	R	PU	58
D6.6	Papers to peer review journals	1	120.00	O	PU	60
		Total	345.00			

Description of deliverables

D6.1) Project web site: A web site for the dissemination of the project and its results and exchange of information among the partners [month 3]

D6.2) Capacity building strategy: Description of the capacity building strategy that will include objectives, phases, activities and expected results. [month 6]

D6.3) Report on the capacity building activities: Description of the capacity building activities carried out in the period (objectives; contents, participants; results) [month 27]

D6.4) Guide for national and international policy makers: Tools to translate knowledge (research results) into policies and planning (including strategies, for instance on: policy advocacy, stakeholders involvement, use of evidence, scaling up) [month 58]

D6.5) Best practices report: Description of selected best practices on care integration in the Latin American countries involved [month 58]

D6.6) Papers to peer review journals: Papers (at least 5) submitted to peer review journals [month 60]

Schedule of relevant Milestones

Milestone number [69]	Milestone name	Lead beneficiary number	Delivery date from Annex I [60]	Comments
MS13	Need assessments for capacity building strategy	2	4	Need assessments carried out by each partner to develop the common research capacity building strategy
MS14	National steering committees trainings	2	21	Trainings of the national steering committee finalised in each LA country

WT3:
Work package description

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

One form per Work Package

Work package number [53]	WP7	Type of activity [54]	MGT
Work package title	Project management and coordination		
Start month	1		
End month	60		
Lead beneficiary number [55]	1		

Objectives

This WP addresses the following objectives
- to manage and coordinate the project in an effective and efficient way
- to assure effective communication and interaction between consortium participants
- to ensure the execution of the project according to the scientific plan and the financial budget
- to effectively coordinate all project meetings and conferences
- to ensure that all work is ethically acceptable and a high level of gender equality in the project
- to liaise with the EC over consortium related issues and to coordinate with the scientific committee

Description of work and role of partners

This work package will deal with all administrative issues of the consortium such as legal, contractual, ethical, gender equality and financial matters. In order to ensure the execution of the project according to the scientific plan and the financial budget, the Equity-LA II consortium has a well-defined and tightly-knit scientific coordination and management structure, which has proved to be very valuable in previous experience. It is critical for the success of a project that the established management arrangements and assigned responsibilities are clear and workable.

The following tasks will be developed:

Set up of project management office (M1) that will monitor the progress of the work packages.
In the Consortium Agreement the roles, responsibilities, rules and procedures of the consortium are described. Partner 1 (CSC) will propose a draft to all other consortium partners that will be discussed and agreed upon. All consortium partners will have signed the agreement before 26/06/2012.

Set up of project management committee (M1). It will be formally established by Participant 1 and made up of the leading scientist of each team (principal investigator). For Brazil, IMIP's principal investigator will represent also UPE's IP. The coordinator will be the chair of this committee. It will meet every six months and bears the following responsibilities: monitoring the project, planning of activities and follow-up of the project; approving of annual work plans for involved institutions, assuring quality of deliverables, milestones and technical reports, managing the financial plan and defining budgets for individual parts of the project, approving allocation of research funds.

Project monitoring and evaluation: Research process and progress will be reviewed by the Project management committee and reported to the international scientific committee and every eighteen month to the EC. In the last Workshop, all partners will evaluate the achievement of the research objectives and the process, analyse influencing factors and extract lessons for future collaborative research.

Financial management of the consortium: Each participant will be responsible for its own daily administrative management of the project and is obliged to prepare a semi-annual technical and financial report as well as to prepare the budget for each year. Participant 1 will coordinate and consolidate all financial reports for the submission to the EC, at the periodic reports

Project management and coordination mechanisms
In order to ensure that all partners are acting as a team and there is effective management and scientific coordination, a series of mechanisms will be put in place by Participant 1. Mechanisms include periodic project

management committee meetings, web site (M3) and permanent communication (e-mails, video-conferences, etc.). These mechanisms will facilitate the exchange of information among the participants.

To ensure administrative and financial management of the consortium, Participant 1 will develop administrative tools and procedures for the project management, including operational procedures for timely and accurate reporting to the EC. These will be discussed and approved by the project management committee during their first meeting in (M2). Each participant will be responsible for their own daily administrative management of the project.

Roles of participants
Participant 1 (CSC) will be responsible for the overall management and coordination of the project, global administration of the funds, overall scientific supervision and follow-up of the project including the monitoring of the progress of the work packages. Furthermore, the coordinator (Participant 1) will represent the consortium in its relations with the EC and is responsible for coordinating all financial reports for the submission to the EC. Lastly, Participant 1 will ensure that all work is ethically acceptable and promote a high level of gender equality both in the process of research as well as in the substance of the research.

All participants will contribute setting up their research teams and will participate in all meetings, in the development of programmes and reports. Furthermore, all participants are responsible the project management in their own countries and for producing timely information as requested by the project coordinator in order to be able to monitor the progress of the project. Partners will be encouraged to signal problems as soon as they appear, instead of allowing them to cause delays. Permanent contact will be encouraged and maintained among all participants by means of e-mail, telephone and the project web site.

Person-Months per Participant

Participant number [10]	Participant short name [11]	Person-months per participant
1	CSC	60.00
	Total	60.00

List of deliverables

Deliverable Number [61]	Deliverable Title	Lead beneficiary number	Estimated indicative person-months	Nature [62]	Dissemination level [63]	Delivery date [64]
		Total	0.00			

Description of deliverables

Schedule of relevant Milestones

Milestone number [59]	Milestone name	Lead beneficiary number	Delivery date from Annex I [60]	Comments
MS15	Financial and scientific progress report 1	1	17	Financial and scientific progress report of the first project period completed and revised
MS16	Financial and scientific progress report 2	1	35	Financial and scientific progress report of the

WT3:
Work package description

Schedule of relevant Milestones

Milestone number [59]	Milestone name	Lead beneficiary number	Delivery date from Annex I [60]	Comments
				second project period completed and revised
MS17	Financial and scientific progress report 3	1	53	Financial and scientific progress report of the third project period completed and revised

WT4:
List of Milestones

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

List and Schedule of Milestones

Milestone number [59]	Milestone name	WP number [63]	Lead beneficiary number	Delivery date from Annex I [60]	Comments
MS1	Research plan	WP1	1	6	Research plan developed and agreed upon
MS2	Preliminary qualitative research tools	WP1	1	6	Topics guides developed and adapted in Spanish and Portuguese
MS3	National steering committees	WP1	1	6	National steering committee set up in each LA country
MS4	Final quantitative research tools	WP2	1	16	Questionnaires for a) users and b) health professionals developed and piloted in Spanish and Portuguese
MS5	Preliminary analysis of base-line study	WP2	1	23	Qualitative and quantitative data collection completed and preliminary analysis available in all LA countries
MS6	Preliminary interventions' design and implementation plan	WP3	2	20	Selected interventions designed and implementation plan developed in all LA countries
MS7	Adjustment of Interventions	WP3	2	27	Interventions adapted according to identified needs in each LA country
MS8	Preliminary analysis plan for intra-country comparison	WP4	1	34	Preliminary analysis plan for assessing the effectiveness of the intervention developed in each LA country
MS9	Before-after analysis in all IHN	WP4	1	44	Before and after analysis finalized in both the intervention and control IHN in all LA countries
MS10	Intervention-control analysis in all countries	WP4	1	45	Intervention-control comparison finalized and results available for all LA countries
MS11	Preliminary cross-country analysis plan	WP5	1	46	Cross-country analysis
MS12	Preliminary cross-country analysis	WP5	1	54	Comparisons of results from the intra-country

WT4:
List of Milestones

Milestone number [59]	Milestone name	WP number [63]	Lead beneficiary number	Delivery date from Annex I [60]	Comments
					analysis completed and available
MS13	Need assessments for capacity building strategy	WP6	2	4	Need assessments carried out by each partner to develop the common research capacity building strategy
MS14	National steering committees trainings	WP6	2	21	Trainings of the national steering committee finalised in each LA country
MS15	Financial and scientific progress report 1	WP7	1	17	Financial and scientific progress report of the first project period completed and revised
MS16	Financial and scientific progress report 2	WP7	1	35	Financial and scientific progress report of the second project period completed and revised
MS17	Financial and scientific progress report 3	WP7	1	53	Financial and scientific progress report of the third project period completed and revised

WT5:
Tentative schedule of Project Reviews

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

Tentative schedule of Project Reviews

Review number [66]	Tentative timing	Planned venue of review	Comments, if any
RV 1	6	Brazil	Internal review to discuss any necessary changes of the project in view of Equity-LA results, that could lead to an amendment, and leaving the option to the Commission to design a reviewer if considered necessary.
RV 2	19	Mexico	Internal review
RV 3	34	Uruguay	Internal review
RV 4	54	Chile	Internal review

WT6:
Project Effort by Beneficiary and Work Package

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

Indicative efforts (man-months) per Beneficiary per Work Package

Beneficiary number and short-name	WP 1	WP 2	WP 3	WP 4	WP 5	WP 6	WP 7	Total per Beneficiary
1 - CSC	12.00	30.00	26.00	24.00	25.00	20.00	60.00	197.00
2 - ITM	6.00	16.00	16.00	12.00	12.00	25.00	0.00	87.00
3 - URosario	16.00	40.00	36.00	29.00	32.00	50.00	0.00	203.00
4 - IMIP	16.00	28.00	36.00	18.00	32.00	50.00	0.00	180.00
5 - UPE	0.00	14.00	0.00	14.00	0.00	0.00	0.00	28.00
6 - UChile	16.00	40.00	35.00	28.00	31.00	50.00	0.00	200.00
7 - UV	16.00	40.00	35.00	28.00	31.00	50.00	0.00	200.00
8 - UNR	16.00	40.00	35.00	28.00	31.00	50.00	0.00	200.00
9 - UDELAR	16.00	40.00	35.00	28.00	31.00	50.00	0.00	200.00
Total	114.00	288.00	254.00	209.00	225.00	345.00	60.00	1,495.00

WT7:
Project Effort by Activity type per Beneficiary

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

Indicative efforts per Activity Type per Beneficiary

Activity type	Part. 1 CSC	Part. 2 ITM	Part. 3 URosari	Part. 4 IMIP	Part. 5 UPE	Part. 6 UChile	Part. 7 UV	Part. 8 UNR	Part. 9 UDELAR	Total
1. RTD/Innovation activities										
WP 1	12.00	6.00	16.00	16.00	0.00	16.00	16.00	16.00	16.00	114.00
WP 2	30.00	16.00	40.00	28.00	14.00	40.00	40.00	40.00	40.00	288.00
WP 3	26.00	16.00	36.00	36.00	0.00	35.00	35.00	35.00	35.00	254.00
WP 4	24.00	12.00	29.00	18.00	14.00	28.00	28.00	28.00	28.00	209.00
WP 5	25.00	12.00	32.00	32.00	0.00	31.00	31.00	31.00	31.00	225.00
Total Research	117.00	62.00	153.00	130.00	28.00	150.00	150.00	150.00	150.00	1,090.00
2. Demonstration activities										
Total Demo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Consortium Management activities										
WP 7	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00
Total Management	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00
4. Other activities										
WP 6	20.00	25.00	50.00	50.00	0.00	50.00	50.00	50.00	50.00	345.00
Total other	20.00	25.00	50.00	50.00	0.00	50.00	50.00	50.00	50.00	345.00
Total	197.00	87.00	203.00	180.00	28.00	200.00	200.00	200.00	200.00	1,495.00

WT8:
Project Effort and costs

Project Number [1]	305197	Project Acronym [2]	Equity-LA II

Project efforts and costs

Beneficiary number	Beneficiary short name	Estimated eligible costs (whole duration of the project)						Requested EU contribution (€)
		Effort (PM)	Personnel costs (€)	Subcontracting (€)	Other Direct costs (€)	Indirect costs OR lump sum, flat-rate or scale-of-unit (€)	Total costs	
1	CSC	197.00	829,329.00	18,750.10	131,266.00	192,119.00	1,171,464.10	967,679.80
2	ITM	87.00	509,677.00	9,000.00	74,325.00	350,401.20	943,403.20	769,470.00
3	URosario	203.00	506,631.00	9,000.00	276,135.00	156,553.20	948,319.20	746,076.00
4	IMIP	180.00	305,210.00	9,000.00	267,323.00	114,506.60	696,039.60	549,727.50
5	UPE	28.00	80,205.00	0.00	21,892.00	20,419.40	122,516.40	92,733.30
6	UChile	200.00	332,459.00	9,000.00	235,639.00	340,858.80	917,956.80	729,172.40
7	UV	200.00	415,147.00	9,000.00	285,155.00	70,030.00	779,332.00	618,438.00
8	UNR	200.00	322,328.00	9,000.00	239,838.00	337,299.60	908,465.60	718,687.20
9	UDELAR	200.00	334,208.00	9,000.00	239,188.00	344,037.60	926,433.60	734,952.80
Total		1,495.00	3,635,194.00	81,750.10	1,770,761.00	1,926,225.40	7,413,930.50	5,926,937.00

1. Project number

The project number has been assigned by the Commission as the unique identifier for your project. It cannot be changed. The project number **should appear on each page of the grant agreement preparation documents (part A and part B)** to prevent errors during its handling.

2. Project acronym

Use the project acronym as given in the submitted proposal. It cannot be changed unless agreed so during the negotiations. The same acronym **should appear on each page of the grant agreement preparation documents (part A and part B)** to prevent errors during its handling.

53. Work Package number

Work package number: WP1, WP2, WP3, ..., WPn

54. Type of activity

For all FP7 projects each work package must relate to one (and only one) of the following possible types of activity (only if applicable for the chosen funding scheme – must correspond to the GPF Form Ax.v):

- **RTD/INNO** = Research and technological development including scientific coordination - applicable for Collaborative Projects and Networks of Excellence
- **DEM** = Demonstration - applicable for collaborative projects and Research for the Benefit of Specific Groups
- **MGT** = Management of the consortium - applicable for all funding schemes
- **OTHER** = Other specific activities, applicable for all funding schemes
- **COORD** = Coordination activities – applicable only for CAs
- **SUPP** = Support activities – applicable only for SAs

55. Lead beneficiary number

Number of the beneficiary leading the work in this work package.

56. Person-months per work package

The total number of person-months allocated to each work package.

57. Start month

Relative start date for the work in the specific work packages, month 1 marking the start date of the project, and all other start dates being relative to this start date.

58. End month

Relative end date, month 1 marking the start date of the project, and all end dates being relative to this start date.

59. Milestone number

Milestone number:MS1, MS2, ..., MSn

60. Delivery date for Milestone

Month in which the milestone will be achieved. Month 1 marking the start date of the project, and all delivery dates being relative to this start date.

61. Deliverable number

Deliverable numbers in order of delivery dates: D1 – Dn

62. Nature

Please indicate the nature of the deliverable using one of the following codes

R = Report, **P** = Prototype, **D** = Demonstrator, **O** = Other

63. Dissemination level

Please indicate the dissemination level using one of the following codes:

- **PU** = Public
- **PP** = Restricted to other programme participants (including the Commission Services)
- **RE** = Restricted to a group specified by the consortium (including the Commission Services)
- **CO** = Confidential, only for members of the consortium (including the Commission Services)

• **Restreint UE** = Classified with the classification level "Restreint UE" according to Commission Decision 2001/844 and amendments

• **Confidentiel UE** = Classified with the mention of the classification level "Confidentiel UE" according to Commission Decision 2001/844 and amendments

• **Secret UE** = Classified with the mention of the classification level "Secret UE" according to Commission Decision 2001/844 and amendments

64. Delivery date for Deliverable

Month in which the deliverables will be available. Month 1 marking the start date of the project, and all delivery dates being relative to this start date

65. Review number

Review number: RV1, RV2, ..., RVn

66. Tentative timing of reviews

Month after which the review will take place. Month 1 marking the start date of the project, and all delivery dates being relative to this start date.

67. Person-months per Deliverable

The total number of person-month allocated to each deliverable.

PART B

COLLABORATIVE PROJECT

Table of contents

B1. CONCEPT AND OBJECTIVES, PROGRESS BEYOND STATE-OF-THE-ART, S/T METHODOLOGY AND WORK PLAN

B1.1 Concept and project objective(s)

Health services fragmentation is one of the main obstacles to attain effective healthcare outcomes in many Latin American countries, leading to difficulties in access to care, poor technical quality, discontinuity of care and inefficiencies in the use of scarce resources[1]. These weaknesses are most evident in the care of patients with chronic conditions that require the coordination of multiple health professionals and care settings[2;3]. This is also an important challenge in Latin America (LA) and is a consequence of the demographic and epidemiological transitions[2] occurring in there. Population groups most seriously affected by healthcare fragmentation include those living in large urban slums, rural inhabitants, and indigenous populations. These characteristics contribute to additional inequities in access to care[4].

In this particular environment of disjointed and fragmented care coupled with the increasing prevalence of chronic conditions; the policy challenge is to explore avenues to lead to joined up thinking regarding care integration[1;3;5] which would lead to more satisfactory outcomes. Many countries have promoted the development of integrated healthcare networks (IHN), defined as a network of organisations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically and fiscally accountable for the health status and outcomes of the population served[1;6]. Theoretically, integration of healthcare delivery should contribute to more efficient, equitable and higher quality health services[7]. The advantages of care coordination go beyond reducing costs and encompasses patients' access to appropriate levels of care; improvements in quality of care; and thus contributes to overall effectiveness of the health system[3;8].

Preliminary results from Equity-LA (FP7-HEALTH-2007-B-223123) have identified numerous barriers to access healthcare services in the IHNs of Colombia and Brazil, suggesting failures in IHN policy implementation. A number of these issues are related to deficiencies in the coordination between primary and secondary care and quality of care, related to IHN's internal factors such as lack of communication among healthcare professionals, insufficient coordination mechanisms, poor response capacity of primary care and limited compliance of clinical standards as defined by national and international guidelines; as well as external factors such as lack of a policy to promote care coordination in IHN at national level (see also 13-15). Similar evidence from other Latin American health systems remains limited[9;10]. While the problems in coordination and quality of care indicates a poor IHN performance and the need for developing and testing useful and feasible strategies to provide evidence on best practices in care integration to help policy-makers to enhance health services networks results, the gap in the research on IHN, further highlights the need for extending the analysis to different types of health systems. The proposed study focuses on both.

Care integration is dependent on the local context – that is, opportunities and costs depend on the particular healthcare system and its settings. Thus, interventions to improve the performance of IHN might be required at policy level, for example health services plans and payment systems, or at the organisational level, in which case interventions may range from those that aim to introduce organisational changes to those developing a tool for integrating patients' information or combining coordination mechanisms in disease management programmes[11].

National governments and international organisms, such as the Pan American Health Organisation (PAHO), have made considerable efforts and displayed a growing interest in developing IHN. However, questions concerning best practices in care integration for the Latin American context and what structural and organizational reforms would be required to make IHN and their regulatory instances more effective remain unexplored[1].

The results of the proposed research build upon those of Equity-LA and adds to them in different ways: i) expanding the scope of the research in Colombia and Brazil by incorporating other Latin American countries, which are Chile, Mexico, Argentina and Uruguay, in order to produce new knowledge on the impact of IHN reforms in different type of healthcare systems; ii) providing evidence of best practices in care integration aimed at improving the main problems for care coordination and quality of care identified previously by Equity-LA; and iii) widening the analysis of two of the main elements in the IHN's performance – care coordination and quality of care, with particular reference to two chronic diseases (type 2 diabetes and chronic obstructive pulmonary disease –COPD-). Those chronic diseases have been selected based on the criteria of prevalence in the region, due to the demographic and epidemiologic transition, and the importance of care integration to improve health outcomes.

Research policy goal: To contribute to the improvement of the effectiveness, efficiency and equity of Latin American healthcare systems by providing evidence on best practices of care integration, which will be translated into effective policies for varied social, political and economic contexts.

General objective

To evaluate the effectiveness of various care integration strategies in improving coordination and quality of care in IHN in different healthcare systems in Latin America.

Specific objectives

a) To analyse the integrated healthcare networks' (IHN) performance with respect to coordination and quality of care in different healthcare systems in Latin America and associated factors in each particular context (milestones 1-3; month 23).
b) To design, implement and benchmark a set of organisational interventions aimed at improving care coordination and quality in different IHN in Latin America, with a focus on health workers and chronic care management (milestones 4-6; month 34).
c) To test the effectiveness and limitations of the various interventions in improving coordination and quality of care in IHN and to identify the factors that determine their applicability in different contexts (milestones 7-10; month 57)
d) To develop tools to translate evidence on best practice of integration of care into innovative and effective policies for a better organisation of IHN in Latin America (milestone 11; month 58).

In order to achieve the objectives the research will apply a quasi-experimental design (a control before and after design). It will employ qualitative and quantitative research methods within a participatory and multidisciplinary action research framework. Participatory action research principles support the development of effective and sustainable care integration strategies[12] by increasing relevance of research and improving its credibility and social validity. The overriding principles hinge upon maintaining sufficient standards of scientific rigor which favour the development of more adequate, acceptable interventions and more effective dissemination strategies for each context. This will serve to allow a bottom-up development of care integration interventions, in which health professionals play a central role in influencing national and regional IHN policies' design.

The project addresses the topic Research on health systems and services in low- and middle- income countries (HEALTH.2012.3.4) by:

(i) addressing policy-makers needs' by providing evidence on best practices in care coordination and quality of care that will enable policy development to promote the emergence of more effective, efficient and equitable IHN, a policy being promoted in all countries under study;

(ii) (ii) combining qualitative and quantitative methods for analysing the performance of IHN developed in

(iii) different Latin American middle - income countries, and evaluating the effectiveness of the interventions;

(iv) (iii) conducting intra- and cross-country comparisons to benchmark care integration practices in different health systems and settings, taking into account relevant contextual factors and to generate robust evidence for their transferability;

(v) (iv) contributing to capacity building in at least four domains:

- Policy making capacity building through training of the members of the national steering committee in each study countries to develop required research skills on aspects relating care coordination and quality of care as well as to ensure a common understanding of the main research elements necessary for the design and monitoring the implementation of interventions in IHN.

- Research capacity building through establishment of EU-LA and South-South cooperation links and training of junior researchers to enhance countries' abilities in producing and translating evidence into policy and practice in priority research areas, such as care integration.

- Health professionals' knowledge and skills on care coordination and quality of care for IHNs' through in-service training programmes and involvement in action research activities.

- Through the involved universities, pre-graduate and post-graduate public health training for health professionals will incorporate teaching on adequate strategies to improve coordination of care in networks, particularly for chronic elderly patients

Equity-LA II builds mainly upon the theoretical framework and the results of Equity-LA, which explored access to the care continuum in IHNs of Colombia and Brazil; but also, on HEPVIC (PL 517746), which explored the mechanisms of health policy making and HESVIC (222970), which focused on strengthening regulation.

Equity-LA II will also develop synergies with projects related to the topic; Improving the organisation of health service delivery (HEALTH.2012.3.2.1) by providing information on best practices of integration between primary and secondary care and on the effect of new organisational approaches on quality of care, also relevant for EU healthcare systems.

This research will contribute to the achievement of the Millennium Development Goals (MDGs) by targeting the improvement of healthcare services' performance in terms of quality of care, efficiency, effectiveness and equity. In addition, it will contribute to the Innovation Union Pilot Partnership on Active and Healthy Ageing goals, as the selected tracer conditions are chronic diseases prevalent among the elderly, namely type 2 diabetes and COPD. Furthermore, it shares the focus of other strategies and programs developed by the EU, such as the EUROsocial, the ALFA programme and the Urbal Regional Aid Programme, producing synergies among them and enhancing their impact in LA.

B1.2 Progress beyond the state of the art

B1.2.1 Relevance of the research on integration of healthcare delivery in Latin America

The achievement of health services effectiveness, efficiency and equity goals is hampered by the absence of care integration in the healthcare systems[13;14], which is the prevailing situation in Latin America[1;5]. Integration is a process opposed to fragmentation of the health services delivery system, that is, provision of care by providers that are not coordinated among themselves, do not provide the continuum of care or do not provide care over time[15], which is the object of this research.

Fragmentation of health services in Latin America manifests itself in the lack of coordination across different levels of care which can lead to diverse repercussions: inefficiencies in health services delivery due to duplication of diagnostic tests and facilities, inappropriate referrals or use of hospital emergency care, loss of continuity of care, difficulties in accessing secondary care and a decrease in quality of care[15]. In other words, the existence of numerous agents operating at different levels of responsibility without coordination makes it difficult to standardise the quality, content and application of health interventions, which in turn raises their costs and encourages inefficient use of resources within the system[1].

The consequences of care fragmentation are most evident when people suffer from chronic diseases and pluripathologies: they need to receive a combination of health services from multiple professionals from varying disciplines in various settings or institutions[16;17], making their coordination difficult and hindering the achievement of continuity of care.

The demographic[2] and epidemiologic[18] transition that the region is experiencing results in a growing number of people with chronic diseases and implies additional challenges to integration[2;14;19]. On the one hand, aggregated demographic projections from 2005 to 2050 for Latin America show considerable changes in the size of the various age groups: the youngest population will decline by around 17%; the adult population will continue to increase but by only 33% and the older adult population, will practically quadruple between 2005 and 2050; outnumbering the young population by 30%[20]. Even if there are major differences between countries regarding the intensity and stage of demographic transition they share the common trend of ageing populations[21]. On the other hand, non-communicable chronic diseases are responsible for two out of three deaths in the general population. This group is the leading cause of mortality in men and women, and continues to increase at an extremely fast pace worldwide and in both regions. Non-communicable diseases contributed 76% of the disability adjusted life years (DALYs) to the overall disease burden[22]. Diabetes and chronic obstructive pulmonary disease (COPD) are among the most disabling in the region[23] and the more prevalent among the elderly population[24;25]. In addition, they are a growing problem: the estimated number of people with diabetes in Latin America was 13.3 million in 2000, and it is expected to reach 32.9 million by 2030[26], while the COPD prevalence was over 10% in subjects older than 40 years of age[25]. Furthermore, both pathologies require lifelong and continuous medical care[27;28]. Among the interventions considered to be effective, the importance of care integration and participation of all stakeholders is highlighted[29;30]. As a consequence, Latin American countries are considered to be ill - prepared to address the current and future needs of the increasing numbers of chronic patients[2], which are most at risk of adverse events, or of suboptimal outcomes from under-coordination[8].

In response to these challenges - the fragmentation of the healthcare provision and the demographical and epidemiological transitions - many countries in Latin America with different types of health systems have issued policies fostering the introduction of integrated healthcare networks (IHN)[31-33]. This type of organizations has been defined as a network of organizations of health services that provides or arranges to provide a coordinated

continuum of services to a defined population and is willing to be held clinically and fiscally accountable for the outcomes and the health status of the population served[1;6].

IHN are not an aim in themselves but a means to improve coordination of care and hence, care continuity, quality and efficiency. In this sense, IHN will be found in different degrees of evolution[15]. This is also the case in the six Latin American countries participating in the study - Colombia, Brazil, Chile, Mexico, Argentina and Uruguay - which represent different types of healthcare systems. In all of them, national laws regarding the configuration of the health system, also provide a framework for the development of IHN. In addition, all countries except Uruguay have national policies or programmes to promote the integration of care, with diverse degrees of ambition and specificity; and, they have specific and local programs for promoting IHN.

In ***Colombia***, Laws 60 and 100 of 1993 created the framework for decentralisation and competition in healthcare delivery. The reform core was the introduction of a managed competition model where insurers (EPS and EPS-S for the Spanish name) compete for affiliates[34], and are responsible for guaranteeing, by direct provision or contracting other healthcare providers, i.e: the delivery of a health package to the enrolled population. Market forces led to the integration of providers and EPS in networks with different types of agreements and degrees of care fragmentation. In 2006 the requirements for the networks – minimum portfolio, accountability and reorganization criteria to assure viability were established[35]. Recently, Law1438/2011 established the IHN as the organization form for healthcare provision[36]. ***Chile*** launched in 1981 two parallel reforms; the creation of a system of private health insurances (ISAPREs for the Spanish name), some of which have developed their own healthcare network, and partial decentralisation of public healthcare to Regional Health Services (RHS) and of the primary healthcare services to the local governments[37]. To rebalance this fragmentation trend, the Ministry of Health developed in 2004 a new policy that promotes regional - based IHN, coordinated by RHS. In this context, IHN are defined as a set of health services that provide care in a coordinated manner, employing institutional or contractual arrangements[38]. Moreover, there is a specific IHN national program that aims to facilitate the functional integration of the healthcare network[39]. The ***Mexican*** segmented public healthcare system is made up of several social insurers (SEDENA, SEMAR, PEMEX, IMSS and ISSTE, for their Spanish names) that affiliate workers depending on the labour sector in which they are working. The Seguro Popular a social insurer, enrols the population working in the informal economy and the state services of the 32 states provide care for the uninsured[40]. In 2006 the National Ministry issued the Integrative Model of Health Care (MIDAS)[41] in order to promote the integration of care. It aims at providing operational guidance for all networks of the country that should be adapted according to their circumstances. Within this framework, the federal government has launched a specific program to strengthen IHN in disadvantaged municipalities as a means to tackle their specific care challenges[42]. ***Argentina***'s health system was defined in Law 23661 of 1989 as a national social security system[43] and contemplated the integration of service provision, but it has never evolved into this particular model. It is decentralised to the provinces and remains highly segmented: formally employed workers are enrolled in sectorial insurers (Obras sociales), responsible for the provision of care, while regional health services provide care to the rest of the population. To promote the integration of care provision between different levels, provinces and programs a national level programme Remediar + Redes (Healing + Networks)[44] has been established with the aim of strengthening local and provincial networks by addressing integration needs identified in the "Analysis of Health Networks" conducted by the provinces. In addition there are some local initiatives[45-49]. ***Uruguay*** with a segmented healthcare system is currently undergoing a reform process to unify the two different public healthcare subsystems, based on law 18.211[50] which was passed in 2007 to establish the legal framework to create the SNIS (National Integrated Health System). The law also defines that the healthcare provision will be organized in networks encompassing the continuum of services and based on primary care. This is still an on – going process. The implementation of IHN has started in Montevideo and is considered as a pilot project[51] which is currently being expanded to other regions[52]. Finally, ***Brazil*** in the early nineties created the Unified Health System (SUS)[53], that already encompassed the creation of IHN. In 2001, after the performance review of the decentralised SUS, the Ministry of Health issued a new norm[54]. This norm established a strategy of health services regionalisation that involved the creation of Regional healthcare networks coordinated by the municipalities and states. The municipalities, grouped or individually, assume the function of providing or arranging to provide a coordinated continuum of services to a geographically - defined population[55]. More recently Brazil[56;57] has approved two additional government ordinances, one for the organization of networks within the SUS framework[58] and the other to advance in the organization networks to bridge inter-state realities[56].

IHN initiatives have received strong support from international organisations, such as WHO (World Health Organisation)[5;59], UN (United Nations)[60] and the World Bank[61]. Furthermore, IHN are at the core of the Pan American Health Organization strategic orientation for health systems[1;62] - and the Health Agenda for the Americas 2008-2017[63], despite the absence of evidence of their impact[15].

Equity-LA[64] represented a first approach to the analysis of the impact of different types of IHN on healthcare

access, coordination and efficiency in two Latin American countries, namely Colombia and Brazil. Its findings highlight the need for further research to increase our understanding of the performance of IHNs' initiatives in different health systems in LA. To fill this gap and provide evidence of best practices Equity-LA II will expand the research to four additional middle income countries in Latin America (Chile, Mexico, Argentina and Uruguay) and will adopt an action research approach that will focus on the implementation and evaluation of interventions to improve care coordination and quality in different contexts. That is, different healthcare networks and different healthcare systems will be analysed.

To do so, Equity-LA II will look at evaluating integration interventions for improving coordination and quality of care in general but also specifically referring to two chronic conditions: type 2 diabetes and chronic obstructive pulmonary disease (COPD). These chronic pathologies have been chosen as tracer conditions because of their relevance in epidemiological terms, that will be increasing in the future[25], as well as the need for both pathologies for lifelong and continuous medical care[27;28]. In addition, the importance of care integration and participation of all stakeholders is highlighted for the interventions considered to be effective for both pathologies[29;30]. Thus the project will contribute to provide evidence on the best strategies to improve coordination of care for both chronic conditions in different healthcare setting in middle income countries.

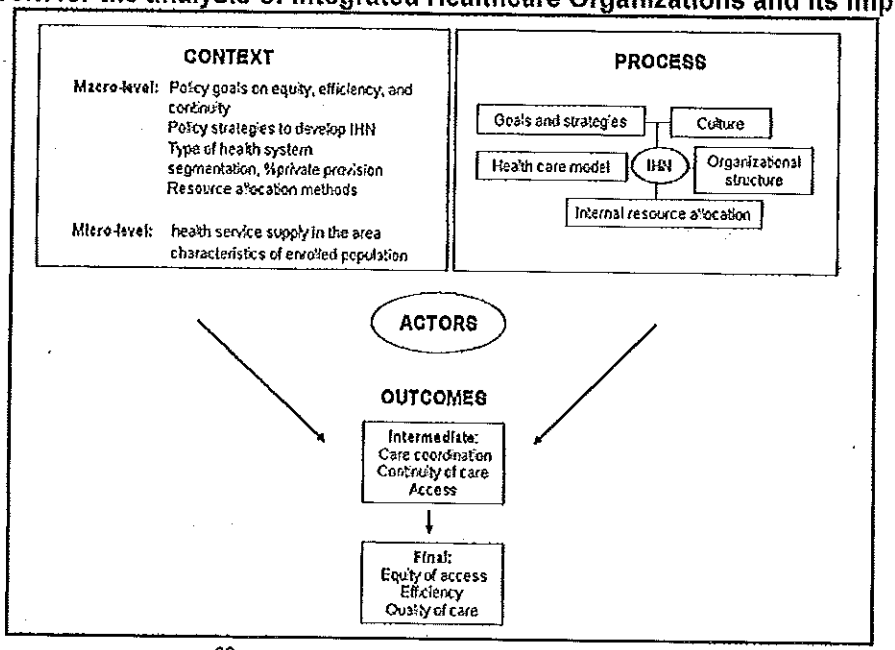
B1.2.2 Care coordination and quality as potential outcomes of IHN performance

IHNs are conceptualised as an organizational form for developing more efficient and equitable health services and better quality of care[1;5;32;65] through the improvement of care coordination and continuity and access to healthcare[32]. However, the best way to evaluate the IHNs' contribution to their intermediate or ultimate goals remains object of debate[15]. To contribute to the progress of knowledge in this area, the proposed research will further develop the Equity-LA conceptual framework[32] (Fig. 1), in two ways:

a) Incorporating new dimensions of analysis,
b) Applying it to other healthcare system contexts in Latin America.

According to this framework (Fig.1) IHN performance analysis should take into account both final (efficiency, equity and quality of care) and intermediate outcomes (care coordination, continuity of care and access to healthcare). The framework proposes to analyse IHN performance, taking into account the internal processes developed by IHNs to achieve their objectives, and the macro and micro-level context in which IHNs perform, which includes the type of health system.

Figure 1: Framework for the analysis of Integrated Healthcare Organizations and its impact



Source: Modified from Vázquez et al.[32]

Care coordination is defined here as the harmonious connection of the different services needed to provide care to a patient throughout the care continuum in order to achieve a common objective without conflicts [6;11;66-70]. Care integration is considered the highest degree of coordination[6]. Continuity, on the other hand, is related to how patients' experience the coordination of services received [71]

There are two interrelated types of care coordination: informational and managerial. Informational coordination or the transfer and use of the patient clinical information needed to coordinate activities between providers. Therefore, in order for effective coordination of patient clinical information to exist, its mere transfer is not enough, it also has to be analysed and used correctly[67;71]. Informational coordination between levels would help to reduce the unnecessary duplication of medical supplies and services such as complementary tests, medicines, contraindicated drugs, etc. Managerial care coordination is the provision of care in a sequential and complementary way, within a healthcare plan which is shared by the different services and healthcare levels involved[67;71].

One of the findings from Equity-LA in Colombia and Brazil highlights the relevance of a third type: administrative coordination[72], the measurement of which will contribute to assess the capacity of the system to match supply and demand of resources. Lastly, administrative care coordination refers to the coordination of patient access, according to their needs, to the continuum of services provided by the network. It is related to the administrative procedures and pathways the patient has to follow in order to receive healthcare and the regulation of the patient's care flow (consultations, diagnostic tests, emergencies, hospitalisation) across the different care levels of the network[72]. This third kind of coordination needs to be further explored, in the context of other health systems and settings.

Continuity of care, on the other hand, relates to how individual patients experience coordination of services, namely the result of coordination from the patient's viewpoint[67;71], and it is defined as the degree to which patients experience care over time as coherent and linked[71]. Therefore, continuity acquires its meaning within the context of different providers caring for one patient, within the framework of patients' expectations and priorities[73]. Three types of continuity are defined[67;71]:

a) relational: the patients' perceptions of an ongoing, therapeutic relationship with one or more providers;
b) informational: the patients' perceptions of the availability, use and interpretation of information on past events in order to provide care which is appropriate to their current circumstances,
c) managerial: the patients' perceptions that they are receiving the different services in a coordinated, complementary and unduplicated way.

Finally, *quality of care* is related to clinical outcomes or practices equal to or higher than accepted standards, minimum waste and costs within legal and policy requirements and a satisfied patient experience[74]. This definition covers the three dimensions of quality: management, professional and patient. Management-quality refers to whether the service makes the best use of resources, without waste, and operates within higher-level requirements. Professional-quality refers to whether the service is provided according to current best professional practice and processes, and results in optimal clinical outcomes. Patient-quality refers to whether a service exceeds patient expectations, provides a satisfactory experience and meets standards of humanity[74]. Each dimensions of quality can be assessed individually, but the overall view of the three dimensions provides a more specific definition of quality of care. Poor quality care is understood as outcomes, costs or experiences below accepted standards and norms[75]. Poor process quality refers to provider actions or omissions that are likely to result in poor outcomes or that diverge from accepted good practice[8].

Link between coordination and quality of care. Available evidence and theory suggest that the lack of coordination is the feature of organizational practice that has the highest direct and significant effect on patient outcome and costs[8], being the common cause of poor quality[74]. Recent research in high income countries indicates that failures in the coordination of care are common in healthcare organizations[76-81], suggesting that an appropriate and necessary way to address quality improvement is to advance in care coordination. Moreover, improving care coordination will also contribute to improve access to healthcare.

Care coordination seem to be particularly needed. Firstly, between professionals and services helping one patient, within the boundaries of one organisation, such as a hospital[8]; secondly, across the boundaries of organisations - when a patient is transferred physically from one separate organisation to another -, but also when professionals in one organisation need patient information, such as test results, held by another organisation[8]; and, thirdly for patients living in the community with chronic illnesses, who may remain relatively independent if the right care and expertise is available at the right time to support them [8]. Care coordination among multiple providers should avoid wasteful duplication of diagnostic testing, perilous polypharmacy and confusion about conflicting care plans[82]; therefore, effects of care coordination extend beyond cost reduction by improving quality of care[7;8;74].

Despite the relevance, research on the link between poor quality and under-coordination and its associated factors is generally limited and in Latin America is virtually non-existent. In order to contribute to fill this gap, coordination, continuity and quality will be analysed as IHN outcomes in their base-line status, as well as in the evaluation of changes introduced by interventions in Equity-LA II project.

B1.2.3 Interventions to improve the performance of IHN

The concept of an IHN as a network that guarantees access to appropriate care to a patient through the coordination of services along the healthcare continuum, involves an ideal. Previous research results are not conclusive about the relation between IHN characteristics and types and achievement of their objectives [83;84]. However, evidence is conclusive on the organizational elements that are critical for IHN's performance[6;32;85;86] on coordination. These are identified as:

a) a shared vision of the system's goals and strategies across the network[87];

b) methods for resource allocation that align health services incentives with the global objectives of the network[6];

c) an organic structure with mechanisms that enhance communication between health professionals involved in the care process[88];

d) a common culture and leadership with values oriented at teamwork, collaboration and best performance[89,90];

e) a healthcare model based on strategies for promoting primary care[1].

To address these critical elements, an array of interventions at different levels of the healthcare system might be considered[91];

macro-level: policies and regulatory mechanisms to develop IHN; integrated purchasing strategy, including performance-based evaluations and capitation payment[91;92], that are responsibility of the Health Authority at national level;

meso-level: IHNs' strategic plans; functional integration and coordination mechanisms for managerial functions (e.g. integrated management strategies, shared management committee)[91], to be developed and implemented by health managers;

micro-level: the introduction of a single mechanism that can be informational (integrated information system), managerial (clinical guidelines and pathways) or administrative (referral mechanisms); or a combination of coordination mechanisms in a comprehensive program (e.g. disease and case management programs) [91], to be developed and implemented by health managers and professionals.

Care coordination interventions may improve IHN performance, especially if introduced in conjunction with interventions to improve quality of care, such as in-service demonstrations, case reviews and audit-oriented observations[19]. Literature recommend the implementation of integration strategies at the micro-level led by healthcare professionals from the beginning of the configuration process of IHN[1;91;93], although better outcomes are achieved when care coordination is promoted in all three levels[94]. The promotion of the implementation of integration strategies at the micro-level is based on one of the main weaknesses detected in the development of such initiatives: the excessive attention paid by IHNs' managers to strategic discourses and organizational changes, ignoring actions aimed at improving clinical management[95]. Although macro and meso-level strategies facilitate clinical integration[6], mechanisms for care coordination seem to be more effective in enhancing collaboration between professionals of different care levels by creating spaces for communication and mutual understanding[96]. Micro-level coordination strategies will be the focus of Equity-LA II. The potential interventions to improve coordination and quality of care is not exhaustive but just an example, since the final selection of interventions will depend on the results of the base-line study and the final decision made by each National steering committee.

At a micro-level health organisations may opt for different types of strategies to coordinate care that may range from the introduction of shared care strategies that combine a series of mechanisms, to individual healthcare mechanisms. Those may be of different types[11;97;98] according to the basic processes in which they are based (Box 1):

1) Based on programming: the implementation of *standardization* mechanisms, useful for those situations which can be anticipated – and therefore normalized – and do not require a rapid response. In this case, coordination is achieved by specifying processes, outcomes or skills in advance[97];

2) Based on feedback: a) *direct supervision*, which is generally used to coordinate activities lacking in high levels of uncertainty[97] and which is achieved by making one person responsible for the work of the rest, giving instructions and controlling the actions of their staff; b) the implementation of *mutual adjustment* mechanisms, useful when the volume of information to be processed is high[97] and the activities are highly specialized and

interdependent[99]. In this case, coordination is achieved by encouraging contact between individuals in order to resolve the problem at the same level at which the information was generated.

The Equity-LA II project aims at coming up with new strategies to integrate the networks, to be designed and tested by creative local teams and that are aimed at the specific problems for network integration that might be different across the IHNs. Therefore, from the potential available interventions to improve coordination (Box 1) the interventions finally selected to be tested will depend on the results of the base-line study in each country.

Box 1: Types of interventions targeted to improve care coordination

Coordination basis	Theoretical coordination mechanisms		Care coordination mechanisms
Programming	Standardization of skills		Expert system: continuing medical education, alternatives to traditional consultations.
	Standardization of work processes		Clinical guidelines, healthcare maps, pharmacological guides, discharge planning;
			Patients' referral protocols and pathways;
			Shared appointment system;
			Action planning system.
	Standardization of outputs		Healthcare maps;
			Performance monitoring systems.
Feedback	Direct supervision		Program or process manager.
	Mutual adjustment	Informal communication	E-mail, post, web, phone, informal meetings.
		Liaison mechanisms	Multidisciplinary, interdisciplinary and transdisciplinary healthcare teams;
			Liaising job posts: case manager and central regulation office;
			Permanent committees: cross-level management committee;
			Integration manager: care manager, cross-field manager;
			Matrix design.
		Vertical information system	Referral records;
			Clinical information systems.

Regarding the two tracer conditions (COPD and type 2 diabetes), the analysis of a range of practices used to coordinate the care for chronic patients concludes that some of these strategies have the potential to increase quality and satisfaction among patients and providers by helping to shift the healthcare delivery system towards better coordinated care[100], but they need to be further explored. Results of several studies on diabetes point towards potential interventions to improve care through integration. For instance, in Germany, the combination of integrated care disease management with practicable integrated quality management including collaboration between family doctors and specialist services represents an innovation in chronic care management and seem to be an efficient way to improve diabetes care continuously[101]. In Australia, following a multidisciplinary care plan, adherence to diabetes guidelines increased and metabolic control and cardiovascular risk factors improved[102]. Finally, in Spain[103], some projects have introduced a strategy of shared care between specialist and primary care to improve care to the diabetes patient, and seem to be producing very encouraging results. As for COPD, its natural history is variable and there are a number of measures that can be taken to improve the symptoms and patients' quality of life[104]. All of these interventions, however, focus on the introduction of shared care mechanisms, such as the incorporation of multidisciplinary teams in a community based care model

[105] and promoting patients involvement[106]. Factors and actors that influence the effectiveness of the introduction of these strategies in different contexts needs to be further explored. Thus Equity-LA II will contribute to provide evidence on best strategies to improve coordination of care for both chronic conditions in different healthcare setting in middle income countries.

Evidence on effective interventions to improve integration of care in Latin America and evaluation of their impact/outcomes

Evaluations of interventions to improve coordination have mainly been performed in the United States and Europe and these show, firstly, that interventions involving multiple strategies produce more successful results than those which employ a single strategy[94;107] and secondly, that despite the weaknesses associated with the studies conducted, there is a certain amount of evidence to suggest a connection between specific strategies and improved care outcomes[14;94]. Shared care strategies that encompass multidisciplinary groups for care coordination, disease management programs and case management[14] have been shown to improve care outcomes in specific population groups, such as patients with psychiatric illnesses, patients who have suffered a stroke and patients with diabetes, with improvements being noted in mortality rates and hospital readmissions, among others[14]. Some interventions, such as the use of team-based models in some disease management programs targeted at severely and moderately ill (asthma, diabetes or heart failure) patients at risk of preventable hospitalization; team coordination for stroke patients giving early coordinated discharge from hospital and providing post-discharge care and rehabilitation at home; and multidisciplinary teams for patients with heart failure, giving follow-up with specialist heart failure nurses and patient caregiver education; have shown that coordination improve quality and save money[8]. However, the associated effects of these interventions on other groups of patients are unknown and the associated effects of the other interventions proposed for improving care coordination are equally unknown. It also remains to be demonstrated whether the results obtained for evaluations in the North American and European contexts are also applicable to other contexts such as Latin America.

Moreover, there is some evidence that one of the factors that influence the use of care coordination mechanisms by professionals depends on their knowledge and degree of involvement in the design, implementation and evaluation. Thus some authors suggest that the introduction of strategies for better care integration should be:

a) *bottom up*, in order words, IHN health professionals should play a central role in introducing the changes[19;108];

b) *based on human resources* training[19];

c) *assuring a balance* between rationalization of clinical decision making and the individual health professional's therapeutic freedom[19].

The systematic introduction and evaluation of micro-level interventions in different healthcare contexts will be addressed by the Equity-LA II action-research approach.

Measuring coordination, continuity and quality of care

Coordination, continuity and quality of care can be analysed using both quantitative and qualitative methods; however, while coordination and quality may be analysed from the point of view of services or the users, continuity of care, following the Reid et al.'s definition, applied in this research, can be analysed only from the point of view of users[71]. The revision of literature shows that available methods and tools are limited and there is no consensus on how best to approach the analysis coordination and continuity across care levels and its relationship to quality of care. To contribute to progress beyond the state-of-the art, Equity-LA II will develop and apply indicators and tools, building upon and further developing the Equity-LA conceptual framework (Fig.1).

a) Care coordination

Coordination analysis is generally based on the use of a combination of indicators which assess aspects related to the structure, process and outcome of the coordination between levels needed to guarantee informational and managerial continuity across the healthcare continuum[11] as well as administrative care coordination[72]. Coordination of information throughout the process is analysed by evaluating the availability of mechanisms for transferring information between different care levels, the level of accessibility, and the adequacy of shared information [109-113] (structure) and the degree of their use and interpretation by the provider[71;114;115] (process). Indicators proposed for assessing the results of this type of coordination are among others related to unnecessary duplication of medical supplies and services.

Managerial care coordination is evaluated through its two dimensions: care monitoring and consistency of care. The first dimension refers to the adequate follow-up of the patient when there are transitions from one care level to another, whilst consistency of care implies the existence of similar treatment approaches and objectives for the different primary and secondary care professionals providing care to the patient. These dimensions can be evaluated with structural indicators which assess the availability of mechanisms for the coordinated management of the patient throughout the continuum (shared clinical practice guides, liaison jobs, planning of hospital discharges) [116-117]; secondly, with process indicators which assess the professionals' degree of adherence to these[116;117], as well as the degree of longitudinal monitoring of the patient and the gaps or disruptions which occur (follow-up consultations, periodicity, etc) [118-121]; thirdly, with care outcome indicators linked to the health objectives of the coordination mechanisms put in place[122]. A set of structural, process and outcome indicators, which incorporates an analysis of the three types of coordination (informational, managerial and administrative) are currently being validated in the Catalonian context[123] by Participant 1.

For the analysis of administrative coordination new indicators need to be developed. These could be based on the evaluation of the tools used, that may encompass from integrated health information systems that allow for the on-line registration of patients referrals between care levels, facilitating the allocation of the patient to the most adequate service in view of their needs and available services and consultation programming; access pathways to guide referrals of patients between care levels; and liaison positions that evaluate and authorize referrals[72].

Care coordination should also be analysed on the basis of managers' and professionals' (the ultimate users of the care coordination mechanisms) opinions on coordination with other care levels and on the barriers and enabling factors associated with the use of established coordination mechanisms, using qualitative research methods such as in-depth interviews or focus group discussions[96;124-127].

b) Continuity of care

Measuring continuity across levels of care should be undertaken in a comprehensive manner by taking the three types (relational, informational and managerial) into account, so that all potential faults from the patient's general perspective are detected[71;73;128;129]. However, most of the available research generally concentrates on one type of continuity, relational continuity[71], one care level, primary care[130], and generally focuses on one type of pathology[131;132]; only very few have approached continuity of care in a comprehensive way[133;134].

Relational continuity is measured by analysing patients' perceptions regarding the relationship they establish with the different providers and the stability of the professional team. The most frequently used measurements to evaluate the doctor-patient relationship, mainly in primary care are based on surveys, whereby, patients are asked whether they have a personal or regular doctor[71;135], and the duration of the relationship between the professional or the concentration and sequence of care between the different providers are evaluated[71;136]. Information and managerial continuity measures have been developed to a lesser degree. They tend to evaluate the transfer and use of information from the patient's viewpoint[133], by asking patients if their previous medical examinations and records were available when they met with their healthcare provider, if the professional was aware of their previous consultations and if the file was complete and was used, and finally if the problems identified in preceding visits were followed up[71;135].

The available questionnaires to measure continuity of care include the Primary Care Assessment Tool (PCAT) questionnaire[137], which focus mainly on primary healthcare, but also include items related to continuity across levels of care and the Consumer Quality Index Continuum of Care[138], which addresses continuity as a part of quality. In recent years two quantitative instruments have been developed to comprehensively evaluate the three types of continuity of care and their dimensions, which are applicable across all care levels and aimed at the general population:

a) the recently published Nijmegen Continuity Questionnaire[139] which has just been validated in the Netherlands

b) the continuity across levels of care questionnaire (CCAENA), developed and validated by Participant 1 (CSC) [133] in Catalonia which addresses patients experiences regarding continuity of care by analysing the healthcare trajectory for a specific episode and also measures the perceptions of continuity of care assessed by means of a Likert scale. The scales to evaluate patients' perceptions of care continuity were also validated in Colombia and Brazil within the framework of the Equity-LA project[64] and will then be applied in the Equity-LA II.

Continuity of care may also be analysed using qualitative research methods to approach the perceptions of patients, their carers and relatives[129;140] regarding their experiences with the health services. In-depth interviews and focus groups are generally used for this purpose[140].

c) Quality of care

According to Donabedian, the evaluation of quality should include structure, process, and outcomes[141]. Structural measures of quality are refer to the presumed capacity of the practitioner or provider to deliver quality healthcare, and include the characteristics of the resources in the healthcare system, including individual practitioners, groups of practitioners, organizations and systems of care, geographic location, and accessibility of services[142]. Process measures, or performance measures, typically include interpersonal aspects of care, as well as aspects such as timeliness and accuracy of diagnosis, the appropriateness of therapy, complications, and mishaps during treatment and coordination of care across delivery settings, episodes of care, and professional disciplines[142]. Finally, outcome measures refer to the patient's subsequent health status and can be analysed from two perspectives; the patient perception, and the technical assessment[143]. Patients' perceptions of quality depend on their individual characteristics and affect their compliance, follow-up decisions, and long-term lifestyle change[143], and their measurement may include patient reports about their state of health, or the analysis of various aspects of their care experience in comparison to their expectations[142]. The technical assessment depend on adherence to normative standards for appropriateness of care or explicit evidence-based criteria[143], and usually include the traditional measures of survival, unintended effects of treatment (e.g. infection), and the relief of symptoms, which may be specific to a given health problem or more comprehensive assessments of the effect of an intervention[142].

Various methods are available in order to assess whether healthcare services meet acceptable levels of quality, which permit to analyse the three dimensions of quality of care previously described. These methods range from purely quantitative methods, such as the use of quality indicators, to qualitative methods, such as in-depth interviews[144]. Among the former, the most widely employed methods include record review and audit, to analyse quality from the point of view of services. The analysis of quality from the viewpoint of patients is usually conducted through surveys that measure patient satisfaction with respect to scientific technical performance, interpersonal relationships, physical environment and access to services. Another approach used is to measure the difference between what the patients expect from health services and the perception of quality actually received, by an instrument that in addition to taking into account aspects of satisfaction, consider the expectations and perceptions of users[145]. Among the qualitative methods, interviews with healthcare providers, written and oral examinations, interviews and focus groups with patients, direct observation of the delivery of services, surrogate patients, retrospective review of adverse outcomes, and simulations among others[146], are used to assess quality of services.

Need for adequate research design and approaches in testing care integration interventions

Organisations are using many types of interventions that are thought to improve different types of coordination, but there is very little evidence of their effectiveness for improving process indicators, and even less for improving the main end outcomes of resource use and quality of care[8]. Among other reasons because work related to care coordination often occurs outside the research paradigm[14]. Ovretveit[8] attributes this lack of evidence mainly due to the following reasons: underdeveloped theory and research designs for studying clinical coordination changes which limits discovering pathways of influence; an over-reliance on a limited set of experimental designs for conducting research which do not give answers for practical questions, and the lack of independent evaluations of the growing number of private 'coordination-plus' interventions in different settings. In the same line, Solberg[147] considers that controlled trials developed to assess care coordination interventions create artificial limitations that are not common in clinical practice and may not respond to the needs of coordination of the people who implement healthcare and of patients[147].

To overcome this situation, it has been suggested to stop spending resources on research that cannot provide more informative answers to pressing questions[8] and start to develop more quasi-experimental research in order to develop theory about how a coordination change is best made, how the changes influence behaviour and intermediate activities, and thus influences end outcomes on quality and continuity[8;14;147]. By developing a well-designed quasi-experimental study (a controlled before and after design), Equity-LA II will address those limitations in the evaluation of complex interventions. In every participating country two comparable IHNs will be

selected, one representing the intervention, the other the control area. Data will be collected before (base-line study) and after the intervention in each IHN, to compare pre and post-intervention performance[148]. With this design, observed differences in performance are assumed to be due to the intervention since controlled before and after studies protect against secular trends and sudden changes, i.e. changes resulting from maturation and external factors can be estimated[148;149].

Furthermore, quasi-experimental studies allow for considering participants' preferences - in contrast to randomized studies; which may be important for influencing participants' motivation and attitudes, e.g. physicians will only take up, or comply with, an intervention designed to change practice, if they have made an explicit or implicit decision to do so[148]. These aspects will be further promoted by adopting a participatory action research approach. Participatory action research (PAR) is an approach to research[160], that focuses on learning, success and action, by involving a collaborative approach that builds on strengths, values and contribution of all agents concerned[151]. One of its added values is that the knowledge acquired focused upon action, not understanding alone[152]. Thus, its strength lies in generating solutions to practical problems – such as strategies to improve care coordination and quality - in addition to implementing those solutions and by systematically monitoring and reflecting on the process and outcomes of change[153]. Action research implies the involvement of all stakeholders in defining the questions they need answered, and in assessing whether research can deliver, or is delivering already what they require, so that it can be more helpful to them[8]. All stakeholders involved in healthcare are represented[154] and participate actively with the researcher throughout the research process[155]. This allows for a more holistic picture of problems[154] and has been shown to improve effectiveness and quality of research, coupled with saving time and money in planning[152]. Furthermore, it contributes to raise the relevance of research, its credibility and social validity. In addition, the involvement of stakeholders (in this case healthcare professionals) will allow for the bottom-up emergence of strategies, considered the most effective, and which has important implications for the sustainability of interventions[152]. Therefore, participatory action research seems the more appropriate approach for the development and evaluation of effective, appropriate and sustainable integration strategies[12].

Although participatory action research lends itself well to the discovery of solutions and the evaluation of success in terms of the size of change achieved, it may also shed light on additional (unsolved) problems that need to be improved in future developments[153]. To generate the evidence required a variety of quantitative and qualitative research methods are used[156] to maintain the standards of scientific rigor necessary. Findings will generate well supported information that can be used for transference of the service delivery model to other practice settings[12].

In addition to contributing to the generation of evidence, adopting a participatory action research approach will enhance the achievement of our objective regarding the translation of evidence on best practice of integration of care into innovative and effective policies. The adoption of an action research approach contributes to bridging the theory - practice gap[12]. By drawing on professionals' experience, it can generate findings that are more meaningful and useful to them, compared to traditional scientific knowledge[153]. It helps to assist wider-reaching changes regarding political and personal transformations due to new relationships between researchers and other participants, provoking the need for wider institutional changes[152].

BASELINE OF THE PROJECT

Despite strong efforts to implement IHN in Latin America, the question of the repercussions of these reforms in equity of access, coordination of care and efficiency remains unresolved. Most of available research on IHN is based in North America or Europe. In Latin America, even if experiences with integration of health services are growing few have been systematically studied or evaluated[18]; moreover, the limited available information is dispersed and not easily accessible[157].

Equity-LA[64] represented a first approach to studying the impact of different types of IHN on healthcare access, coordination and efficiency by analysing two Latin American countries -Colombia and Brazil. Its results are the basis of Equity-LA II.

Preliminary results of document analysis of Equity-LA show that IHN' policy has progressed in both countries through the recent publications of norms for the development of healthcare networks. The organization of networks is formulated, according to the stated policies' principles, as a strategy to address current weaknesses that are the result of the particular evolutions of their health systems models: in Brazil, as a way to overcome fragmentation of care in the public system which entails the municipal decentralization, and in Colombia, as a way to deal with the financial difficulties faced by public providers, due to the introduction of market mechanism in the health system. However, interviewed policy makers and managers from both countries referred experienced difficulties in the implementation and consolidation of that IHN policy: in Brazil related, among others, to the process of decentralization, such as few incentives to municipal policy makers to collaborate in the

conformation of the regional networks; and in Colombia related to deficits in the territorial distribution of healthcare services, concentrated in the urban areas of the country, as well as to the purchasing systems and payment mechanisms employed by insurers that discourage the collaboration between providers. To analyse further IHN policy and factors that influence on it, Equity-LA II will extend the scope of the research to other Latin-American countries with different healthcare system models that have also implemented IHN policies.

In addition, results from Equity-LA suggest important weaknesses in the performance of the analysed IHNs in each country in relation to intermediary outcomes (access and care coordination) and final outcomes (quality of care).

Regarding access to healthcare services, preliminary results of the population survey show that individuals with health needs from the study areas of Colombia experience more barriers to seeking healthcare than those in the areas of Brazil. The latter face more difficulties at the entry of the services (denial of care). In Colombia barriers in seeking healthcare are related to poor quality of services and insurance conditions (such as affiliation problems and copayments). In Brazil, the reasons for denial of care are related to insufficient available resources such as lack of physicians.

Results of the qualitative study also show important barriers to access to various levels of the healthcare continuum, which differ between care levels and countries. In Brazil, structural and organizational barriers related to health services are identified. Regarding structural barriers, in primary care the insufficiency of services for the needs of the assigned population, particularly the lack of physicians were pointed out, while in secondary care, low response capacity of primary care with a number of inadequate referrals and long distances to the healthcare facilities were highlighted. Long waiting times for consultations and diagnostic tests were the main organizational barriers to primary and secondary care. In Colombia, barriers of access care are mainly related to insurers - especially to secondary care - and to lesser degree related to characteristics of providers and the population. In primary care, structural barriers (insufficient resources and limited geographical accessibility) and organizational barriers (long waiting times for an appointment) are predominant. While in secondary care, barriers related to the managed competition model are added to structural barriers: care control mechanisms, long administrative procedures, care fragmentation and long waiting times. Managed care mechanisms are not only a barrier in themselves, but also contribute to increase the negative impact of structural and organizational barriers, also found in Brazil, through the increase of indirect costs (time and travel costs) and of delay in care.

These results seem to indicate numerous problems regarding access to healthcare services, not just at the entry of the healthcare system, but also to adequate services according to health needs, as well as care coordination as an influencing factor. More research should be conducted in order to deepen the analysis of perceived quality of healthcare by social actors in IHN.

Those results suggest important deficiencies in the coordination between primary and secondary care according to the perspective of IHN managers and health professionals, resulting from the qualitative study. In Colombia, internal and external obstacles to coordination are identified. Among the internal factors, the main barriers to care coordination are related to the low response capacity of the primary care; insufficient coordination mechanisms between care levels - especially the absence of an integrated information system - and lack of professionals' training and adherence to clinical guidelines. Inadequate working conditions for professionals (type and duration of contracts, high staff rotation) are considered to be an important conditioning factor. External factors refer to deficiencies in the public regulation of contracts between insurers and providers and lack of a policy to promote care coordination in IHN at national level. In Brazil internal barriers to care coordination are predominant: lack of communication between healthcare professionals with the user as the main information transfer mechanism, non-existent coordination mechanisms and poor response capacity of primary care. In order to identify the magnitude of the problem and analyse the link between lack of coordination and poor quality of care, the extent of the barriers from health professional perspective will be measured, as well as the research be broaden to different healthcare systems.

Additionally, results from Equity-LA show poor IHN performance regarding selected tracer diseases (type 2 diabetes and breast cancer) In relation to diabetes, the results of both countries indicate limited patient follow-up and limited compliance of clinical standards defined by national and international guidelines. This is evidenced by the low percentage of patients who have fulfilled standards of necessary tests for monitoring the disease. In the case of breast cancer, a long period of time between the first symptoms and the start of the treatment is detected, which indicates barriers not only to entry the system but also throughout the healthcare continuum. Although breast cancer has not been selected as a tracer condition for Equity-LA II due to the fact that coordination between care levels is more relevant for other chronic diseases – e.g. type 2 diabetes and COPD- the founded barriers to access across the healthcare continuum, highlight important problems that need to be taken in consideration in the analysis of IHNs' performance.

The evaluation of best practices of care integration in the Latin American context is practically nonexistent, with available assessments conducted at national level and focused on specific populations - mainly mothers and children[158;159]. In addition, most studies have concentrated on the evaluation of a single mechanism, such as implementation of information technology in healthcare settings[160;161]. In addition, most of the available literature on care coordination is based on research developed in high income countries[8;14;111;127;147;162;163], and generally refers to two interrelated types of care coordination - informational and managerial. In high income context, research on care coordination usually disregards the coordination of patient access, relevant to less developed countries.

Evidence on the factors and actors that influence the effectiveness of micro-level interventions to improve integration of care in different health systems and settings of middle income countries is also practically non-existent. Preliminary results from Equity-LA suggest that the implementation of integration strategies, particularly at the meso- and micro-level, is still at an early stage in Colombia and Brazil[64]. In those areas where some care coordination mechanisms have been implemented, a range of barriers in the design and implementation process have been identified[64]. These include limited participation of health professionals in the design and dissemination of coordination mechanisms and low rate of referrals from secondary to primary care. In accordance with other studies[9;10], these results clearly indicate the need for designing and testing effective bottom-up strategies targeted at improving health services integration and for applying interventions benchmarking that takes into account local conditions.

Finally indicators to evaluate systematically coordination of care aspects have been limitedly developed. Available measures of care coordination commonly refer to one care level (often primary or ambulatory care)[14;120;163]; they are generally based on professionals and/ or managers opinions[14;163], and mostly measured through surveys[163]; and they only measure limited aspects of care coordination. In addition, the conceptual framework used to develop the measures is not made explicit, so that what precise aspects of coordination of care are being analysed or how measures relate to care coordination is not obvious; and, few take into account health systems' contextual factors or have been validated in different settings[120;162;163]. Equity-LA II will further develop and apply indicators of care coordination within different healthcare systems and settings.

PERFORMANCE/RESEARCH INDICATORS

Performance/Research Indicators

- **Progress**

a) Research tools for the qualitative analysis of care coordination, continuity and quality of care from actors' perspective (developed and adapted topic guides) in Spanish and Portuguese

b) Tested questionnaire to determine user's perceptions of continuity and quality of care (developed and piloted)

c) Tested questionnaire to find out the health professional's opinion about the degree of coordination and quality of care (developed and piloted)

c) National steering committee representing all stakeholders involved set up and trained in all Latin American participant countries

d) A common research capacity building strategy developed

f) A plan for the use and dissemination of results of the project developed

g) Project web site to provide information on the research outputs of the project

h) Completed data collection and preliminary analysis of base-line study in all Latin American participant countries

i) Implementation plan of interventions aimed at improving care coordination and quality in the domain of chronic diseases developed in all Latin American countries

j) Selected micro-level interventions implemented in the intervention IHN in all Latin American participant countries

k) Completed data collection and preliminary analysis of the effectiveness of the interventions in all Latin American countries

l) Papers submitted in peer-reviewed journals

m) Final regional conference to disseminate methods and findings organised

- **Results**

a) An assessment of IHNs' performance regarding coordination, continuity of care and quality of care (base-line)

b) A set of bottom-up designed interventions to improve coordination and quality of care of COPD and type 2 diabetes

c) Tested interventions aimed at improving care coordination and quality for a particular-context (intra-country analysis)

b) Evidence on the outcomes of interventions aimed at improving care coordination and quality, and the associated factors in each health system context (cross-country analysis).

c) A best practices report that provides evidence on effective interventions to improve integration of health services in different health systems contexts.

d) Policy tools for national and international policy makers to apply project results, in order to implement policies conducive to higher system performance (through better coordination and quality of care).

- **Impact**

a) Evidence available on best practices to improve care coordination and quality of care in healthcare networks in different healthcare systems in Latin America.

b) Evidence basis for policy development to promote the emergence of better quality and better performing IHNs.

b) Key decision-makers trained for the planning and implementation of evidence- based interventions to improve care coordination and quality of care of IHN, as well as for the evaluation of the performance of IHN in each country.

c) Health professionals with knowledge and skills on care coordination and quality of care of chronic diseases in the intervention IHN of each country.

e) A national and international network of key stakeholders concern with the integration of care that will increase the probability of implementation of evidence-based policies to improve performance of IHNs.

f) A network of research institutions involved in Equity-LA II with scientific capabilities to carry out research in the fields of integration, quality of care, and participatory action research in all participant countries.

B1.3 S/T METHODOLOGY AND ASSOCIATED WORK PLAN

B1.3.1 Overall strategy and general description

Study design. A quasi-experimental design (a controlled before and after design) for evaluating complex interventions[148] will be adopted, with a participatory and multidisciplinary action research approach. Participatory action research entails the documentation of problems, achievements and state of the art, the formulation of an analysis and action model including interventions' design, implementation and evaluation[164]; as well as the stakeholders' active participation – including policy makers - throughout all research phases[155].

Study area. Research will be carried out in the six participating Latin American middle income countries, representing different types of healthcare systems. In each country, two comparable integrated health services networks (IHN) - one intervention and one control area- have been selected according to the inclusion criteria: a) provision of a continuum of services including at least primary and secondary care; b) provision of services to a defined population; c) provision of care mainly to urban slums; d) willingness to participate and implement designed interventions; and e) leadership with competence for implementing designed strategies. Selected IHN are: Colombia: Sur-occidente and Centro-oriente networks of Bogotá; Brazil: Recife and Caruarú; Chile: Central and South networks of South Metropolitan Health Service (Santiago); Mexico: Xalapa and Veracruz; Argentina: North District and South District of Rosario; Uruguay: Eastern region of Montevideo and the healthcare network of Salto

Research phases and methods. The project will be structured in four sequential research phases which will extend over 60 months and take into account Campbell et al.'s model for the evaluation of complex intervention[165] as well as the participatory action research approach (Box 2).

Phase 1. After finalising the research framework and research plan, a base-line study will be conducted using both qualitative and quantitative research methods to assess the IHNs' performance regarding coordination, continuity and quality of care. This phase encompasses documentation of problems and state of the art for the design of interventions. The national steering committee, made of stakeholder, will be established.

Phase 2. Design and implementation of interventions to improve care coordination and quality, based on the results of the base-line study; this phases includes the identification of the intervention components and the formulation of an analysis and action model.

Phase 3. Evaluation of interventions applying the same design as in the base-line study and including two intra-country comparison (before and after in every IHN; intervention-control)

Phase 4. Cross-country comparative analysis

Throughout the four phases, capacity building and dissemination of results, as well as coordination and management activities will be carried out (WP6 and WP7).

Box 2: Study phases duration and relation to work packages and objectives

Phase	Objective	Duration	Description	WP
Phase 1	a)	24 months	Research framework and tools (6M) Base-line study in all participating Latin American countries (18M)	WP1 WP2
Phase 2	b)	18 months	Design and implementation of interventions in one integrated healthcare network (IHN) in every participating Latin American country	WP3
Phase 3	c)	12 months	Intra-country evaluation of interventions	WP4
Phase 4	d)	12 months	Cross-country comparative analysis	WP5

Work Packages description

The work plan is broken down into seven work packages (WPs), following the phases of the project implementation *(WT1 List of work packages, Part A)* (Fig.2)

Work package 1. Theoretical framework and research tools. This WP will be developed at the beginning of the Phase 1, in order to preparing the onset of the project by finalising the common theoretical framework, elaborating the research plan and preliminary research tools, set up research teams and committees and start capacity building activities (Objectives a, b, c and d). To finalise the conceptual framework, based on the Equity-LA's one, will be carried out a literature review on the international evidence on coordination and quality of care with a particular focus on the participating Latin American countries. The formulation of a common conceptual framework will enhance the comparability across countries. The development of a research plan will ensure timing and scientific quality of all aspects of the project. This WP will particularly focus on the adaptation of tools from those developed by the Equity-LA project, and the development of new research tools based on the review of the scientific literature.

During this work package, 3 committees with different functions will be set up in each LA country: i) a national steering committee representing all stakeholders involved in the healthcare (healthcare professionals, managers, users of the involved IHNs, local policy-makers and researchers) that will remain active for the five years of the project. The national steering committee of each country will participate in all project phases and will be in charge of the design and implementation of interventions, ii) the international scientific committee (M3), consisting of key experts in the field of research. The committee will meet annually and is in charge of assuring quality of the scientific work performed and advising on the scientific aspects of the project. iii) the national steering committee, in each Latin American participant (M4), in which main stakeholders will provide support to the country research team, address emerging issues throughout the project and contribute to the dissemination of findings along the research.

During this work package, two meetings will be organised: the 1st Workshop at the start of the project (M1) to reach an agreement on the main aspects of the theoretical framework and research tools, and the 2nd Workshop towards the end of this work package (M6) targeted to finalise the framework, the research plan and the qualitative research tools.

Capacity building which is a transversal component of the project will already start during this WP in two domains: research and policy making. This will take place by means of the exchange among all researchers and the beginning of needs appraisal. This includes selection of junior researchers, permanent communication and debate, workshops on research framework, methods and tools and joint work among the teams.

In this WP, led by Participant 1 (CSC), every participant will contribute according to their field of expertise.

Work package 2. Base-line study. In Phase I, an assessment of the performance of the intervention and control IHNs will be also carried out in all six Latin American participating countries, to set the base-line for the later evaluation of the interventions (Objective a). This base-line study will concentrate on coordination, continuity and quality of care to the general population and to patients with tracer conditions (COPD and type 2 diabetes)

This work package is made up of three components *(more details in WT3 Work Package descriptions, Part A)*:

1. A qualitative study to investigate care coordination, continuity and quality of care from stakeholders' perspective – IHN's healthcare professionals, managers and patients with tracer conditions-. Data will be collected by focus groups and individual interviews (M7-18).

2. A quantitative study. Two questionnaire surveys will be conducted in order: a) to determine user's perceptions of continuity and quality of care, and b) to find out the health professional's opinions about the degree of coordination and quality of care (M13-21). As a first step, the questionnaire, adjusted according to the results of the qualitative study, will be piloted and afterwards adapted for its use in the data collection. Simple random samples of health professionals and users will be selected in both (intervention and control) IHNs under investigation in each country.

The sample size for the questionnaire survey will be calculated taking into account the controlled before and after design of the study. The sample size is estimated in order to ensure the detection of a 15% variation in professionals' opinions on coordination and a 10% variation in patients' perceptions of continuity and quality of care between phases and IHNs. In both cases, sample size is calculated on the basis of a power of 80% (β = 0.20) and a confidence level of 95% (α = 0.05) in a bilateral contrast *(more details in WT3 Work Package descriptions, Part A)*.

3. The analysis of the base-line study will be completed by combining the preliminary results of the qualitative study with those of the quantitative study (M19-24). Results will be used for the design of interventions in the intervention's IHNs of each country. They will further serve as the basis of the before-after and the intervention-control comparison.

During this work package, the 3rd Workshop will take place for finalising the quantitative analysis plan and research tools (M13), and the 4th Workshop to discuss the overall results of the base-line study (M19).

During this work package, capacity building will continue adding to the activities started in WP1 and activities of WP6 following specific activities: specific training of junior researchers to develop the knowledge and skills required for the development of the base-line study, scientific support to Participant 6-9 provided by participants of the previous Equity-LA (1-5) to obtain a common understanding among all the partners of the main research elements related to base-line study, and exchange among researchers that include permanent communication and debate, workshops on research methods and results of the base-line study, and join work among the teams *(more details in WT3 Work Package descriptions, Part A)*.

Participant 1 (CSC) will be overall responsible for this work package, but every Latin American country team (Participants 3-9) will lead and carry out the base-line study in their own country with the scientific support of previous participants of Equity-LA (Participants 1-5). Participant 2 (ITM) will lead the researchers' capacity building process.

Work package 3. Design and implementation of interventions. This WP will be developed during Phase 3 in order to design, implement and benchmark a set of organisational interventions aimed at improving care coordination and quality, in the domain of chronic diseases (COPD and type 2 diabetes), in different IHN in Latin America (Objective b).

Design of interventions (M19-21). Based on the results of qualitative and quantitative baseline study, a list of micro-level priority interventions will be established and the top three interventions priority of each country will be selected to get implemented and evaluated. The selected strategies will be conceived to motivate health professionals to participate on a voluntary basis. Identified interventions will target care coordination and quality of care that may refer to the introduction of a single mechanism or a combination of mechanisms in a comprehensive program. A set of indicators will be elaborated to monitor the interventions once these have been defined. Indicators that measure coordination and quality of care will be adopted from those used in Equity-LA, and developed by Participants 1 (CSC) and 2 (ITM) in the context of other studies. The national steering committees of each country will be in charge of designing and implementing the interventions, coached in carrying out these actions in their network, by Participant 2. They will be further responsible for recruiting and training participants in their countries, throughout the process.

Implementation of interventions (M22 to 36). The national steering committee will be in charge of monitoring the process of the intervention and will receive support by the more experienced participants. Each member of the national steering committee will supervise one or two participating health facilities of the IHN in their country during 18 months. The constant monitoring will facilitate the adaptation of the intervention to achieve optimal effectiveness. Interventions will be implemented in the intervention IHN in each country, and it will be introduced in the control IHNs (comparative arm) at the end of the country study, in order to prevent changes occurring too early and thereby hindering detection of differences.

At beginning of this WP (M19), the 4th Workshop will take place to discuss the results of the base-line study and potential interventions based on those results. The 5th Workshop (M25) will be also hold in order to analyse the uptake of the intervention and discuss potential adjustments.

The capacity building activities developed in this work package include: (1) in-service training, supervision and monitoring to contribute to capacity building of researchers, national steering committee and health professionals in an on-going learning process; (2) training of junior researchers to develop knowledge and skills to support and coach the members of the national steering committee in their activities; (3) training of national steering committee to ensure a common understanding of the main research elements necessary for the design, implementation and monitoring of interventions in IHN; (4) training of health professionals to obtain expected capacities for the introduction of interventions in the IHN of each LA country; (5) exchange among researchers to obtain a common understanding among all the partners of the main action-research elements necessary for the design, implementation and monitoring of the interventions *(more details in WT3 Work Package descriptions, Part A)*.

Participant 2 (ITM) with the support of Participant 1 (CSC) will lead this WP, but every Latin America participant (Participants 3-9) will be responsible for successfully implementing the intervention in their own country, supported by previous participants of Equity-LA (Participants 1-5).

Work package 4. Evaluation of interventions. This WP will be developed in Phase 3 in order to assess the effectiveness of the interventions, recognize their limitations and identify factors that determine the applicability in different contexts (Objective c). This evaluation will follow the same design as the one used in the base-line study and will also combine qualitative and quantitative methods *(more details in WT3 Work Package descriptions, Part A).*

During this work package, two meetings will be organised: the 6th Workshop (M34) in order to develop an intra-country comparison plan, and the 7th Workshop (M40) to discuss the evaluation preliminary results and identify issues where more data collection or analysis is needed.

A series of capacity building activities will be developed: specific training of junior researchers to develop the research knowledge and skills required in the evaluation of interventions, scientific support to Participant 6-9 provided by participants of the previous Equity-LA (1-5) to obtain a common understanding among all the partners of the main elements necessary for evaluation and comparisons of the interventions; and exchange among researchers that include permanent communication and debate, workshops on research plan and results of the interventions' evaluation and joint work among the teams *(more details in WT3 Work Package descriptions, Part A).*

Participant 1 (CSC) will be overall responsible for that WP; however every Latin American country team (Participants 3-9) will lead and carry out that WP in their own country, with scientific support of previous participants of Equity-LA (Participants 1-5). Participant 2 (ITM) will lead researchers' capacity building process.

Work package 5. Cross-country comparative analysis. In Phase 4 the cross-country comparison will be carried out which will result in a better understanding of the link between different interventions and their outcomes, and the associated factors in each health system and healthcare setting (objective c).

The cross-country comparison will be done among participating LA countries and with international experiences, such as those from Catalonia (Spain) where IHNs have been evaluated.

At the beginning of this work package (M46), the 8th Workshop will be held in order to the present the final results of the intra-country analysis to develop a cross-country comparative analytical plan.

During this work package, a series of capacity building activities will be developed: specific training of junior researchers will be conducted in order to develop the knowledge and research skills required for the cross-country comparative analysis and the elaboration of policy-makers tools, and exchange among researchers *(more details in WT3 Work Package descriptions, Part A).*

This WP will be led by Participant 1 (CSC) together with Participant 2 (ITM), with all other participants contributing to specific areas of analysis. Latin American country teams (Participants 3-9) will contribute to develop the policy tools for their national policy-makers.

Work package 6. Capacity building and dissemination of research results. This WP will be carried out throughout the four phases. It has two main parts: one dedicated to research capacity building and the other dedicated to the dissemination of results (Objective d).

Capacity building is a transversal component of the project that will take place throughout its implementation in three main areas: (1) policy making capacity building for the planning, management and organisation of health systems by involving key stakeholders from the beginning of the project and generating evidence based tools for the development of policy; and research dissemination (2) strengthen research capacity of all involved institutions in health system research through specific training of junior researchers and exchange of knowledge and experiences among senior researchers; and (3) improve health professional knowledge and skills on care coordination and quality of care through in-service training programmes *(more details in WT3 Work Package descriptions, Part A).*

A common capacity building strategy will be developed at the beginning of the project by partner 2 in close collaboration with all partners on the basis of needs exposed in the first Workshop (M6). At this stage, each partner will assess the specific needs of the various actors involved, through meetings, workshops and interviews.

a) Policy makers' capacity building

National steering committees' capacity building that include: specific training to enhance the active participation of the national steering committee in the action research process and participation of national steering committee members in all activities of the project (learning by doing training).

Capacity building strategy is not restricted to the members of the national steering committee, but also extended to the national and regional policy makers by means of the dissemination of the knowledge generated by means of different mechanisms.

b) Research capacity building of the involved institutions

- Specific training (formal training) of junior researchers by means of workshops and seminars in order to develop research skills, organised by the LA participant in close collaboration with participant(s) with expertise in the area
- Participation of young researchers in all activities of the project to develop necessary research skills (learning by doing training)
- Exchange among researchers that include permanent communication and debate, workshops on research methods and tools, joint work of the teams and when necessary, training in areas relevant to he project and to share knowledge and skills (in Latin America and also in Europe)
- Close monitoring by senior researchers in each country team
- On-line and in-situ support by paired-partners

c) Health professionals' capacity building

- Specific training on aspects relating care coordination and quality of care for health professionals, according to identified needs
- On the job training and close monitoring during the implementation of interventions by national steering committee

At the first Workshop (M6), capacity building needs will be identified and a common research capacity building strategy developed.

The second part of that work package is dedicated to adequately conduct research knowledge management and to finalise a plan for the use and dissemination of results. The preliminary version of the plan will be prepared during the first phase of the project (M3). The dissemination activities will encompass, among other activities, the development of a dissemination strategy at the first Workshop (M6), involving policy makers and other relevant stakeholders in the Latin American countries; building networks with the stakeholders involved in the project, as well as international networks that will promote the distribution of results; the elaboration of policy tools for national and international policy makers; organisation of round tables; submissions of research papers; etc. *(more details in WT3 Work Package descriptions, Part A).*

In order to facilitate the implementation of elaborated policy guidelines and to obtain the maximum impact on local, regional and national health policy levels in the involved Latin American countries, policy makers are involved from beginning in the project and will work in close collaboration with relevant stakeholders.

During the project, annual national scientific committee meetings will be organised by the leading participant in order to identify and incorporate key elements that increase the appropriateness of the results for varied social, political and economic contexts (M6, M19, M34, M46, M54).

Two meetings will be organised devoted specifically to dissemination of project's results: the 9th Workshop (M54) in order to discuss the elaboration of best practices reports and policy tools and guidelines, that targets the preparation of the final Regional conference for the regional dissemination of results, and the conference itself, which will take place in month 60.

Participant 2 will be in charge of developing the capacity building strategy at the beginning of the project and to supervise its implementation, in close collaboration with the other participants.

Work Package 7 Project management and coordination. This work package, carried out throughout the four phases will deal with all administrative issues. The following tasks will be developed *(more details in WT3 Work Package descriptions, Part A)*:

1) Set up of project management office (M1) that will monitor the progress of the work packages.

2) Set up of the project management committee (M1) made up of the leading scientist of each team (principal investigator). It will meet every six months and bears the following responsibilities: monitoring the project, planning of activities and follow-up of the project and budget; assuring quality of deliverables.

3) Project monitoring and evaluation by the Project management committee every six month and reported to the EC every eighteen month *(details of tentative schedule of project reviews in WT5, Part A).*

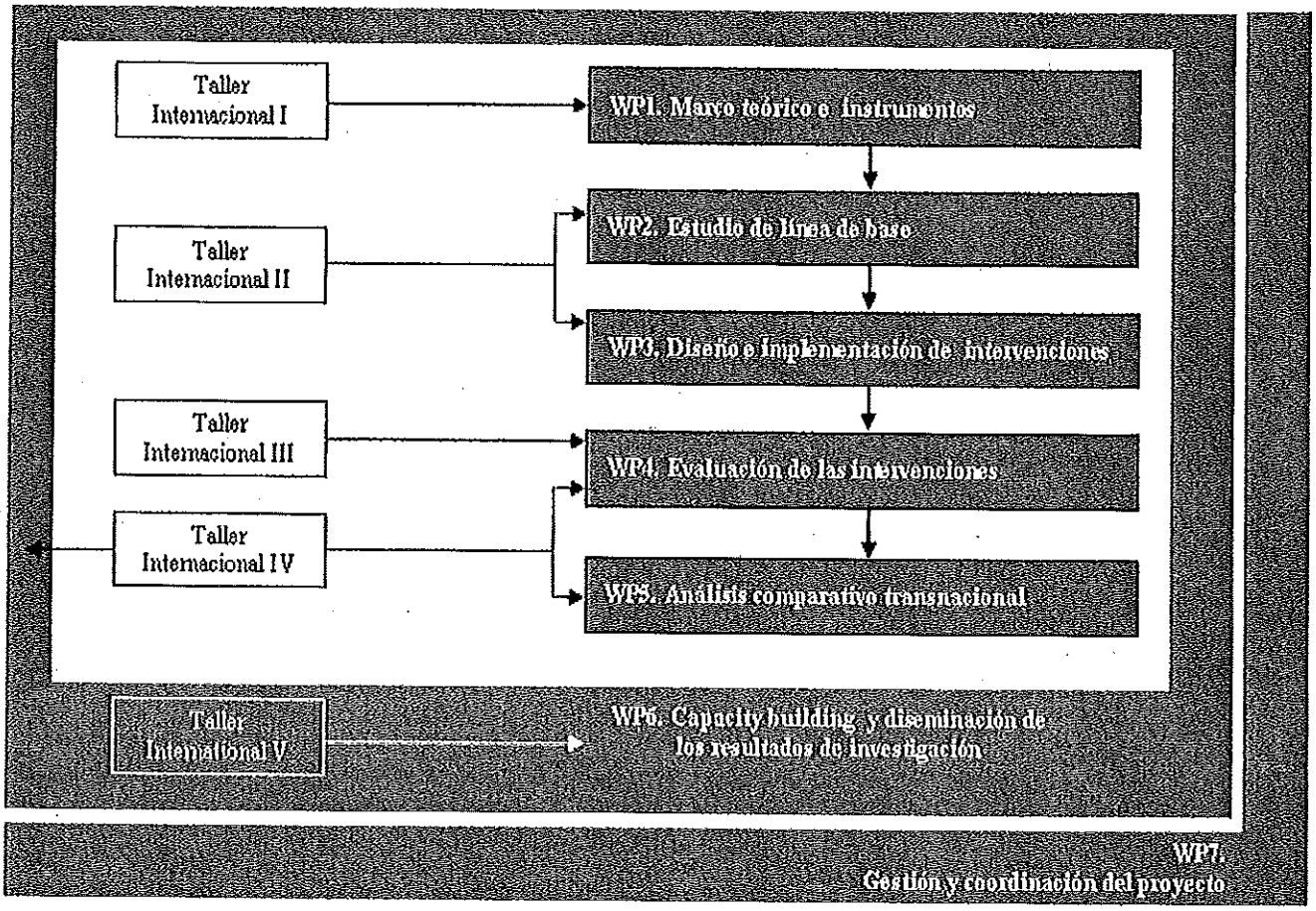
4) Financial management of the consortium by each participant coordinated by Participant 1.

5) Project management and coordination mechanisms. In order to ensure that all partners are acting as a team and there is effective management and scientific coordination, a series of mechanisms that include: periodic project management committee meetings, web site (M3) and permanent communication (e-mails, video-conferences, etc.), and administrative tools and procedures for the project management. Each participant will prepare semi-annual progress and activity reports, and will submit them to participant 1 for further distribution to the project management committee. The project reviews will be planed in line with its milestones, and they will take place in the corresponding scheduled workshops (details of the milestones in WT4 Work Package descriptions, Part A). The outcomes of the reviews, as well as required changes to the work plan, will be presented in the four reports delivered to the EC (details of the schedule of project reviews in WT5, Part A).

Participant 1 (CSC) will be responsible for the overall management and coordination of the project, overall scientific supervision and follow-up of the project and will represent the consortium in its relations with the EC. Furthermore, all participants are responsible the project management in their own countries and for producing timely information as requested by the project coordinator in order to be able to monitor the progress of the project.

Responsibilities and relationship between participants. Each participant will lead the scientific area in which they have the most expertise. In addition, Participant 1 (CSC) will be responsible for the overall coordination of the project and will provide the scientific lead. CSC will lead deliverables 1.1., 2.1, 4.1., 5.1., 6.3, 7.1. (details of the schedule of project reviews in WT2, Part A) Participant 2 (ITM) will lead the overall design and implementation of interventions WP3. ITM will lead deliverables 3.1, 5.2, 6.1, 6.2. Participants 3 to 9 will be responsible for carrying out the project in their own countries (WP2-4; 6-7), will be in charge of their parts of the deliverables, and will contribute to research's overall design and cross-country comparative analysis (WP1; WP6). Each previous Equity-LA participant (1-5) will provide scientific support to one of the new participants (6-9).

Figure 2: Graphical presentation of the workpackages and project workshops showing their interdependencies



Significant risks and contingency plan

Although the methods and tools proposed in this research have been widely used and validated, the following identified risk factors could hamper the study's success and need to be targeted and overcome:

- Integrated healthcare networks (IHN) selected for investigation refuse to participate: the IHN will be replaced by another IHN of the same country, using defined selection criteria.

- Selected subjects for the qualitative and quantitative study or for the implementation of the intervention are not willing to participate or drop out during the study: a percentage of drop-out rates will be considered when calculating the sample or determining the number of participants.

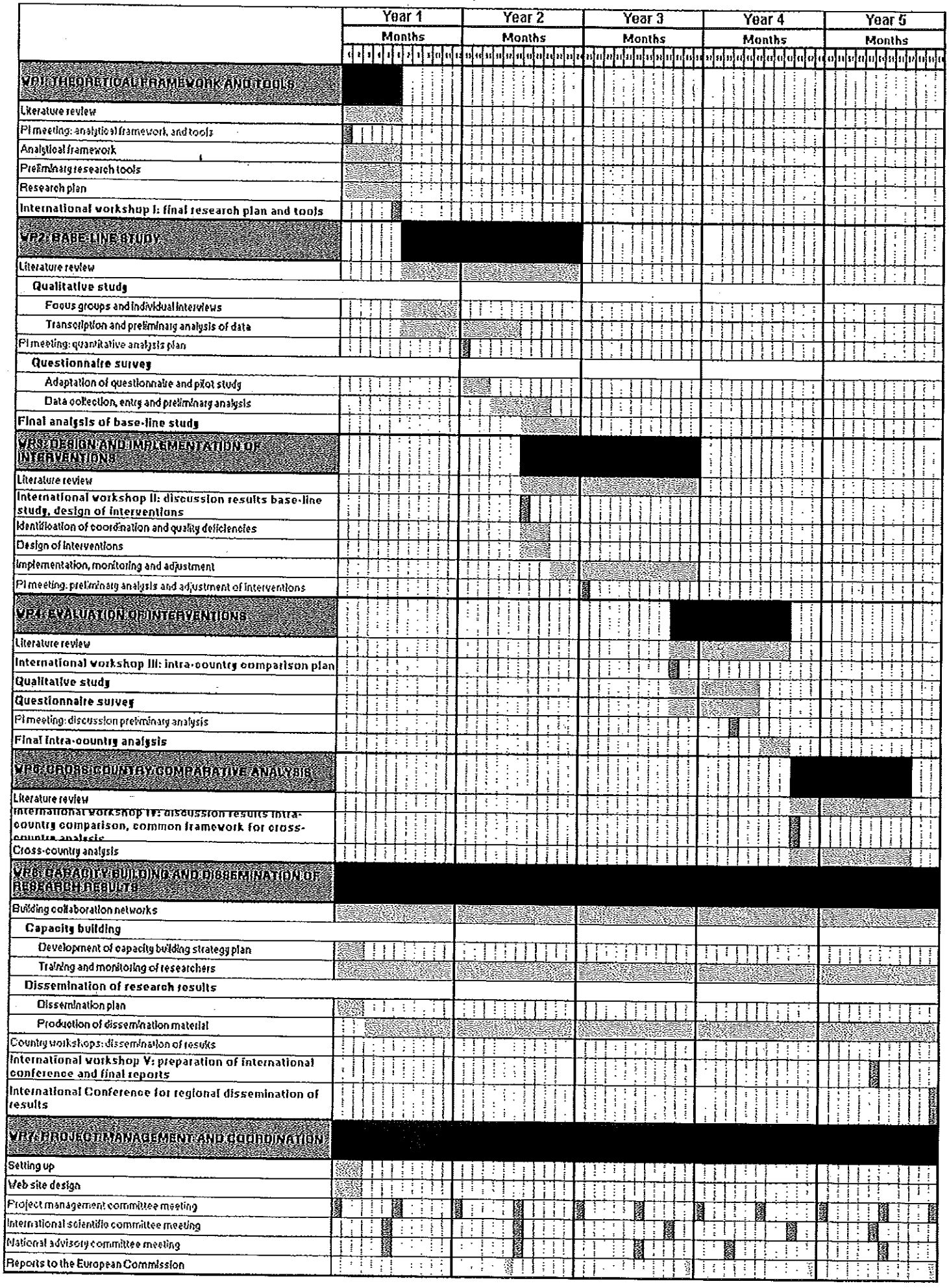
- Impeded cooperation with relevant stakeholders and hindered or rejected access to documents, institutional records and actors: a careful analysis of stakeholders will minimise the facts that endanger their participation in the project; furthermore, a permanent and fluid communication with stakeholders will promote their active engagement and avoid future obstacles.

- Issues that may lower comparability between the countries results, e.g. no sharing of a minimum data set for comparative analysis or no common explanatory framework: in order to countervail those issues, a common conceptual and explanatory framework will be developed, close communication between the participants will be kept by different means; and periodic workshops will be organized. In addition, collaboration among the participants in previous research studies has proved to be successful.

- Political changes during the intervention phase that lead to changes in managerial positions of IHNs and therefore affect the study areas: this risk will be reduced by signing collaboration agreements with the networks at the beginning of the project that guarantee their full commitment.

In addition, partners will be encouraged to signal problems as soon as they appear, instead of allowing them to cause delays. Permanent contact will be encouraged and maintained among all participants by means of e-mail, telephone and the project web site.

B1.3.2 Timing of work packages and their components



B2. IMPLEMENTATION

B2.1 Management structure and procedures

The Equity-LA II project will be managed by a consortium consisting of two European and seven Latin American institutions.

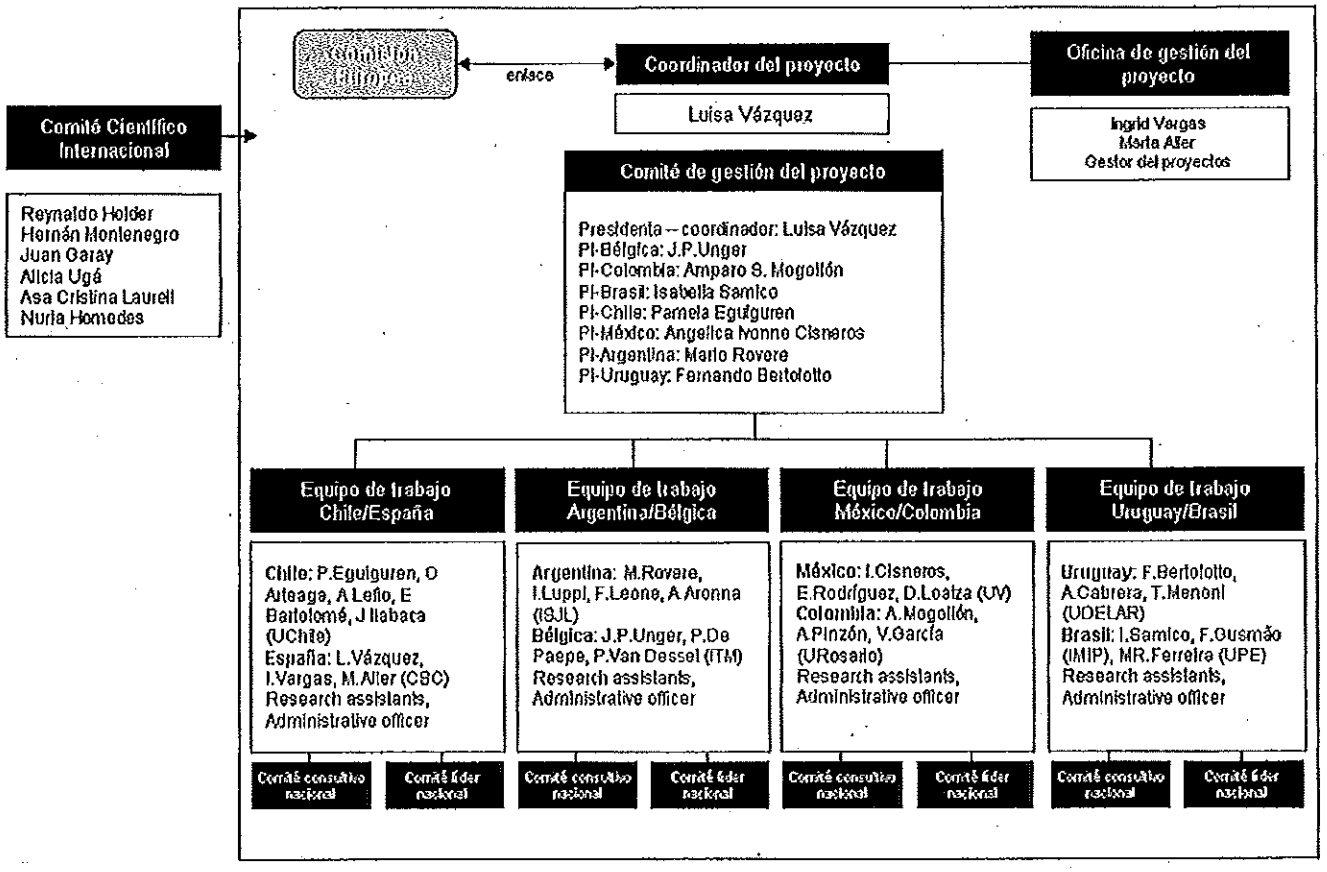
Parallel to the negotiation of the Gran Agreement, the Consortium Agreement will be developed and signed by all participants, which will determine the responsibilities of each partner in the implementation of the project as well as the project monitoring and evaluation. It is critical for the success of the project that those management arrangements are clearly stated and workable. The consortium will be managed throughout the project according to the rules and regulations stated in the agreement.

The Equity-LA II consortium will have a well defined and tightly knit management structure, based on the principle of consensus, and consisting of the following components:

- Coordinator and project management office
- Project management committee
- Country teams
- National steering committee
- National scientific committee
- International scientific committee

Key features of the management structure are summarised in the project's organisation chart (Fig. 3) and are described below.

Figure 3: Project's organisation chart



** Coordinator and project management office*

The Consorci de Salut i d'Atenció Social de Catalunya (CSC) in Barcelona, Spain, will be the coordinator of the consortium represented by Dr. Luisa Vázquez. She is the head of the Health Policy Research Unit (HPRU) at the CSC, showing extensive experience in international research management gained through her current leadership of the FP7 project Equity-LA (SICA - Project ID.223123) and her position as the principal nvestigator in two INCO projects (STD 204-E; IC18-CT98-0340) and a Leonardo da Vinci project (2002-K/02/B/F/PP/129_583).

CSC is a public entity, with a wide ranging experience in developing and implementing health sector reform programmes in Spain as well as in Latin America. It has substantial high level experience in managing programme budgets up to € 10 million. As a whole, it has a turnover of almost € 54 million. The Equity-LA II consortium will benefit from the support provided by the administrative and financial structure of the CSC and their significant track record in project management.

The coordinator will be responsible for the global administration, general coordination and follow-up of the project as well as the overall scientific supervision. It will represent the consortium in its relations with the EC regarding the overall management of the project. The coordinator with support of the project management office will monitor the progress of the work packages, to make sure progress is made according to the plan. Participants will be encouraged to signal problems as soon as they arise, instead of allowing them to cause backlogs in the project progression.

To ensure appropriate and timely execution of the project, CSC will establish a project management office in Barcelona (consisting of researcher, research assistant, project manager and administrative support) and will represent the Consortium in its relations with the EC regarding its overall management. The project management office will be responsible for ensuring regular adequate communication and information exchange among the participants, facilitated by the use of a web-based secure intranet, e-mail, telephone, video-conferences, etc. It will be responsible for producing regular reports and financial statements to the EC as required on the basis of the information provided by all partners and will guarantee the successful execution of all work packages, to ensure that progress is made according to the plan envisaged. The project manager, under the supervision of the project coordinator, will be responsible for WP7 and the administrative, financial coordination: supervision of the production of the financial reports, audits in conjunction with the submission of the financial and administrative reports to the EC.

In the circumstances of the addition of a new beneficiary during the lifetime of the project, its leading scientist will be incorporated to the project management committee in similar conditions to the rest.

** Project management committee*

Gained experience from previous attention to coordination activities between work packages. The Equity-LA II project will ensure that sufficient time is given for ideas and concepts to be exchanged between those involved in the work packages. While much of the work can be achieved through Internet, phone calls and emails, face-to-face meetings are essential in order to ensure networking, real dialogue and concrete agreement. Therefore, the project management committee will be the principal vehicle to exchange views between project partners. It will be composed of the leading scientist of each team (PI; principal investigator). For Brazil, IMIP's principal investigator will represent also UPE's IP. The project coordinator will be the chair of this committee. This committee will be responsible for the planning, follow-up of the project and key decisions. It will further ensure that project objectives are fulfilled, discuss problems that arise and suggest solutions to resolve those. This committee will meet every six months.

The project management committee will be responsible for:

- Monitoring the project;
- Planning and follow-up of project activities;
- Approving annual work plans for institutions involved;
- Assure quality of the deliverables, milestones and technical reports;
- Managing the financial plan and defining budgets for the individual parts of the project, and jointly discussing mayor project or consortium changes;
- Approving research funds allocation.

All resolutions of the Project Management Committee shall require the unanimous consent of members either present at a committee meeting or responding to a written consultation organised by the Coordinator. No reply within 2 weeks is considered as agreement. If consensus cannot be reached, a voting mechanism based on a simple majority vote will be established. Project Management Committee shall not deliberate and decide validly

unless two-thirds (2/3) of its Members are present or represented (quorum) (more details on the Consortium Agreement).

** Country teams*

The principal investigator of each team will be in charge of the overall management and supervision of the project in their particular country and will liaise with other participants and the project coordinator. Each partner ill be supported by an administrator from his or her institution to manage the project funds.

Each of the Latin American participants will be responsible for the development of the country study in all their phases: base-line study; design, implementation and evaluation of the intervention. They will carry out the respective activities at the research sites in their country and contribute to the development of the research framework and the cross-country analysis. They will be responsible for the detailed planning, timely execution and high quality of the activities they are leading. The country teams will submit annual detailed work plans, including detailed estimations of resources and deadlines for deliverables. Latin American participants will be also responsible for organising the different workshops.

Four teams will be established that combine participants with different levels of experience: each team is made up of one participant of the ongoing Equity-LA project and one of the new participants. Teams are formed as followed: Spain-Chile; Belgium-Argentina; Colombia-Mexico; Brazil-Uruguay. Participants of the Equity-LA project will provide scientific support to its partner country for development of WP2-4. Therefore, each new participant institution will have a scientific back-up team that will provide both long distance and in situ support.

** National steering committee*

At the beginning of the project, a national steering committee will be set up in each LA country. The national steering committee aims at avoiding a fragmented account of problems and solutions and ensuring equal relationship between researchers and other participants. It will be composed of no more than seven members, representing all stakeholders involved in the healthcare, thus consisting of healthcare professionals, managers, users and researchers of the involved IHNs.

The national steering committee will be in charge of

- analysis of situation (base-line study);
- identification of problems hampering care coordination in the IHNs and definition of intervention measures;
- implementation, monitoring and adaption of interventions;
- supervision of one or two participating health centre(s) in their country during 18 months;
- contribute to the recruitment and training of health professionals (see WP3, page 19).

The members of the national steering committee will sign a long-standing collaboration agreement as in house consultants with the participant in each LA country that guarantee their full commitment.

** National scientific committee*

A National scientific committee will be established in each Latin American country, in which main stakeholders will participate: policy makers, health providers' representatives, professionals and civil society representatives related with the project's field of the research. Scientific officers of the EC representing each country will also be invited to participate. It will be comprised of 5-7 members. The objective of this committee is to provide technical support to the research, to address emerging issues throughout the project and to facilitate the ownership of the research by key stakeholders.

The national scientific committee will:

- provide technical support to the country based research team;
- address emerging issues along the project;
- contribute to dissemination of findings along the research.

** International scientific committee*

An independent, international scientific committee will be set up, consisting of key experts in the field of research (Box 3). They will provide an external view of the quality of the project's process. This committee will meet every year. The timing of the meeting will coincide with the project workshops.

The international scientific committee will:

- review and comment on draft annual work plans and reports;
- assure quality of the scientific work performed;
- advise on the scientific aspects of the project;
- act as an independent arbitrator within the consortium on scientific matters.

Box 3: Provisional international scientific committee

Expert	Institution	Area of expertise
Reynaldo Holder	Pan American Health Organisation (PAHO)	Integrated healthcare networks
Hernán Montenegro	World Health Organisation (WHO)	Integrated healthcare networks
Juan Garay	European Commission	Health policies
Alicia Ugá	Escola Nac. de Saúde Pública FIOCRUZ, Brasil	Health quality and evaluation
Asa Cristina Laurell	Universidad Autónoma Metropolitana, Mexico	Health policies
Nuria Homedes	School of Public Health, The University of Texas Health Science Centre at Houston	Health services assessment

Project management and coordination mechanisms

To ensure that a genuine team is formed and the project is coordinated and managed effectively, a series of mechanisms will be needed to put in place:

- Biannual meeting of the project management committee;
- Annual meeting of the national scientific committee meetings;
- Annual meeting of the international scientific committee meetings;
- Administrative and financial support;
- Annual action planning;
- Web site;
- Permanent communication (web site, e-mails, phone calls, etc.).

These mechanisms will ensure that similar data sets are collected and a common explanatory framework is developed, so that comparative analysis of the results is possible. It will also allow to monitor progress of the WPs and to make sure progress is made according to plan.

In general, meetings and workshops intend to build capacity and also to facilitate an optimal transfer of results from the previous phase to the subsequent one. Moreover, they should allow for identification of problems that emerged while working on the different work packages and are part of the project review about its advancement. The organisation and location of the workshops will alternate between the Latin American countries. Workshops will last an average of 10 calendar days and the estimated number of participant is 2 people per beneficiary.

The project management committee will meet every six months in order to monitor progress and it will make sure that project objectives are fulfilled and will make decisions on the overall management of the project. It will discuss potential problems and solutions. These meetings will take place in the framework of the project workshops. They may meet more frequently, via teleconference if needed according to the circumstances.

National scientific committee meetings will meet annually in each country in order to address emerging issues.

The international scientific committee will meet annually in order to provide an external review of the quality of the project's processes.

Each partner will elaborate a detailed action plan at the beginning of every year and an activity and financial report at the end of the year. Those reports will feed the project's global technical and financial reports that the project coordinator will submit periodically to the EC. The project management office will provide support for the development of these reports.

A project web site with secure intranet will be created for the project to ensure a) a wide dissemination of the project and its results and b) facilitated exchange of information and communication among partners throughout the project. This tool will further permit saving information (documents, audio files, etc.), holding chat sessions with partners and using a forum board to post comments and suggestions. The web page will provide information on:

- Research project in general
- Preliminary and final results reports
- Research protocols and instruments
- Documents relating to dissemination activities (i.e. workshop programmes, papers and documents provided; papers, newsletter, etc.)
- Directory of all participants
- Links of interests
- Research and dissemination activities timetable
- Follow-up of activities and their results

Permanent communication will be maintained among all participants by extensive use of emails, web site and conference calls between the project management committee meetings and the workshops, to ensure that there is continued communication between researchers within WPs, as the researchers will be working on their individual work packages, so largely in their own workplaces. Conference calls will be used when urgent matters need to be discussed. It is intended to set up a Voice over Internet Protocol (VoIP) communication structure (e.g. using Skype) that also enables video conferencing and simplifies communication within the consortium.

Working languages. The working languages will be Spanish and Portuguese, with periodic reports to the EC being produced in English. Dissemination activities will be conducted in any of the three languages depending on the context and circumstances.

Gender issues. The project takes into account the European policy of equal opportunities between women and men. It will promote gender equality both in the process of research as well as in the subject of the research.

The project will take the gender mainstreaming strategy of the Commission as a basis for integrating the gender issues in the project. It will address gender issues in the substance as well as in the process, as described under.

Interaction with European Commission Services/Agencies. In the context of the policy relevance of the research being carried out, the consortium will use appropriate mechanisms to ensure dialogue with Commission policy-makers and to guarantee regular and appropriate contacts with relevant Commission services/agencies. This may include i.e. meetings, briefings and informal contacts between the consortium and relevant European Commission services and representatives.

Workshops and meetings as part of capacity building activities

Capacity building is a transversal component of the project that will take place throughout its implementation addressing policy makers, researchers and health professionals. In addition to other activities (described in WPs 1-6 and B.1.3.1), it encompasses workshops and meetings with different participants and contents summarised in Figure 4.

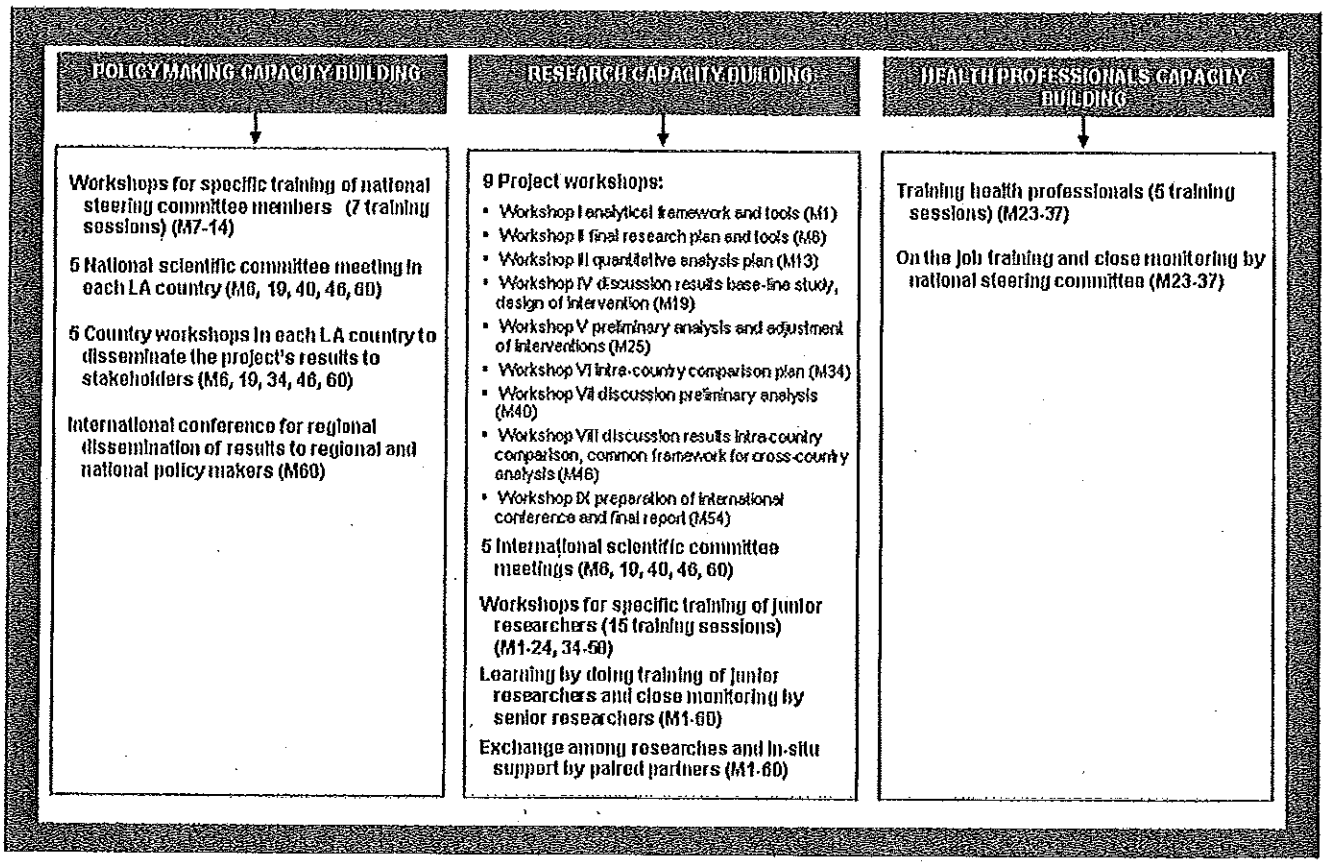
Policy making capacity building: a) training of the members of national steering committee by means of workshops to enhance their active participation in the action research process (7 training sessions, 7 trainees per country; b) 5 National scientific committee meetings to facilitate the ownership of the research and ensure that emerging issues are addressed by key stakeholders in each LA country (30). They will coincide with the project workshops in the host country and the estimated number of participant is 5-7 members; c) 5 country workshops in each participating Latin American country (30) addressed to main stakeholders to disseminate the project and its results along its development; c) an International Conference for regional dissemination of results to regional and national policy makers at the end of the project. The estimated number of participant is 2 people per benficiary (apart from the general public).

Research capacity building: (a) 9 project workshops planned every 6 months dedicated to train the teams to develop the skills necessary to conduct every phase of the research and to facilitate the optimal transfer of results from the previous phase to the subsequent one. Project workshops will last an average of 10 calendar days and the estimated number of participants is 2 people per beneficiary, except for the host country that will have the whole team including the national steering committee. The contents of these workshops, organised alternatively in every one of the Latin American countries will be subsequently used by each LA partner to train their team; (b) 5 International scientific committee meetings, coinciding with project workshops, to provide scientific advise on the quality of the project's processes; (c) specific training (formal training) of junior

researchers by means of workshops, as well as by learning by doing training and close monitoring in order to develop research skills (15 training sessions, 3-4 trainees per country); (d) exchange among researchers, that include, in addition to the project workshops, virtual meetings and in situ support by paired-partners.

Health professionals capacity building: a) specific training of health professionals to obtain needed capacities for the introduction of interventions in the IHN of each LA country, by means of a formal training (5 training sessions, 20 trainees per country), as well as an on the job training and close monitoring by national steering committee, with the support of partner 2.

Figure 4: Workshops and meetings as part of capacity building activities



B2.2 Beneficiaries

BENEFICIARY 1. Consorci de Salut i d'Atenció Social de Catalunya, Spain

The research co-ordinator; the Health Policy Research Unit (HPRU) is a leading research unit in health policy and health services in Spain. Its main areas of research are: health financing and its implications for equity; integration of healthcare and its implications for care coordination, quality, access and efficiency; social participation in health systems and migrants' healthcare. The HPRU is involved in the development of a multidisciplinary approach to health systems research and is a member of the Health Research, Teaching and Extension Network for Latin America (REDIDESAL).

HPRU forms part of the Consorci de Salut i d'Atenció Social de Catalunya (CSC), a public entity that groups public health providers of the Catalonian national health system. The CSC has contributed to the modernisation of the national health system in Catalonia, promoting the decentralisation by increasing autonomy and co-responsibility in healthcare management. CSC has a collaboration agreement with the PAHO to provide support regarding the introduction of IHN in the Americas. The CSC has wide experience in international research projects among them the ongoing Equity-LA project as a coordinator (FP7-SICA Project ID.223123), and other EC funded projects as participant (See page no. 37).

The CSC will be the project coordinator; hence will be responsible for the overall coordination and the scientific supervision of research activities. It will lead WP1, WP2, WP4 and WP7, and WP5 together with ITM (Belgium). The CSC also will provide scientific support to UChile.

Staff involved in the project

Principal Investigator: *M. Luisa Vázquez* MD, PhD, MSc, is head of the HPRU and has conducted research and training in the field of public health and health systems in Latin America for the last 25 years; first as a researcher of the University of Heidelberg and then as lecturer at the University of Liverpool, before moving to Spain in 1998. She has wide ranging experience in action-research, qualitative research methods and population surveys in health systems and services research. She has been the principal investigator in several research projects financed by the European Commission; and is the coordinator of the current Equity-LA project.

Ingrid Vargas, BA Econ, PhD, MSc is a health economist and researcher at the HPRU. Her areas of expertise are integration of care, equity and access to healthcare, health financing and health system reforms she is one of the main researchers in Equity-LA.

Marta B. Aller, BPharm, BA Anthrop, MPH and current PhD candidate, researcher at the HPRU, with experiences in quantitative methodology, systematic reviews and meta-analysis, as well as the design of tools for quality of care assessment. Her PhD thesis is on continuity of care between care levels in different healthcare contexts in Catalonia. She is research fellow in the current Equity-LA project.

Selected publications

Aller MB, Vargas I, Waibel S, Coderch-Lassaletta J, Sánchez-Pérez I, Llopart JR, Colomés LI, Ferran M, Garcia-Subirats I, Vázquez ML. Factors associated to experienced continuity of care between primary and outpatient secondary care in the Catalan public healthcare system. Gac Sanit. 2012 (accepted).

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BENEFICIARY 2: The Prince Leopold Institute of Tropical Medicine, Belgium

The Prince Leopold Institute of Tropical Medicine (ITM) Antwerp is one of the world's leading institutes for training, research and technical assistance in tropical medicine and healthcare in developing countries. In total, the Institute employs about 415 FTE (77 staff in the public health department, of which 55 scientists), technicians and supporting personnel and has an annual turnover of € 52,3 million (ITM Annual Report 2010). The Department of Public Health is structured into two research groups (Group Health Systems and Group Epidemiology and Disease Control). The department's research priorities are primarily based on the relevance for healthcare systems in developing countries, on the core values of primary healthcare - the universal right of every person to accessible, effective and high quality health services - and the pursuit of added value or innovation in international health policies. The department's research portfolio covers the domains of health policy, access to care, quality and human resources, and disease control. The ITM has wide experience in international research projects, many of them funded by EU: Equity-LA (SICA Project ID.223123); HESVIC (SICA Project ID.222970); NIDIAG (SICA Project ID. 260260). ITM is also member of the Health Research, Teaching and Extension Network for Latin America (REDIDESAL).

ITM will lead WP3 and WP6, and WP5 together with CSC (Spain); it will contribute to the other WPs and will also provide scientific support to UNR (Argentina).

Staff involved in the project

Prof. Jean-Pierre Unger, Dr. Pierre De Paepe and Dr. Patrick Van Dessel belong to the Unit of Public Sector Healthcare of ITM's Department of Public Health. Together they recently published on the health systems of Costa Rica, Colombia and Chile. Moreover, they are involved in the ongoing Equity-LA project, and the project HESVIC (Health system stewardship and regulation in Vietnam, India and China), a project focusing on stewardship and regulation as it relates to governance of health systems in policy and practice. They

Principal Investigator: *Prof. Jean-Pierre Unger*, MD, MPH, PhD and Senior Lecturer, is a specialist in health services organisation and has experience in national health planning activities in Latin America, Asia and Africa. He provided scientific guidance for health systems development in different countries.

Dr. Pierre De Paepe, MD, MPH, is an expert who worked in health district development and health sector reform in Latin America for over two decades. He coordinated PHC programmes in Peru and Argentina, and provided technical assistance to the Ministry of Health of Ecuador during the health sector reform.

Dr. Patrick Van Dessel, MD, MPH, is a public health specialist who has worked in several African countries and in Bolivia, and presently in the HESVIC project in Asia.

Selected publications

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BENEFICIARY 3: Universidad del Rosario, Colombia

The University of Rosario (URosario) is a private non-profit institution, founded in 1653, and has been certified with the Institutional High Quality Accreditation by the Colombian Ministry of Education. Furthermore, the University has been the first one in the country applying for a certification of high quality in research, awarded by the European University Association in 2006. The University is a teaching institution that carries out research and has an important extension policy. In URosario, of the 31 research groups, 28 are officially recognized by COLCIENCIAS (Colombia Institute for Science and Technology Development). The Urosario has developed experience in international cooperation projects, aiming at reaching academic excellence, institutional strengthening and development of scientific knowledge, funded by the EU, IDB, PAHO, PNUD, among others. URosario is member of the Research Network, Teaching and Health Extension for Latin America (REDIDESAL).

URosario has participated in several international research projects in the framework of EU ALFA programme or FP6 and FP7: EVAL-HEALTH (Project ID. 261389) and the current Equity-LA (SICA. Project ID.223123); The School of Medicine and Health Sciences addresses the understanding of social dynamics and health policy related public health, community health, and clinical research. The School has become a national reference for the formulation of public policy for vulnerable populations.

URosario will be involved in WP2-4 leading the project in Colombia, and will contribute to WP1 and WP5-7. URosario will also provide scientific support to UV (Mexico).

Staff involved in the project

Principal Investigator: Amparo Mogollón, BPhy, PhD is senior lecturer and researcher at the Research Centre in Health Sciences at the School of Medicine and Health Sciences in the University of Rosario (URosario). She is member of the research group State, Public Policy and Social Participation of the URosario. She has wide expertise in training and health policy research with a special focus on access to healthcare, integration of care and vulnerable population and is the leading scientist in current Equity-LA project in Colombia.

Angela M. Pinzón MD, MPH, PhD, is senior lecturer at the same research centre and has conducted research and training in the field of public health for over ten years. She has worked in Latin America, the USA and Africa in child health. She has wide experience using quantitative research methods, in particular conducting population surveys in health.

Virginia García, BPhy, MAAnthrop, is a lecturer at the Research Centre in Health Sciences at the School of Medicine and Health Sciences and has experience in community health, anthropology and qualitative research. She also participates in Equity-LA.

Selected publications

Vargas I, Vázquez ML, Mogollón AS, Unger JP. Barriers of access to care in a managed competition model: lessons from Colombia. BMC Health Serv Res 2010; 10: 297-308.

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BENEFICIARY 4: Instituto de Medicina Integral Prof. Fernando Figueira, Brazil

The Instituto de Medicina Integral Prof. Fernando Figueira (IMIP), a non-profit non-governmental institution created in 1960, is recognised by the Brazilian Ministry of Education as a teaching academic hospital and by the Ministry of Health as a referral hospital. The IMIP's main research fields are: healthcare delivery; epidemiology, mother and child health, evaluation of health programmes and policies and community based projects. Furthermore, IMIP offers undergraduate and postgraduate programmes on mother and child health, intensive and palliative care and health evaluation. Along with care delivery and teaching, research makes up the tripod that supports the IMIP's institutional mission. Its research board aims to coordinate, guide and support the development of research and knowledge production. The scope of activities has been extended within the last years, now consisting of seven research groups registered in the National Council for Scientific and Technological Development (CNPq) among them the Research Group for Healthcare Evaluation. IMIP has participated in various research programmes funded by different national and international funding bodies such as the Brazilian Ministry of Health or the European Union. For instance, INCO 97 (IC18-CT98-0340). The IMIP is one of the participants of the ongoing project Equity-LA (223123)

The IMIP will lead the project in Brazil, being responsible for WP3 and the quantitative part of WP2 and contributing also to WP1 and WP5-7. IMIP will provide scientific support to UDELAR (Uruguay).

Staff involved in the project

Principal Investigator: *Isabella Chagas Samico*, MD, MSc, PhD is a pediatrician, lecturer and researcher at the IMIP. She is the coordinator of the Research Group on Healthcare Evaluation of the IMIP as well as of the Master's program in Health Evaluation. She has experience in the field of medicine and public health, with special emphasis on health evaluation care program evaluation and maternal and child health. She has been developing work in the area of implementation of health services and programs.

Fernando Antônio Ribeiro Gusmão Filho, MD, MSc, PhD. He is the coordinator of the Medicine course of the University of Pernambuco and teacher at postgraduate programs offered by IMIP; member of the Research Group on Healthcare Evaluation; as well as the Epidemiology Unit. His research areas primarily regard health services research and public health.

Selected publications

Vidal SA, Samico I, Frias PG, Hartz ZMA. An exploratory study of the costs and consequences of prenatal care in the Family Health Program. Rev Saude Publica 2011 (3):467-74.

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BENEFICIARY 5: Universidade de Pernambuco, Brazil

The University of Pernambuco is a public higher education institution, established in 1990. Its mission is to contribute to the sustainable development of Pernambuco through teaching, research and university extension. The university's central facilities are located in Recife, but the university also have decentralised campuses in several cities of Pernambuco; thus, it is a multi-centric university, made up of 13 units and 3 large teaching hospitals, It provides graduate and postgraduate training in health sciences, natural sciences and training of professionals. The University's vision is to be recognized by society and various levels of government for their contribution to sustainable development of social issues in all regions of Pernambuco, due to its excellence in teaching and research.

The UPE is the leading participant of the current project Equity-LA (SICA) FP7-HEALTH-2007-B Project ID.223123) in Brazil.

UPE will be responsible for conducting the qualitative study in WP2 and WP4 in Brazil and will contribute to WP1 and WP5-7. UPE will provide scientific support to UDELAR (Uruguay) specifically in the qualitative research component.

Staff involved in the project

Principal Investigator: *Maria Rejane Ferreira da Silva*, BSc Nurs, PhD, MSc, is a lecturer at the University of Pernambuco and the coordinator of the Maternal Health training program. She is researcher at the Research Centre Aggeu Magalhães/FIOCRUZ, where she has participated in different research projects and forms part of the municipal Laboratory in Support of the Health Decentralisation Process. She has wide experience in the use of qualitative research methods. She is the principal investigator of the Equity-LA project in Brazil.

Lia Giraldo da Silva Augusto, MD, MSc, PhD is senior lecturer and researcher at the UPE. Her areas of research in public health refer to environmental and occupational health policies.

Selected publications

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BENEFICIARY 6: Universidad de Chile, Chile

The University of Chile (UChile), founded in 1842, is the oldest higher education institution in Chile, a public university with internationally recognized high quality and placed at the top of the Chilean university system with regard to teaching, research, creation and dissemination, in all its areas of knowledge. UChile is the most renowned Chilean Institution in scientific and technological research. It counts for a third of the scientific publications in Chile and is know for the high percentage of competitive research projects in fields of technology, humanities and social sciences.

UChile has wide experience in international research projects in different areas, some funded by FP6 and FP7, and among them the following projects: CHAGASEPINE (HEALTH-2007-223034), DIVINOCELL (HEALTH-2007-223431) and ALFA programme. UChile is member of the Health Research, Teaching and Extension Network for Latin America (REDIDESAL).

The Salvador Allende Gossens School of Public Health at the University of Chile was founded in 1943 and constitutes Chile's most important training institution in public health research and training. Its research, extension and support in teaching programs contributed to attaining great international prestige. It has been conducting public health services research into technical teams from different levels of management in the Chilean health system.

UChile will lead WP2-4 in Chile and will contribute to WP1 and WP5-7.

Staff involved in the project

Principal Investigator:*Pamela Eguiguren Bravo*, BMid, MPH and PhD candidate, is lecturer and head of the Health Promotion Division of the School of Public Health and coordinator of the Observatory of Gender Equity in Health in Chile. Her research interest includes gender analysis in health and healthcare and qualitative research.

Oscar Arteaga Herrera, MD, MSc, PhD is head of the School of Public Health (SPH). He has wide experience in health policy and health services evaluation. He has experience as consultant for PAHO, BID and World Bank. His research areas include the analysis of IHN and public health.

Alvaro Lefio Celedón, MD, specialist in Public Health, belongs to the Health Promotion Division of Public Health School. He was Deputy Director of the Health Service Arauco. He has conducted research on infant mortality, health services evaluation, with mixed methodological approaches.

Selected publications

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BENEFICIARY 7: Universidad Veracruzana, Mexico

The University of Veracruz (UV) is a public higher education institution and the top regional public university in terms of offer diversification. Since 1980, the Public Health Institute, one of its 24 research centres, has held as its main objectives the postgraduate training of human resources and research development in public health. Since 1981, it has run specialization training in public health, now referred to as a Master's in Public Health, approved by the National Science and Technology Council (CONACYT) for entry in the National Register of Quality-Approved Postgraduate Courses due to its social relevance, results and longstanding collaboration with various sectors of society. The 8% of the students are from Central and South American countries. UV has experience in international collaboration projects among then some funded by EC, for example the ALFA programme, in different areas of education and research. UV is member of the Health Research, Teaching and Extension Network for Latin America (REDIDESAL).

One of the Public Health Institute research lines relates to the organized social response to healthcare and is aimed at generating and applying knowledge in matters regarding public health policies, public health services legal framework, strategic planning and management of health services and programmes, regulation and fiscal control in public health, innovation in healthcare systems and human resources training. The three researchers who form part of the Equity-LA II project actively pursue these research areas and two of them also possess the significant advantage of having held high-level decision-making roles in the country's local health ministries.

UV will be involved in WP2-4 leading the project in Mexico, and will contribute to WP1 and WP5-7.

Staff involved in the project

Principal Investigator: *Angélica Ivonne Cisneros* Luján BA Econ, MSc, in December 2011 completed the Leaders Program in International Health sponsored by PAHO/WHO, is senior researcher teacher in the specific lines of Public policies with special attention to: social participation in health, social control in health, health systems, health financing and budgeting, gender in health. She was General Director of Administration of the Ministry of Health of the Federal District.

Edit Rodríguez Romero MD, MPH, is senior researcher teacher in the specific lines of health systems, health legislation, training human resources for health. She was Minister of Health of the State of Veracruz and has been recognized with the Medal of Merit both state and national Health 2008, which granted both Veracruzana Society of Public Health as the Mexican Society of Public Health.

Dulce María Cinta Loaiza BA Econ, PhD, is senior research teacher in the specific lines of Public policies in health, social determinants of health, gender and health and training of human resources for health.

Elsa Ladrón de Guevara, MD, MRegDev, PhD is senior lecturer at the UV, current president of the Veracruzana Society of Public Health and the former director of the Public Health Institute. Her field of research refers to the analysis and evaluation of health policy and health services.

Selected publications

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BENEFICIARY 8: Universidad Nacional de Rosario, Argentina

The National University of Rosario (UNR) is a public and autonomous institution of the Argentinean Higher Education System, coordinated by the National Interuniversity Council (CIN). It is one of the biggest national university in the country and carries out teaching and scientific and technological development in all main branches of contemporary knowledge. The UNR was founded in 1968. Actually the institution includes 12 faculties, 3 institutes at secondary level and 1 interdisciplinary study centre. Its chief activities include 124 postgraduate, 63 graduate programs and 15 technical careers.

The Juan Lazarte Institute of Health (ISJL) is a foundation at the UNR, a joint venture with the Town Council and the Medical Association of Rosario, with the specific purpose of creating a "space for reflection and practice" oriented to the interdisciplinary study of health problems and planning and management of healthcare services. The main lines of research in recent years have been in the field human resources development, health services networks, primary care, epidemiology, social and institutional actors' representations of the health sector, appropriate technologies and health policy. The ISJL has developed a very significant internal network with most of the academic units of the University involved directly or indirectly in health and health education, which promotes multi-centric research projects. Its close relationship with the Secretary of Public Health of Rosario, as well with other public and private health agencies, encourages a sustainable technical cooperation including development projects, continuous education and operational research.

The Master in Public Health is a postgraduate programme of the UNR founded in 1994 and depends directly of the Superior Council; the academic supervision is made through the interdisciplinary studies centre (CEI in Spanish). This programme was certificated twice by the National Council of University Accreditation and Evaluation (CONEAU in Spanish). The MSP activities: teaching, research and technical cooperation, are usually managed by the ISJL.

Staff involved in the project

Principal Investigator: *Mario Roberto Rovere* MD, specialist in International Health, is the Director of the Master of Public Health of UNR. He has been regional consultant for Human Resources Development at PAHO/WHO, former National Secretary of Social Policy, and consultant for international agencies in health.

Irene Raquel Luppi BSc Stat, MPH is head of the Department for the Promotion of Research, and academic coordinator of the Master in Public Health. She has participated in a number of research projects in health services assessment, human resources, research methodology, and health information systems. She also provides advice to institutions, students and teachers.

Francisco Leone MD, Public Health specialist, lecturer of health services management of Master in Public Health and coordinator of technical cooperation of the ISJL. He was the former secretary for Administration and Management in the Province of Tierra del Fuego, and has management experience in various health institutions.

Alicia Aronna BSc Stat, MPH is research coordinator of the Master of Public Health, director of Health Statistics of the Secretary of Health of Rosario, and researcher in several projects related to health services assessment, human resources, and research methodology and health information systems.

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BENEFICIARY 9: Universidad de la República – Facultad de Enfermería, Uruguay

The University of the Republic (UDELAR), a public and autonomous entity with more than 150 years of history, is the first institution of higher education and research in Uruguay, and the only public university. UDELAR, with more than 80,000 students, is responsible for all public higher education in Uruguay and for 80% of the research in the country. It collaborates with a wide range of institutional and social actors to carry out multiple activities addressed at the application of knowledge and dissemination of culture. It is accountable to the national government. It is a member of the Association of Universities of the Montevideo Group and the Union of Universities of Latin America and the Caribbean. Its Sectorial Commission for Scientific Research (CSIC) aim is the promotion of research to contribute to the solution of public interest and social inclusion problems. Since 1990, UDELAR has participated in international academic collaboration programmes, including the EU ALFA programme I, II, III, and several international research projects among then some funded by FP7, in different areas of knowledge, such as CHIBCHA (223678) in health.

The Faculty of Nursing, belongs to University's Health area, was founded in 1950 as the School of Nursing and became a Faculty in August 2004. Its lines of research are closely linked with the development of the integration in the health system. Among others, research is conducted on emerging public health and health services problems: population ageing, quality of health services, human resources training in nursing, primary care components.

UDELAR will be involved in WP2-4 leading the project in Uruguay, and will contribute to WP1 and WP5-7.

Staff involved in the project

Principal Investigator: *Fernando Bertolotto*, BA Soc, MPH is senior lecturer and researcher at the Research Unit of the Nursing Faculty and coordinator of postgraduate training at the Institute of Public Health, Epidemiology and Development at the University of Bordeaux - France. He has wide experience in researh and action research in heath services and urban health policy in France.

Alicia Cabrera, MSc, lecturer and head of the Administration Department of the School of Nursing-UDELAR, Director of the Specialty and Master in Health Services Management and of the Doctoral Program in Health Sciences with the National School of Public Health of Cuba. She coordinates an international project on the composition and distribution of nursing resources in Latin America.

Josefina Verde, MSc and Lecturer, is head of the Postgraduate Centre of the School of Nursing UDELAR. Her lines of research include Diabetes, and she is the coordinator of the project "Prevalence of Diabetes in Uruguay", declared of National Interest by Parliament in 2003, 2004.

Teresa Menoni, MSc, is lecturer and coordinator of the Update on Family and Community Health course for Chilean professionals. Her research relates to healthcare access and vulnerable population.

Selected publications

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B2.3 Consortium as a whole

Roles and expertise of participants to be brought into the consortium

The Equity-LA II project will be undertaken by integrating the expertise of nine project participants: two European and seven Latin American. Of those, five are participants of Equity-LA.

The new participating middle income Latin American countries have been selected in order to represent different types of healthcare systems according to two components that influence healthcare integration: a) the degree of segmentation that refers to the segregation of the population into different healthcare subsystems and institutions[15]; and, b) the existence of private participation in the provision of care or insurance management. On the one hand, in segmented healthcare system, the financial and legal possibility of moving across segments is limited, and therefore coordination between healthcare providers of different subsystem is rare. On the other hand, the diversity of healthcare providers' ownership in health system private participated has been found an important barrier to establish alliances, shared objectives and strategies, and shared clinical co-ordination mechanisms[166]. The six middle income Latin American countries participating in the project represent different types of healthcare systems according to the degree of segmentation and private participation (Box 4). In addition, they also constitute a good geographical representation of Latin America (in the north: Mexico; South America north-western Colombia; South America eastern Brazil; and south Chile, Argentina and Uruguay).

Box 4: Types of health system selected for Equity-LA II project

		Segmentation degree	
		Integrated	Segmented
Private participation	Yes	Brazil (p++) Uruguay (p++)	Colombia (p+++) Chile (p++) Argentina (p+++)
	No		Mexico

p: private participation in provision

Source: modified from Gideon et al. 2010[167]

The European participants belong to different types of institutions: health system research unit at a public health providers' association and a private non for profit academic institution. The Latin American teams combine private (non for profit) and public, academic and research institutions. The first five previously proven successful Equity-LA participants (CSC, ITM, URosario, IMIP, UPE) have been joined by four new participants, all with expertise in health system research and healthcare networks.

All participants have been involved in the development of the proposal and have agreed to form a Consortium on the basis of clear distributed roles (Box 5).

The main feature of the project will be its participatory character. Even if leading roles have been distributed among the participants according to their areas of expertise, all participants will work as a team, enabling the project to achieve its objectives. This will be facilitated by the use of project web site, e-mail, video-conferences and shared research protocols. Participants will be encouraged to seek support from their team participant and from any other participant. Project workshops, meetings and scientific exchange will be an important opportunity for sharing expertise, building capacity as well as consolidating a scientific partnership.

The CSC research team will be responsible for the overall scientific coordination, development of research framework and tools, intra-country and cross-country analysis along with ITM, and the follow-up and scientific supervision of the research activities, building upon its previous experience coordinating the Equity-LA project. At the same time will team up with the UChile team to provide scientific support in the development of Chile's country study (WP2-4). It will build upon its research and management experience, as well as, on a good knowledge of the Latin American context. Its areas of expertise include integration of care, coordination and continuity of care in Latin America (with a focus on diabetes) and Spain (with a focus on COPD), and qualitative and quantitative research methods and action-research.

The ITM team will be responsible for leading the design and implementation of interventions and the dissemination and capacity building strategy due to their wide experience. Together with the CSC team, ITM will lead the cross-country comparative analysis, building upon their previous participation and experience in the Equity-LA project. Furthermore, ITM will contribute to the overall scientific development of the project and will team up with UNR to provide scientific support to carry out the Argentina's country study (WP2-4), building on their knowledge of the Argentinean health system acquired in other projects. Their areas of expertiseinclude action research, health policy and services research with a focus set on access to effective and quality health services in developing countries.

Box 5: Participant's roles of work packages

Participant N°	Institution	Participant's roles
Participant 1 CSC	Consorci de Salut i d'Atenció Social de Catalunya, Barcelona, Spain	**Project coordinator** Overall scientific coordination and administration (project management WP7) Development of research framework and tools (WP1) Scientific support to Chile: *paired with Participant 6* (WP2 -4) Cross-country analysis (WP5)
Participant 2 ITM	Prince Leopold Instituut Voor Tropische Geneeskunde, Antwerp, Belgium	Contribution to development of research framework and tools (WP1) Design implementation of interventions (WP3) Scientific support to Argentina: *paired with Participant 8* (WP2-4) Cross-country analysis (WP5) Development of capacity building and dissemination plans (WP6) Project management and coordination for Belgium (WP7)
Participant 3 URosario	Universidad del Rosario, Bogota Colombia	Contribution to development of research framework and tools (WP1) Base-line study (WP2); design, implementation and evaluation of intervention in Colombia (WP2-4); Scientific support to Mexico *paired with Participant 7* (WP2 and WP4) Contribution to cross-country analysis (WP5) Implementation of results dissemination and capacity building plans in Colombia (WP6) Project management and coordination in Colombia (WP7)
Participant 4 IMIP	Instituto de Medicina Integral Prof Fernando Figueira, Recife, Brazil	Contribution to development of research framework and tools (WP1) Quantitative base-line study, design, implementation and quantitative evaluation of intervention in Brazil (WP2-4); Scientific support to Uruguay (WP2 and WP4) *paired with Participant 9* (WP2 and WP4)Contribution to cross-country analysis (WP5) Implementation of results dissemination and capacity building plans in Brazil (WP6) Project management and coordination for Brazil (WP7)
Participant 5 UPE	Universidade de Pernambuco, Brazil	Contribution to development of research framework and tools (WP1) Qualitative data collection on base-line and analysis of intervention in Brazil (WP2 and 4); Scientific support to Uruguay in this field (WP2 and WP4) *paired with Participant 9* Contribution to cross-country analysis (WP5) Contribution to implementation of results dissemination and capacity building plans in Brazil (WP6) Project management and coordination for Brazil (WP7)
Participant 6 UChile	Universidad de Chile, Santiago, Chile	Contributes to development of research framework and tools (WP1) Base-line study, design, implementation and evaluation of intervention in Chile (WP2-4); *paired with Participant 1* Contribution to cross-country analysis (WP5) Implementation of results dissemination and capacity building plans in Chile (WP6) Project management and coordination for Chile (WP7)
Participant 7 UV	Universidad Veracruzana, Xalapa, México	Contribution to development of research framework and tools (WP1) Base-line study, design, implementation and evaluation of intervention (WP2-4); *paired with Participant 3* Contribution to cross-country analysis (WP5) Implementation of results dissemination and capacity building plans in Mexico (WP6) Project management and coordination for Mexico (WP7)
Participant 8 UNR	Universidad Nacional de Rosario, Argentina	Contribution to development of research framework and tools (WP 1) Base-line study, design, implementation and evaluation of intervention in Argentina (WP2-4); *paired with Participant 2* Contribution to cross-country analysis (WP5) Implementation of results dissemination and capacity building plans in Argentina (WP 6) Project management and coordination for Argentina (WP7)
Participant 9 UDELAR	Universidad de la República, Montevideo, Uruguay	Contribution to development of research framework and tools (WP1) Base-line study, design, implementation and evaluation of intervention in Uruguay (WP2-4); *paired with Participants 4 and 5* Contribution to cross-country analysis (WP5) Implementation of results dissemination and capacity building plans in Uruguay (WP6) Project management and coordination for Uruguay (WP7)

The URosario team will be responsible for the Colombia country study: data collection and analysis, design and implementation of interventions, capacity building and dissemination plans in Colombia. Additionally, they will team up with the UV team to provide support to the development of the Mexico's country study WP2-4) building upon their acquired experience and knowledge in the Equity-LA project; they will also contribute to finalising the research theoretical framework, and to the cross-country analysis, based on their research experience relating to access to healthcare, integration of care and diabetes.

The responsibility for the Brazil country study will be shared between IMIP and UPE. The IMIP team will be responsible for the quantitative data collection and analysis, design, implementation and evaluation of interventions, capacity building and dissemination plans in Brazil. The UPE team will be responsible for the Brazil qualitative data collection and analysis and will contribute to the other components of the project. IMIP and UPE participate in the on going Equity-LA project and building upon the experience and knowledge acquired in that project, they will team up with the UDELAR team to develop Uruguay's country study (WP2-4); they also will contribute to finalising the research theoretical framework, and to the cross-country analysis, building upon their research experience in access to health services, integration of care and diabetes.

The UChile team will be responsible for the Chile country study: data collection and analysis, design, implementation and evaluation of interventions, capacity building and dissemination plans in their own country. They also will contribute to finalising the research theoretical framework, and to the cross-country analysis, building upon their research experience relating to action research, gender analysis and qualitative methods, diabetes and healthcare networks.

The UV team will be responsible for the Mexico country study: data collection and analysis, design and implementation of interventions, capacity building and dissemination plans in Mexico. They will contribute to finalising the research theoretical framework, and to the cross-country analysis, building upon their research experience relating to health policy research, gender analysis in health and diabetes.

The UNR team will be responsible for the Argentina country study: data collection and analysis, design, implementation and evaluation of interventions, capacity building and dissemination plans in Argentina. They also will contribute to finalising the research theoretical framework, and to the cross-country analysis, building upon their research experience relating to human resources development, quality of care and health workers training.

The UDELAR team will be responsible for the Uruguay country study: data collection and analysis, design and implementation of interventions, capacity building and dissemination plans in Uruguay. They also will contribute to finalising the research theoretical framework, and to the cross-country analysis, building upon their research experience relating to diabetes, public health policy and action-research.

Institutions participating in the consortium hold the necessary complementary skills, have experience inscientific collaboration and are committed to the research project (Box 6). They will provide working space, time for the research team to work on the project, institutional support to dissemination activities and space for national and international meetings. They have long standing relationship with the health services that will ensure their involvement in the process of research from the very beginning. In addition, an ad hoc long standing collaboration agreement will be established with the health services networks that constitute the study areas. Furthermore, they will look for complementary funding, for instance, for additional dissemination activities or to expand areas of research.

Box 6: Expertise of the participants

	1 CSC Spain	2 ITM Belgium	3 URosario Colombia	4 IMIP Brazil	5 UPE Brazil	6 UChile Chile	7 UV Mexico	8 UNR Argentina	9 UDELAR Uruguay
Research methods	✓	✓	✓	✓	✓	✓	✓	✓	✓
Action research	✓	✓				✓		✓	✓
Integration and coordination of care	✓	✓	✓	✓	✓				
Quality of care	✓	✓					✓	✓	
Access to health care	✓	✓	✓	✓	✓	✓	✓	✓	✓
Integrated Health Services Networks	✓	✓	✓		✓	✓		✓	✓
Health services evaluation	✓	✓		✓	✓	✓	✓	✓	
Diabetes	✓	✓	✓	✓	✓		✓		✓
COPD	✓		✓		✓				
Gender analysis			✓			✓	✓		
Project management	✓	✓				✓		✓	
Training and capacity building	✓	✓	✓	✓	✓	✓	✓	✓	✓

1. CSC, Consorci de Salut i d'Atenció Social de Catalunya; 2. ITM, Prince Leopold Institute of Tropical Medicine; 3. URosario, Universidad del Rosario; 4. IMIP, Instituto de Medicina Integral Prof Fernando Figueira, Brazil; 5. UPE, Universidade de Pernambuco; 6. UChile, Universidad de Chile; 7. UV, Universidad Veracruzana, México; 8. UNR, Universidad Nacional de Rosario, Argentina; 9. UDELAR, Universidad de La República, Uruguay.

Existing relationships between participants

Many of the participants have experience working together previously in this research setting (Box 7). The project coordinator has collaborated with some participants involved in the project on many different occasions. In addition the European participants have a wide experience and knowledge of Latin American health systems research, and in facilitating policy implementation processes in Europe and Latin America.

Box 7: Participants who have worked together prior to development of the proposal

	1 CSC	2 ITM	3 URosario	4 IMIP	5 UPE	6 UChile	7 UV	8 UNR	9 UDELAR
1 CSC		✓	✓	✓	✓	✓	✓		
2 ITM	✓		✓	✓	✓	✓	✓	✓	
3 URosario	✓	✓		✓	✓	✓	✓		
4 IMIP	✓	✓	✓		✓				
5 UPE	✓	✓	✓	✓					
6 UChile	✓	✓	✓				✓		
7 UV	✓	✓	✓			✓			
8 UNR		✓							
9 UDELAR									

1. CSC, Consorci de Salut i d'Atenció Social de Catalunya; 2. ITM, Prince Leopold Institute of Tropical Medicine; 3. URosario, Universidad del Rosario; 4. IMIP, Instituto de Medicina Integral Prof Fernando Figueira, Brazil; 5. UPE, Universidade de Pernambuco; 6. UChile, Universidad de Chile; 7. UV, Universidad Veracruzana, México; 8. UNR, Universidad Nacional de Rosario, Argentina; 9. UDELAR, Universidad de La República, Uruguay.

Sub-contracting

Project audits and design and maintenance of the project web site, activities that do not concern the research work itself (non core activities), but that are needed in order to a) provide to the EC a certificate on the financial statements; and b) to ensure a wide dissemination of the project and its results and facilitate exchange of information and communication among partners throughout the project. Beneficiary N°1 will subcontract the design and maintenance of the project web site for the amount of 9750€ and the beneficiaries 1 to 9 (except beneficiary N°5) will subcontract the audit.

In compliance with the guide for Financial Issues relating to FP7 indirect actions, all the beneficiaries will ensure transparent bidding procedures before selecting a subcontractor, following the principle of the best price-quality ratio under conditions of transparency and equal treatment. For public entities will follow the procurement principles established by their national authorities. Private legal entities will follow the rules that they usually apply for the selection of procurement contracts, respecting in any case the terms of the ECGA.

Third parties (other than subcontractors)

For the management of funds, the University of Pernambuco (UPE) has a prior agreement with the Instituto de Apoio a Fundação Universidade de Pernambuco by means of which the latter handles the financial and administrative tasks of the UPE.

The Instituto de Apoio a Fundação Universidade de Pernambuco is a non-for profit foundation, created to provide support to the UPE in managing research and development projects that receive external funding, providing the administrative and financial resources to the University of Pernambuco (UPE) free of charge.

B2.4 Resources to be committed

The participant institutions will provide a team that will be responsible for the project implementation in their own country and/or for the provision of support to their paired country, will contribute to the cross-country analysis, implement the capacity building strategy, liaise with additional stakeholders and make sure that the research objectives will be achieved. For the research to be successful, additional resources are necessary. This is a health systems action research project with an important component of capacity building; hence, the resources requested are needed basically for personnel time, training and dissemination activities and for the overall project coordination and management.

The budget includes eligible direct and indirect costs. Direct costs are all eligible costs directly attributed to the project in accordance with the activities given in the work packages. The requested EC financial contribution respects the indicated upper funding limits: 75% for RTD activities, 100% for Management and other activities. This proposal does not require Demonstration activities. Costs are allocated according to the corresponding type of activity: RTD for scientific activities, MGT for management activities and OTHER for dissemination and capacity building.

The total cost of the project, as described in A3, is 7,413,930€ of which 80% corresponds to RTD (5,947,974€), 4% to MGT (293,117€) and 16% corresponds to OTHER (1,172,839€). The requested EU contribution is 5,926,937€ of which 33.3% (1,970,863€) is allocated to capacity building, a transversal component that takes place throughout the project. Its expenses, mostly personnel costs, have been budgeted in the corresponding work packages as RTD (74%) or OTHER (26%).

The **budget breakdown** is summarised below in Box 8. Financial information breakdown cost and disaggregated by partners in *Boxes 9-17.*

The difference between participant 1 requested funds and the rest is to cover activities regarding overall scientific supervision and management of the project. Management funds for the project administration include personnel costs, travel and subsistence (one travel per year to support beneficiaries management activities), and subcontracting (certificated of financial statements). Other subcontracting funds are for Web page design and maintenance.

Differences between Latin-American participants are due to different indirect cost (20%; 60%; 10%) and salaries. Furthermore, participants 1-4 have an additional budget allocation to provide scientific support to the new participants (6-9).

1. Personnel Costs (3.635.194€)

The cost of personnel assigned to the project represents the main share of the budget, of which 77.6% is dedicated to RTD, 4.5% Management and 17.9% to OTHER. The budget includes funding for researchers and administrative staff, calculated in accordance with the person-months per participant given in the Project effort by activity per beneficiary (Annex I WT7). Salaries are calculated based on the unit costs provided by individual participants. Administrative staff has only been requested for the project coordinator (project manager (30p/m) and administrative support (30 p/m).

2. Other direct costs (1.770.761€)

a) Travel and subsistence

- **For project workshops** are essential in order to facilitate an optimal transfer of results from the previous phase to the subsequent one, to identify problems, and to monitor and control the progress of the project. They are also part of the capacity building strategy not only by facilitating the exchange among researchers but also by including specific training activities. A workshop has been planned every 6 months, totalling 9 workshops for the length of the project of which 8 are dedicated to RTD activities and the last one to the preparation of the Regional Conference for the regional dissemination of results (OTHER). The last day of every workshop is dedicated to the project management committee meeting (Management). In addition, the International Scientific committees will participate in 5 workshops (one per year).

Workshops will last an average of 10 calendar days and the estimated number of participants is 1 or 2 per beneficiary; and, in 5 workshops, also 7 members of the International scientific committee. The budget for the workshops includes funds for travel expenses on an economy class basis and per diem expenses. Subsistence costs and accommodation have been calculated for all the activities on the basis that only beneficiary 2 (ITM) will opt for flat rate according to Financial guide and the daily allowances of the European Commission. The other beneficiaries will opt for reimbursement of per diem and accommodation costs according to eligible costs.

Costs have been calculated on the basis that each meeting will be held at the location of one of the project participants and, therefore, one of the participants will not require travel costs. The project coordinator has additional subsistence funds to support the beneficiary responsible for preparing and organizing the corresponding meeting.

- In situ exchange

Participants of the previous Equity-LA (1-4) will provide in situ scientific support to participants 6-9 during WP2 and 4. Additionally participant 2 will provide scientific support to beneficiaries 3-9 during the implementation of the interventions (WP3). Budget includes funds for travelling on economy basis (2-3 travels according to the beneficiary) and per diem expenses (RTD and OTHER).

- **For the regional conference.** At the end of the project a regional conference will be organised for the wider dissemination of research results. The international conference will last 3 days. 1 or 2 people per beneficiary will attend the conference. Two extra days have been calculated to collaborate in the final preparations and conference follow-up. The budget for the regional conference includes funds for travel expenses on an economy class basis and per diem expenses (OTHER).

- For national conferences

The budget also includes funding for each beneficiary to attend two national conferences per year (one person). Funds cover travel, conference inscription and subsistence for 4 days (OTHER).

b) Organization of meetings and workshops

The budget for workshops includes funds to rent a meeting room and a catering service. The hosting participant of the workshop will deal with travel and per diem expenses for the members of the International Scientific committee (RTD).

Country workshops will be held annually in each participating Latin American country to disseminate the project *and its results along its development. Funds have been allocated to cover the derived expenses.*

Regional conference. At the end of the project a regional conference will be organised for the regional dissemination of research results. Funds have been allocated to the hosting partner to cover derived expenses of its organisation. The international conference will last 3 days. (OTHER)

c) Consumables

Funds requested for stationary include bibliographic materials, paper, CDs, library costs, digital voice recorders, photocopies and other incidental supplies that are principally expendable in nature (RTD). It also includes the ATLAS-ti software to analyse qualitative data, SPSS software for statistical analysis and Reference Manager to manage the bibliography references (RTD). The budget also included the provision of basic computer equipment to Latin-American participants (one PC for each LA participant) (RTD).

The budget includes funding for training material to national steering committee members, junior researchers and health professionals (RTD).

d) Fieldwork

The funds necessary to cover field research activities have been calculated, on the basis of previous experiences on the LA countries budget (RTD):

- to cover the costs of the professionals and users surveys: supervisors, interviewers, training, travel expenses, printing of the questionnaires and data entry and processing. It has been calculated on the basis of a sample size of 692 with respect to health professionals (173 for each IHN and phase) and 1,568 for users (392 patients per IHN and phase).

- to support additional activities of the qualitative study: The budget includes funding for transport for interviewers and per diem for team members (interviewers, supervisors and observers) that participate in focus groups and data transcription. It has been calculated on the basis of a sample size of 16 focus groups (8 groups per IHN and phase) and 60 individual interviews (15 interviews per IHN and phase).

- to design and implement the intervention: transport cost and per diem for trainers.

e) Publications

The budget includes funding for each beneficiary to cover fees of open access scientific journals and for leaflets, essential components of the dissemination strategy (2 open access papers per country) (OTHER).

Explanation of specific capacity building budget allocation

The project adopts a participatory action research, which means that many decisions will depend on the needs identified in each phase of the project. Capacity building is a transversal component of the project that will take place throughout its implementation in three main areas: 1) policy making capacity building for the planning, management and organisation of health systems by involving key stakeholders from the beginning of the project; generating evidence based tools for the development of policy; and, through research dissemination 2) strengthen research capacity of all involved institutions in health system research through specific training of junior researchers and exchange of knowledge and experiences among senior researchers; and 3) improve health professional knowledge and skills on care coordination and quality of care through in-service training programmes.

In this section, the funds specifically allocated to capacity building are described. The main share of the funding to capacity building are junior and senior researchers' time (personnel costs), allocated to the corresponding work package WP (RTD or OTHER).

The **capacity building budget allocation** is summarised in Box 18 below.

At the beginning of the project a common capacity building strategy will be developed on the basis of the need assessments carried out by each partner (0.3% of the requested EU contribution). The total estimated effort in person-month for this activity is 0.625 p/m over 6 months per beneficiary imputed to WP6 (OTHER).

Funds for the implementation of capacity building strategy are allocated to the three main areas:

(i) Policy making capacity building (9.3% of the requested EU contribution)

Funds have been allocated to cover expenses of the national steering committee members' training either as formal training (workshops) or learning by doing training, conducted by junior researchers under seniors' supervision. The number of training sessions will depend on the needs of each committee. Allocated funds have been calculated for 7 training sessions, of 4 hours each and 42 trainees (7 per country). Formal training will take place mainly during WP2 and the beginning of WP3 and learning by doing training during the development of WP 2, 3 and 6. This represents a total of 36.3 p/m of junior researchers and 2 p/m of the senior researchers in the corresponding WP (RTD and OTHER). The budget also includes per diems for the members to assist the trainings and meetings. Policy making capacity building strategy also includes generation of evidence and its dissemination to national and regional policy makers and other relevant stakeholders. Dissemination will be done through national and international workshops and conferences and through translation of results into tools to inform policy making, such as best practices reports and policy guidelines. The total estimated effort in person-month allocated to activities conducting to these policy tools (159.6 p/m) of junior and senior researchers imputed to WP6 (RTD and OTHER).

(ii) Research capacity building of the involved institutions (20% of the requested EU contribution) RTD

Research capacity building comprises: (1) specific training (formal training) of a minimum of 24 junior researchers (3 per beneficiary) by senior researchers (0.3 p/m imputed to WP 1-5 (RTD)). Funds have been allocated to 15 sessions; (2) close monitoring to junior researchers by senior researchers (52.6p/m imputed in WP 1-5, 12% of senior researchers time (RTD)); (3) supervised participation of junior researchers in all phases of the research: data collection of the base-line study, design, implementation and evaluation of interventions, and data analysis (326 p/m imputed to WP 1-5 (RTD)); and (4) exchange among researchers that include participation in the workshops and in-situ support by paired partner and in situ support on the implementation of the interventions by beneficiary 2 to partners 3-9 (see above, travel and subsistence (RTD)).

(iii) Health professionals' capacity building (3.7% of the requested EU contribution)

Funds have been allocated to cover expenses of training and monitoring to health professionals during the implementation of interventions conducted by national steering committee and researchers of each country team. The number of sessions will depend on the type of intervention to be implemented. Funds have been allocated to 5 sessions of 4 hours each and 120 health professionals (20 professionals per intervention IHN). The costs are based on a total estimated effort of 101 p/m of senior and 126 p/m of junior researchers over 14 months imputed to WP3 (RTD). They also include per diem for trainers and reserved funds to remunerate the in-house consultant if it is considered necessary/appropriate.

Sub-contracting. (81.750 Euro) (Management and OTHER)

The budget includes funds to subcontract the design and maintenance of the project web site (9,750€) (OTHER) and the beneficiaries 1 to 9 (except beneficiary N°5) will subcontract the audit (9,000€ per beneficiary) (Management).

Box 8: Financial Information: Breakdown on cost (in euro)

Category cost	Activity	CSC	ITM	URosario	IMIP	UPE	Uchile	UV	UNR	UDELAR	Total
Personnel (total)		**829.329,08**	**509.677,00**	**506.632,60**	**305.210,60**	**80.205,00**	**332.459,00**	**415.147,41**	**322.328,00**	**334.208,00**	**3.635.196,69**
Research personnel		**586.615,00**	**377.833,00**	**426.058,60**	**240.744,60**	**80.205,00**	**261.547,00**	**331.814,68**	**253.258,00**	**263.114,00**	**2.821.181,88**
Senior research	RTD	154.165,20	111.491,36	161.165,65	96.699,22	30.944,00	141.824,99	174.978,85	138.140,68	142.187,63	1.151.597,58
Junior research	RTD	432.449,80	266.341,65	264.884,95	144.045,38	49.261,00	119.722,01	156.835,83	115.117,32	120.926,37	1.669.584,31
Research fellow dissemination	OTHER	78.050,08	131.844,00	80.582,00	64.466,00		70.912,00	83.332,73	68.070,00	71.094,00	649.350,81
Project manager and administrative support	MGT	164.664,00									164.664,00
Travel and subsistence (total)		**126.266,00**	**66.225,00**	**55.160,00**	**44.600,00**	**10.940,00**	**38.106,00**	**55.680,00**	**41.930,00**	**41.280,00**	**480.187,00**
Workshops I to VIII	RTD	60.800,00	38.100,00	26.040,00	20.880,00	8.120,00	24.906,00	40.180,00	29.680,00	24.080,00	272.786,00
In situ scientific exchange	RTD	31.866,00	18.900,00	7.480,00	7.760,00						66.006,00
Coodinator (travel and per diem)- management activities	MGT	19.600,00									19.600,00
National Conferences	OTHER			10.000,00	7.500,00		10.000,00	10.000,00	4.250,00	10.000,00	51.750,00
Workshop IX	OTHER	7.000,00	4.100,00	4.000,00	4.230,00	1.410,00		5.500,00	4.000,00	3.600,00	33.840,00
Regional Conference	OTHER	7.000,00	5.125,00	7.640,00	4.230,00	1.410,00	3.200,00		4.000,00	3.600,00	36.205,00
Meetings and workshops organization (total)				**26.666,40**	**38.666,40**		**21.125,00**	**35.166,40**	**21.500,00**	**21.500,00**	**164.624,20**
Workshops I to VIII	RTD			3.000,00	3.000,00		1.500,00	1.500,00	1.500,00	1.500,00	12.000,00
International Scientific Committee meeting	RTD				12.000,00				6.000,00	6.000,00	24.000,00
Workshop IX	OTHER						1.125,00				1.125,00
International Scientific Committee meeting	OTHER						4.500,00				4.500,00
Country workshops	RTD			23.666,40	23.666,40		14.000,00	23.666,40	14.000,00	14.000,00	112.999,20
Regional Conference	OTHER							10.000,00			10.000,00
Publications (total)		**5.000,00**	**8.100,00**	**6.400,00**	**4.400,00**		**6.400,00**	**6.400,00**	**6.400,00**	**6.400,00**	**49.500,00**
Open access papers and leaflets	OTHER	5.000,00	8.100,00	6.400,00	4.400,00		6.400,00	6.400,00	6.400,00	6.400,00	49.500,00
Fieldwork (total)				**173.647,00**	**165.396,00**	**8.752,00**	**156.748,00**	**173.648,00**	**156.748,00**	**156.748,00**	**991.687,00**
Qualitative study	RTD			20.357,00	12.517,00	8.339,00	19.357,00	20.357,00	19.357,00	19.357,00	119.541,00
Quantitative study	RTD			120.291,00	120.292,00		106.348,00	120.292,00	106.348,00	106.348,00	679.919,00
Implementation	RTD			10.500,00	10.500,00		11.100,00	10.500,00	11.100,00	11.100,00	64.800,00
In-house consultant (national steering committee)	RTD			22.499,00	22.087,00	413,00	19.943,00	22.499,00	19.943,00	19.943,00	127.327,00
Consumables	RTD			14.260,00	14.260,00	2.200,00	13.260,00	14.260,00	13.260,00	13.260,00	84.760,00
Sub-contracting (total)		**18.750,00**	**9.000,00**	**9.000,00**	**9.000,00**		**9.000,00**	**9.000,00**	**9.000,00**	**9.000,00**	**81.750,00**
Web page design	OTHER	9.750,00									9.750,00
Audit	MGT	9.000,00	9.000,00	9.000,00	9.000,00		9.000,00	9.000,00	9.000,00	9.000,00	72.000,00
INDIRECT COSTS (*)		**192.119,02**	**350.401,20**	**156.553,20**	**114.506,60**	**20.419,40**	**340.858,80**	**70.030,18**	**337.299,60**	**344.037,60**	**1.926.225,60**
TOTAL ELEGIBLES COTS		**1.171.464,10**	**943.403,20**	**948.319,20**	**696.039,60**	**122.516,40**	**917.956,80**	**779.332,00**	**908.465,60**	**926.433,60**	**7.413.930,49**
EC REQUESTED		**967.679,80**	**769.470,00**	**746.076,00**	**549.727,50**	**92.733,30**	**729.172,40**	**618.438,00**	**718.687,20**	**734.952,80**	**5.926.937,00**

* Standard flat rate of 20%: CSC, URosario, IMIP, UPE
* Specific flat rate 60%: ITM, Uchile, UNR, UDELAR
* Simplified method 10%: UV

Box 9: Budget Participant 1 (CSC)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**	**61.745**	Senior 7.5 p/m Junior 4.5 p/m	**154.372**	Senior 18 p/m Junior 12 p/m	**138.335**	Senior 16 p/m Junior 10 p/m	**103.061**	Senior 14 p/m Junior 10 p/m	**123.438**	Senior 15 p/m Junior 10p/m					**586.615**
	Subcontracting (total)															
	Other direct cost (total)	**15.200**		**23.533**		**15.200**		**31.133**		**7.600**						**92.666**
	Travel and subsistence to project workshops	15.200	Workshops I and II 2 people - 20 days - 60l per diem	7.600	Workshop III 2 people - 20 days - 60l per diem	15.200	Workshops IV and V 2 people - 20 days - 60l per diem	15.200	Workshops VI and VII 2 people - 20 days - 60l per diem	7.600	Workshop VIII 2 people - 20 days - 60l per diem					60.800
	Travel and subsistence for in situ scientific exchange			15.933	2 people - 20 days - 60 l per diem			15.933	2 people - 20 days - 60 l per diem							31.866
MGT	**Personnel Cost (total)**													**164.664**	Adm. Supp. 30 p/m Project mag 30 p/m	**164.664**
	Subcontracting (total)													**3.000**		**3.000**
	Audit													3.000	2 audits for certificates of financial statements	3.000
	Other direct cost (total)													**13.600**		**13.600**
	Travel and subsistence for management support													13.600	5 trips for 1 person - 7 days - 60l per diem	13.600
OTHER	**Personnel Cost (total)**											**18.050**	Senior 5 p/m Junior 5 p/m			**18.050**
	Subcontracting (total)											**3.750**				**3.750**
	Web page											3.750	Web page design and maintenance			3.750
	Other direct cost (total)											**15.000**				**15.000**
	Travel and subsistence to project workshops											7.000	Workshop IX 2 people - 15 days - 60l per diem			7.000
	Travel and subsistence for Regional Conference attendance											7.000	2 people - 15 days - 60l per diem			7.000
	Publications											5.000	Publication open access papers and leaflets			5.000

Box 10: Budget Participant 2 (ITM)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**	33.712	Senior 3.5 p/m Junior 2.5 p/m	33.450	Senior 8.5 p/m Junior 7.5 p/m	83.487	Senior 8.5 p/m Junior 7.5 p/m	63.601	Senior 6.5 p/m Junior 5.5 p/m	73.544	Senior 6.5 p/m Junior 5.5 p/m					377.334
	Subcontracting (total)															
	Other direct cost (total)	9.525		4.763		28.425		9.525		4.763						57.000
	Travel and subsistence to project workshops	9.525	Workshops I and II 2 people - 10 days - 60l per diem	4.763	Workshop III 2 people - 10 days - 60l per diem	9.525	Workshops IV and V 2 people - 10 days - 60l per diem	9.525	Workshops VI and VII 2 people - 8 days - 60l per diem	4.763	Workshop VIII 2 people - 10 days - 60l per diem					38.100
	Travel and subsistence for in situ scientific exchange					18.900	1 person - 5 days - 60 l per diem									18.900
MGT	**Personnel Cost (total)**															
	Subcontracting (total)													3.000	2 audits for certificate of financial statement	3.000
	Other direct cost (total)															
OTHER	**Personnel Cost (total)**											131.844	Senior 10 p/m Junior 15 p/m			131.844
	Subcontracting (total)															
	Other direct cost (total)											15.300				15.300
	Travel and subsistence to project workshops											3.300	Workshop IX 2 people - 10 days - 60l per diem			3.300
	Travel and subsistence for Regional Conference attendance											3.900	2 people - 3 days - 60l per diem			3.900
	Publications											8.100	Publication open access papers and leaflets			8.100

Box 11: Budget Participant 3 (URosario)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**	44.847	Senior 6 p/m Junior 10 p/m	112.118	Senior 15 p/m Junior 25 p/m	100.306	Senior 13.5 p/m Junior 22.5 p/m	78.453	Senior 12 p/m Junior 17 p/m	69.635	Senior 12 p/m Junior 20 p/m					426.049
	Subcontracting (total)															
	Other direct cost (total)	7.341		58.074		51.345		58.073		15.259		0				248.034
	Fieldwork			60.146	Quantitative study			60.146	Quantitative study							120.292
				10.179	Qualitative study			10.179	Qualitative study							20.357
						10.500	Implementation									10.500
	In-house consultant					22.499	NSC Members' remuneration									22.499
	Travel and subsistence to project workshops	4.340	Workshops I and II 2 people - 10 days - 60l per diem	4.340	Workshop III 2 people - 10 days - 60l per diem	8.680	Workshops IV and V 2 people - 10 days - 60l per diem	4.340	Workshops VI and VII 2 people - 10 days - 60l per diem	4.340	Workshop VIII 2 people - 10 days - 60l per diem					26.040
	Country workshop organization expenses			5.917	Country workshop	5.917	Country workshop	5.917	Country workshop	5.917	Country workshop					23.666
	Travel and subsistence for in situ scientific exchange			3.740	2 people - 5 days - 60 l per diem			3.740	2 people - 5 days - 60 l per diem							7.480
	Workshops' organization expenses	1.500	Workshop I					1.500	Workshop VII-							3.000
	Consumables	1.501	Software and hardware	3.753	Software and hardware	3.753	Software and hardware	2.252	Software and hardware	3.002	Software and hardware					14.260
MGT	**Personnel Cost (total)**															
	Subcontracting (total)													3.000	2 audits for certificate of financial statements	3.000
	Other direct cost (total)															
OTHER	**Personnel Cost (total)**											30.582	Junior 50 p/m			30.582
	Subcontracting (total)															
	Other direct cost (total)											31.680				31.680
	Travel and subsistence for in situ scientific exchange											3.640	2 people - 5 days - 60 l per diem			3.640
	Travel and subsistence to project workshops											4.000	Workshop IX 2 people - 10 days - 60l per diem			4.000
	Travel and subsistence for Regional Conference attendance											7.640	2 people - 3 days - 60l per diem			7.640
	National conferences											10.000	2 Congresses per year - 1 person - 4 days			10.000
	Publications											6.400	Publication open access papers and leaflets			6.400

Box 12: Budget Participant 4 (IMIP)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**	25.341	Senior 5 p/m Junior 10 p/m	63.354	Senior 13 p/m Junior 5 p/m	57.018	Senior 13.5 p/m Junior 22.5 p/m	44.348	Senior 10 p/m Junior 8 p/m	50.683	Senior 12 p/m Junior 20 p/m					240.744
	Subcontracting (total)															
	Other direct cost (total)	12.481		61.634		49.216		67.153		16.413		0				246.362
	Fieldwork			60.146	Quantitative study			60.146	Quantitative study							120.292
				6.259	Qualitative study			6.259	Qualitative study							12.517
						10.500	Implementation									10.500
	In-house consultant					22.087	NSC Members' remuneration									22.087
	Travel and subsistence to project workshops	3.480	Workshops I and II 2 person - 10 days - 60l per diem	3.480	Workshop III 2 person - 10 days - 60l per diem	6.960	Workshops IV and V 2 people - 10 days - 60l per diem	6.960	Workshops VI and VII 2 people - 10 days - 60l per diem							20.880
	Country workshop organization expenses			5.917	Country workshop	5.917	Country workshop	5.917	Country workshop	5.917	Country workshop					23.666
	Travel and subsistence for in situ scientific exchange			2.140	1 person - 5 days - 60 l per diem			5.620	2 people - 5 days - 60 l per diem							7.760
	Workshops' organization expenses	1.500	Workshop II							1.500	Workshop VIII					3.000
	Scientific committee meeting organization expenses	6.000	Scientific committee meeting							6.000	Scientific committee meeting					12.000
	Consumables	1.501	Software and hardware	3.753	Software and hardware	3.753	Software and hardware	2.252	Software and hardware	3.002	Software and hardware					14.260
MGT	**Personnel Cost (total)**															
	Subcontracting (total)													3.000	2 audits for certificates of financial statements	3.000
	Other direct cost (total)															
OTHER	**Personnel Cost (total)**											64.466	Junior 30 p/m			64.466
	Subcontracting (total)															
	Other direct cost (total)											20.360				20.360
	Travel and subsistence to project workshops											4.230	Workshop IX 2 people - 10 days - 60l per diem			4.230
	Travel and subsistence for Regional Conference attendance											4.230	2 people - 3 days - 60l per diem			4.230
	National conferences											7.500	1 Congress per year - 1 person - 4 days			7.500
	Publications											4.400	Publication open access papers and leaflets			4.400

Box 13: Budget Participant 5 (UPE)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**			48.123	Senior 2 p/m Junior 12 p/m			32.082	Senior 2 p/m Junior 12 p/m							80.205
	Subcontracting (total)															
	Other direct cost (total)			3.551		3.120		5.551								14.303
	Fieldwork			2.085	Qualitative study			2.085	Qualitative study							4.170
	In-house consultant					413	NSC Members' remuneration									413
	Travel and subsistence to project workshops			2.707	Workshop III 1 person - 10 days - 60l per diem	2.707	Workshops IV and V 1 person - 10 days - 60l per diem	2.707	Workshops VI and VII 1 person - 10 days - 60l per diem							8.120
	Consumables			1.100	Office supplies			1.100	Office supplies							2.200
MGT	**Personnel Cost (total)**															
	Subcontracting (total)															
	Other direct cost (total)															
OTHER	**Personnel Cost (total)**															
	Subcontracting (total)															
	Other direct cost (total)											2.820				2.820
	Travel and subsistence to project workshops											1.410	Workshop IX 1 person - 10 days - 60l per diem			1.410
	Travel and subsistence for Regional Conference attendance											1.410	1 person - 5 days - 60l per diem			1.410

Box 14: Budget Participant 6 (UChile)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**	27.551	Senior 5 p/m Junior 10 p/m	68.828	Senior 15 p/m Junior 25 p/m	61.945	Senior 12.5 p/m Junior 22.5 p/m	48.180	Senior 10.5 p/m Junior 17.5 p/m	55.062	Senior 11 p/m Junior 20 p/m					261.547
	Subcontracting (total)															
	Other direct cost (total)	3.512		71.342		45.149		75.562		3.850		0				210.415
	Fieldwork			53.174	Quantitative study			53.174	Quantitative study							106.348
				9.679	Qualitative study			9.679	Qualitative study							19.357
						11.100	Implementation									11.100
	In-house consultant					13.943	NSC Members' remuneration									13.943
	Travel and subsistence to project workshops	7.116	Workshops I and II 2 people - 10 days - 60l per diem			7.115	Workshops IV and V 2 people - 10 days - 60l per diem	7.116	Workshops VI and VII 2 people - 8 days - 60l per diem	3.558	Workshop VIII 2 people - 10 days - 60l per diem					24.907
	Country workshop organization expenses			3.500	Country workshop	3.500	Country workshop	3.500	Country workshop	3.500	Country workshop					14.000
	Workshop organization expenses			1.500	Workshop III											1.500
	Consumables	1.396	Software and hardware	3.489	Software and hardware	3.489	Software and hardware	2.094	Software and hardware	2.792	Software and hardware					13.260
MGT	**Personnel Cost (total)**															
	Subcontracting (total)													3.000	2 audits for certificates of financial statements	3.000
	Other direct cost (total)															
OTHER	**Personnel Cost (total)**											20.312	Junior 50 p/m			20.312
	Subcontracting (total)															
	Other direct cost (total)											25.225				25.225
	Workshop rganization expenses											5.625	Workshop IX and Scientific committee meeting			5.625
	Travel and subsistence for Regional Conference attendance											3.200	2 people - 8 days - 60l per diem			3.200
	National conferences											10.000	2 Congresses per year - 1 person - 4 days			10.000
	Publications											6.400	Publication open access papers and leaflets			6.400

Box 15: Budget Participant 7 (UV)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**	34.928	Senior 6 p/m Junior 10 p/m	87.320	Senior 15 p/m Junior 25 p/m	78.588	Senior 12.5 p/m Junior 22.5 p/m	61.124	Senior 10.5 p/m Junior 17.5 p/m	69.356	Senior 11 p/m Junior 20 p/m					331.316
	Subcontracting (total)															
	Other direct cost (total)	12.381		85.754		49.305		83.373		14.659		0				245.255
	Fieldwork			60.146	Quantitative study			60.146	Quantitative study							120.292
				10.173	Qualitative study			10.173	Qualitative study							20.357
						10.500	Implementation									10.500
	In-house consultant					22.499	NSC Members' remuneration									22.499
	Travel and subsistence to project workshops	11.480	Workshops I and II 2 people - 10 days - 60l per diem	5.740	Workshop III 2 people - 10 days - 60l per diem	5.740	Workshops IV and V 2 people - 10 days - 60l per diem	11.480	Workshops VI and VII 2 people - 10 days - 60l per diem	5.740	Workshop VIII 2 people - 10 days - 60l per diem					40.130
	Country workshop organization expenses			5.917	Country workshop	5.917	Country workshop	5.917	Country workshop	5.917	Country workshop					22.667
	Workshop organization expenses					1.500	Workshop IV									1.500
	Consumables	1.501	Software and hardware	3.753	Software and hardware	3.753	Software and hardware	2.252	Software and hardware	3.002	Software and hardware					14.260
MGT	**Personnel Cost (total)**															
	Subcontracting (total)													3.000	Audits for certificates of financial statements	3.000
	Other direct cost (total)															
OTHER	**Personnel Cost (total)**											33.333	Junior 30 p/m			33.333
	Subcontracting (total)															
	Other direct cost (total)											31.300				31.300
	Travel and subsistence to project workshops											5.500	Workshop IX 2 people - 10 days - 60l per diem			5.500
	Regional conference organization expenses											10.000	Regional conference			10.000
	National conferences											10.000	2 Congresses per year - 1 person - 4 days			10.000
	Publications											6.400	Publication open access papers and leaflets			6.400

Box 16: Budget Participant 8 (UNR)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**	26.653	Senior 6 p/m Junior 10 p/m	66.647	Senior 15 p/m Junior 25 p/m	59.382	Senior 12.5 p/m Junior 22.5 p/m	46.653	Senior 10.5 p/m Junior 17.5 p/m	53.317	Senior 11 p/m Junior 20 p/m					253.258
	Subcontracting (total)															
	Other direct cost (total)	3.876		74.082		43.772		76.926		10.532						221.188
	Fieldwork			53.174	Quantitative study			53.174	Quantitative study							106.348
				3.679	Qualitative study			3.679	Qualitative study							19.357
						11.100	Implementation									11.100
	In-house consultant					19.943	NSC Members' remuneration									19.943
	Travel and subsistence to project workshops	8.480	Workshops I and II 2 people - 10 days - 60l per diem	4.240	Workshop III 2 people - 10 days - 60l per diem	4.240	Workshops IV and V 2 people - 10 days - 60l per diem	8.480	Workshops VI and VII 2 people - 10 days - 60l per diem	4.240	Workshop VIII 2 people - 10 days - 60l per diem					28.680
	Country workshop organization expenses			3.500	Country workshop	3.500	Country workshop	3.500	Country workshop	3.500	Country workshop					14.000
	Workshop organization expenses					1.500	Workshop V									1.500
	Scientific committee meeting organization expenses					6.000	Scientific committee meeting									6.000
	Consumables	1.396	Software and hardware	3.483	Software and hardware	3.483	Software and hardware	2.094	Software and hardware	2.792	Software and hardware					13.260
MGT	**Personnel Cost (total)**															
	Subcontracting (total)															
	Other direct cost (total)													3.000	2 audits for certificate of financial statements	3.000
OTHER	**Personnel Cost (total)**															
	Subcontracting (total)											63.070	Junior 50 p/m			63.070
	Other direct cost (total)											18.650				18.650
	Travel and subsistence to project workshops											4.000	Workshop IX 2 people - 10 days - 60l per diem			4.000
	Travel and subsistence for Regional Conference attendance											4.000	2 people - 3 days - 60l per diem			4.000
	National conferences											4.250	1 Congress per year - 1 person - 4 days			4.250
	Publications											6.400	Publication open access papers and leaflets			6.400

Box 17: Budget Participant 9 (UDELAR)

		WP1	Description	WP2	Description	WP3	Description	WP4	Description	WP5	Description	WP6	Description	WP7	Description	Total
RTD	**Personnel Cost (total)**	27.636	Senior 6 p/m Junior 10 p/m	63.240	Senior 15 p/m Junior 25 p/m	62.316	Senior 12.5 p/m Junior 22.5 p/m	48.468	Senior 10.5 p/m Junior 17.5 p/m	55.392	Senior 11 p/m Junior 20 p/m					263.114
	Subcontracting (total)															
	Other direct cost (total)	8.276		13.282		44.312		13.386		9.732		0				215.588
	Fieldwork			53.174	Quantitative study			53.174	Quantitative study							106.348
				9.679	Qualitative study			9.679	Qualitative study							19.357
						11.100	Implementation									11.100
	In-house consultant					13.343	NSC Members' remuneration									13.343
	Travel and subsistence to project workshops	6.880	Workshops I and II 2 people - 10 days - 60l per diem	3.440	Workshop III 2 people - 10 days - 60l per diem	6.880	Workshops IV and V 2 people - 10 days - 60l per diem	3.440	Workshops VI and VII 2 people - 10 days - 60l per diem	3.440	Workshop VIII 2 people - 10 days - 60l per diem					24.080
	Country workshop organization expenses			3.500	Country workshop	3.500	Country workshop	3.500	Country workshop	3.500	Country workshop					14.000
	Workshop organization expenses							1.500	Workshop IV							1.500
	Scientific committee meeting organization expenses							6.000	Scientific committee meeting							6.000
	Consumables	1.396	Software and hardware	3.489	Software and hardware	3.489	Software and hardware	2.094	Software and hardware	2.792	Software and hardware					13.260
MGT	**Personnel Cost (total)**															
	Subcontracting (total)															
	Other direct cost (total)													3.000	2 audits for certificates of financial statements	3.000
OTHER	**Personnel Cost (total)**															
	Subcontracting (total)											71.034	Junior 50 p/m			71.034
	Other direct cost (total)											23.600				23.600
	Travel and subsistence to project workshops											3.600	Workshop IX 2 people - 10 days - 60l per diem			3.600
	Travel and subsistence for Regional Conference attendance											3.600	2 people - 3 days - 60l per diem			3.600
	National conferences											10.000	2 Congresses per year - 1 person - 4 days			10.000
	Publications											6.400	Publication open access papers and leaflets			6.400

Box 18: Capacity building budget

Activity	WP 1	WP 2	WP 3	WP 4	WP 5	WP 6	Total	% EU Contribution
Policy making capacity building							**546.842,3**	**9,28**
Training of the members of the National steering committee. 2 p/m Senior researchers and 36,3 p/m Junior researchers		7.474,4				94.589,1	102.063,5	1,70
Per diems for trainings and meetings		2.137,5		1.425,0	1.425,0		4.987,5	0,08
Deliverables D.6.3, D.6.5. 159,6 p/m						283.767,3	283.767,3	4,80
Country workshops		23.100,0	23.100,0	23.100,0	23.100,0		92.400,0	1,60
Regional Conference						63.624,0	63.624,0	1,10
Research capacity building of the involved institutions							**1.180.575,7**	**20,02**
Specific training of Junior researchers. Senior researchers 0,3 p/m	145,9	392,9	328,4	275,0	291,9		1.434,2	0,02
Close monitoring to Junior researchers by Senior researchers. 52,6 p/m	20.031,9	52.322,0	44.737,4	35.776,6	39.766,5		192.634,4	3,30
Participation of Junior researchers in all phases of the research. 326 p/m	60.818,7	150.033,1	121.637,5	107.166,5	121.637,5		561.293,2	9,50
Project Workshops	79.126,4	35.344,5	78.478,4	82.936,4	38.876,2	50.930,0	365.692,0	6,20
In situ scientific support. 0,9 p/m		17.019,2	25.483,6	17.019,2			59.522,0	1,00
Health professionals' capacity building (training)							**224.122,9**	**3,70**
Senior researchers supervision effort - 101 p/m			30.559,1				30.559,1	0,50
Traning of health professionals by Junior researchers - 126 p/m			43.376,3				43.376,3	0,70
Per diems for trainings			32.062,5				32.062,5	0,50
In-house consultant (National Steering Committee)			118.125,0				118.125,0	2,00
Other capacity building activities							**19.322,2**	**0,30**
Need assessments. 5 p/m						19.322,2	19.322,2	0,30
							1.970.863,1	**33,30**

B3. IMPACT

B3.1 Strategic impact

B3.1.1 Contributions to the expected impacts listed in the work programme

The project addresses the objective of the FP7 Health Cooperation Work Programme: health specific cooperation actions of supporting research to improve the efficiency and effectiveness of health systems in many low and middle income countries, focusing on the two areas of the call: health systems/health services research and strengthening research capacity building in terms of human resource.

The project focuses on the HEALTH.2012.3.4-1 topic "Research on health systems and services in low-and middle income countries" and will contribute to the expected impacts of the topic by developing, implementing and testing a set of interventions to improve care coordination, continuity and quality in six Latin American countries, within a participatory and multidisciplinary action research framework. It will contribute to the strengthening of health systems increasing their quality of care and performance, by addressing an area of high interest, but so far little explored: the integration of healthcare.

Firstly, in response to policy makers' needs it will contribute to empower national and regional decision-makers in middle income countries in the planning, management and organisation of health systems, not only by:

a) by providing robust evidence on best practices to improve the integration of health services that will contribute to the strengthening health systems, but of equal importance

b) by involving key stakeholders in the process of research from the beginning of the project

c) by developing tools based on best practices of disseminating information to non-academic public, to allow this evidence to be translated into healthcare integration policies conducive to more effective health systems and higher quality health services.

Secondly, it will contribute to capacity building in at least three domains:

1) strengthening research capacity in the field of health systems/health services research by

a) establishing EU-LA and South-South cooperation links

b) specific training of junior researchers

2) health professional knowledge and skills on care coordination and quality of care for IHNs' through in-service training programmes and involvement in action research activities.

3) pre-graduate and post-graduate public health training for health professionals of involved institutions will incorporate teaching on adequate strategies to improve coordination of care in networks, particularly for chronic elderly patients.

Equity-LA II builds mainly upon the results of Equity-LA, which explored access to the care continuum in IHNs of Colombia and Brazil and identified important barriers to care coordination. It will expand the scope of the research in Colombia and Brazil and will incorporate four new countries to represent a large array of health systems and IHN. In addition, it builds upon two other FP7 projects, in which the ITM participant was directly involved: HEPVIC (PL 517746), which studied key determinants of health policy making, and revealed mechanisms common to different countries, opening new research avenues; and HESVIC (222970) provides an insight into how regulation and governance could foster networking healthcare delivery services and into what can be expected from a regulatory approach in conjunction with a managerial one. It provides an array of methodological orientations and mechanisms worth being further analysed. Equity-LA II will also develop synergies with projects related to the topic Improving the organisation of health service delivery (HEALTH.2012.3.2.1) by providing information on best practices of integration between primary and secondary care and on the effect of new organisational approaches on quality of care, in different healthcare contexts also relevant for EU healthcare systems.

The project contributes to the Innovation Union Pilot Partnership on Active and Healthy Ageing goals since it will provide evidence on best practices of care integration, particularly for the management of two diseases highly prevalent among the elderly: type 2 diabetes and chronic obstructive pulmonary disease (COPD). It will, therefore, contribute to improve the performance of healthcare systems by providing effective strategies, adapted to the context, to improve the coordination allowing for a better life quality for the elderly.

Specifically, the project will contribute to the expected impacts by:

1. Generating evidence-based policies, strategies, practices and interventions to improve integration of care in Latin American countries

Calls for a better integration of healthcare networks have appeared worldwide[1;18;65;67;82;168]. In response to these, many countries in Latin America, and around the world, with different types of health systems have issued policies fostering the introduction of integrated healthcare networks. However, there is practically no evidence on the effectiveness of available interventions targeted to improve integration of care, and their results on coordination and quality of care, within the context of low and middle income countries.

By using a quasi-experimental design; this research will help fill the evidence gap to support health policy making by providing the first available evidence on best practices of care integration in the region. Evidence will be produced by:

a) combining qualitative and quantitative methods for analysing the performance of IHN developed in different Latin American middle income countries, and evaluating the effectiveness of the tested interventions;

b) conducting intra- and cross-country comparisons to benchmark care integration practices in different health systems and generate robust evidence for their transferability. The participation of a wide range of Latin American countries, with different healthcare systems and different development of their healthcare networks, will result in a better understanding of the link between the context of the health systems and the development degree of healthcare networks on the one hand and the different interventions and their outcomes on the other.

In addition, despite the growing enthusiasm, there is little guidance for planners and decision-makers on how to plan and implement integrated health systems[167]. By developing, tools based on best practices of disseminating information to the general public or audiences who have little to no knowledge of the subject matter, Equity-LA II will empower national and regional decision makers to better translate knowledge, empirical and operational data into policies and planning conducive to more effective health systems and services, through better integrated healthcare networks.

2. Strengthening research capacity of all involved institutions

The development of research capacity in the participant countries represents an important project component, encompassing two aspects: generation/consolidation of new areas of research and skills. Healthcare integration is a priority area for health systems development and research but not much developed in Latin America research institutions. Equity-LA provided an opportunity to involved research institutions to develop it. Equity-LA II will contribute to consolidate this capacity in previous participants' institutions and at the same time, to expand it to the new participants. It will enable them to identify priority issues on integration of care, quality and IHN; to carry out research in areas identified as priority research areas in health system development in their own countries, and develop their abilities in applying different research approaches and methods (participatory action research; qualitative and quantitative methods); and getting evidence into policy and practice, in order to build a basis for enhanced knowledge-development in their countries.

The project brings together participants with different complementary fields of expertise and will develop the research capacity, building upon Equity-LA previous experience, among others. New participants would benefit from the knowledge and experience of the previous research experience on integration of care, access to health services; old participants will benefit from new participants complementary knowledge and skills, such as, health workers training, gender analysis. This exchange will take place at three levels: between European-Latin America institutions; amongst European research institutions and, amongst Latin American research institutions. This is expected to be mutually beneficial both for European and Latin American countries.

In addition to developing the project as a team, in permanent communication and debate, the project includes the implementation of a training plan, to develop the necessary research skills of participants (based on an initial training needs analysis). This will include workshops on research methods and tools; joint work among the teams, in order to share knowledge and skills (in Latin America and also in Europe) and specific training and close monitoring of younger research fellows by senior researchers in each country team. Junior researchers will participate in workshops and where appropriate there will be exchange among participants to be trained in areas relevant to the project. Moreover, some junior may have the opportunity to pursue formal academic training in the framework of the project.

Capacity building will contribute to create a sustainable and attractive research landscape for health systems and services research, particularly in the areas of integration and quality of healthcare, in the participating countries. This will incorporate ethical and gender issues.

3. Improving skills and enhancing motivation of health workforce

Equity-LA II will focus on testing healthcare integration strategies at the micro-level, that according to available evidence, seem to be the most effective in enhancing collaboration across care levels[96]. The introduction these integration strategies needs a) to adopt a bottom up approach where health professionals play a central role in introducing the changes[19;108] and b) to be *based on human resources* training[19].

Thus the improvement of health workers skills and increasing their motivation will be at the core of the project. To introduce and test integration interventions an action-research approach will be adopted, whereby health professionals will be involved in all phases of the research from the very beginning. Moreover, the core of the intervention is the provision of specific training programs for the health workers, aimed at improving coordination and care quality, and based on their identified needs. This may include, improvement in health workers skills in the development and use of coordination mechanisms, such as referral system, clinical guidelines, etc; team work, communication skills, and clinical audits, among others.

These two parallel actions will contribute to increased motivation and raised morale among healthcare workers to remain in their workplaces, while improving their performance and skills. Moreover, the project will produce evidence on best practices to train and motivate healthcare workers.

As a collateral effect, and through its links with universities, it is hoped that as a result of the project and in the medium term, undergraduate and post-graduate public health training for physicians and other health professionals will incorporate teaching on adequate strategies to improve coordination of care in networks, particularly for chronic elderly patients, whereby the pilot IHNs of the project could be taken as demonstration fields of good practice.

4. Building networks

The research will bring together a diverse range of interest groups and stakeholders concerned with health sector organisation at local, national and international levels:, civil society groups, organized users of health services (e.g. type 2 diabetes patients) and health providers. It is expected that collaborative links established in each country and between countries will continue after completion of this project.

These links together with capacity building activities will increase the probability of implementation of evidence-based policies, strategies and interventions to improve the performance of IHNs and the quality of their services. Moreover, Equity-LA II will provide the opportunity to consolidate and expand the networks already established, that involve policy makers, civil society, and international experts and networks-enhancing the work developed during the Equity-LA project.

5. Contributing to support towards Millennium Development Goals

Achieving health-related Millennium Development Goals (MDGs) crucially depends on people having access to healthcare to meet their health needs. Thus, in Latin America and the Caribbean there is an urgent need to improve access to quality healthcare services as a condition for achieving the MDGs. Although the Latin American countries differ in terms of health situation relating to Millennium Development Goals, they face common challenges to meet the commitments undertaken: a faster progress towards a substantial reduction in health inequalities, progress with respect to universal health-care coverage under social protection schemes and an improvement of the quality of resource allocation. With this aim, the PAHO highlights among the guiding principles for health policy: improving equity and extension of social protection in health; strengthening health systems capacity to respond to the needs of the population, among others, by building-up a network of services to make the universal right to health a reality, and ensuring continuity of care between different levels and subsystems of the health system[60;169].

6. Latin American countries selected to participate in the study are listed as International Co-operation Participants Countries (ICPC) in the Annex 1 of the FP7 Cooperation work programme. Argentina, Brazil, Colombia, Chile, Mexico and Uruguay are countries listed in the ICPC. The inclusion of these countries with their different types of health systems (and subsystems) ensures a combination of public-private in the provision and insurance management; different levels of access to healthcare; and different types of integrated healthcare networks. This is particularly relevant because it will allow establishing different relevant contextual factors that may influence the effectiveness of the interventions and contributes to the innovative potential of the proposal and ensures both comparability and interoperability of their results.

The research addresses priority interests on the national research agenda of the Latin American countries

- **Argentina**: Segmentation and fragmentation of the health system are major problems: primary healthcare centres provide ambulatory care and refer patients to secondary and tertiary levels of care according to need, without much coordination either of care or patient flows, and with the shortcomings characteristic of a fragmented system[170]. The municipality of Rosario, Santa Fé province, home to the project participant in Equity-LA II, is developing local networks since 2005. The national programme Remediar+Redes promotes the strengthening of provincial healthcare networks.

- **Brazil**: In the field of Health System and Policies, the Brazilian Ministry of Health defined research on health system organisation as a priority research area, with emphasis on integration of services, regionalisation (meaning health services networks), intersectorial coverage, access and continuity from user's perspectives[171]. In addition, the integration of health services is at the core of the newest health policy in the country[172].

- **Colombia**: the Ministry of Health and COLCIENCIAS included research in public health as one of the action lines of the National Programme of Science and Technology, looking, amongst other issues, at evidence-based strategies to improve equity of access and to develop integrated healthcare models[173;174]. Research into and improvement of integrated healthcare networks is a priority for the Health Secretariat of the Bogotá District[175]. The introduction of healthcare networks was defined since the inception of the system in 1993 and it is at the core of recent legislation on the organisation of health provision[38]. Moreover, one of the key health objectives in Colombia's latest National Development Plan[176] (for 2010-2014 period) is to implement IHN.

- **Chile**: a recent policy document of the Ministry of Health, "Orientations for Planning and Programming of Networks in 2012", mentions the need of a greater articulation among the hospitals of lower complexity and the municipal health teams. Law 19.937 and the AUGE initiative (Law 19.966) also stress the need for integration of care across care levels. In the 2011 call for research project financing of CONICYT (National commission for scientific and technological research) priority themes include research on coordination of the healthcare networks, quality of care and aiming at improving the articulation of the network[177].

- **Mexico**: IHNs have been a priority for the Ministry of Health since 2006, when a specific programme (MIDAS) was launched[41] in order to promote the integration of health services networks. In 2011 the promotion of IHN is one of national health strategies and priorities in the Annual Government Presidency's report[178]. Because results are still incipient, research on the impact of this public policy is a priority.

- **Uruguay**. Law 18,211 of 2007 defined the legal framework for the creation of the National Integrated Health System and the strategic orientations for the organisation of the provision of care in networks based on the first level of care. The IHN implemented in Montevideo (ASSE-RAP) can be considered a large-scale experiment that has so far not been evaluated. Research on Innovative management of health services pivoting in primary care level, has been established as a priority area by the National Research Agency[179].

B3.1.2 Steps to bring about the expected impacts

To bring about these impacts, the following steps will be undertaken:

I) Development of scientific evidence on effective interventions aimed at improving care integration

1. ***New evidence*** on the effectiveness of the introduction of specific interventions to improve care integration; the performance of IHN relating to care coordination, continuity, and quality of care, particularly relating to chronic diseases; how contextual factors relating to health systems and healthcare settings influence these results; how factors and actors influence the effectiveness of integration strategies in improving care coordination, continuity and quality, in different health systems and healthcare settings; particularly in the field of chronic conditions; better understanding of gender issues related to health systems structure in order to contribute to reduce gender inequalities.

2. Providing ***evidence for policy*** development to promote the emergence of better quality and better performing among healthcare providers that will benefit national efforts to improve healthcare organisation and effectiveness in the health sector.

Policy recommendations may be put forth:

- to adjust and further develop policies, strategies and mechanisms currently used to progress towards integrated healthcare
- to develop incentives and mechanisms to introduce mechanisms that increase coordination of institutions providing healthcare, especially those aiming at coordinating primary and secondary care levels. This will contribute to a better-coordinated and more efficient healthcare delivery.
- to implement strategies for coordinating healthcare that take into account the identification, by all actors involved, of critical factors that influence care coordination, continuity and quality of care. This is intended to improve the performance of access mechanisms in place, or to generate new alternatives seeking consensual solutions.
- to develop better strategies to ensure that the views and experiences of users relating to continuity of care and access to health services are taken into account;
- to set up or improve training programmes directed at strengthening management skills to support integration in the health system.

3. Equity-LA II ***will develop health services management know how and test research instruments*** to analyse and monitor factors and actors influencing health services performance.

To improve health systems regulation and to make health services work better, policy makers and health providers must invest in efforts to measure systems' performance and to inform the public on it. On the one hand an adequate regulatory framework is required. Information about the performance of providers is essential to preserve the healthcare system and to protect citizen's rights. On the other hand, integration of health services is a process that takes time and it is essential to learn from IHNs performance evaluation throughout the process. As already mentioned, there has been relatively little systematic research on the performance of IHNs, particularly in Latin-American countries, and even less research with a quasi-experimental design.

This research project will contribute to efforts for providing validated methods, tools and standards to evaluate the performance of IHN, regarding coordination, quality and continuity of care. The final aim is to assist governments (in their stewardship role) in their attempts to develop effective ways of not only measuring system performance, but also in using this knowledge to improve health systems' performance. A tested methodology, with tools, indicators and standards to monitor IHNs performance will be delivered in the last phase of the project as a result of the literature review and research carried out at country and cross-country levels.

The performance evaluation framework and standards will be derived from the following principles[160;161]:

- establish measurable goals on coordination, quality and continuity of care based on national targets.
- apply the performance framework to all levels of the health system, before the intervention (baseline diagnostic) and after.
- include measures of system operation based on process variable focus on sub-populations, including those at higher risk, with particular attention to women
- ensure data availability and quality
- ensure patients' perspective is included in the framework and measures
- provide reports that are comprehensible and meaningful to targeted audiences at different levels

Specific measures and strategies will be suggested in the following areas:

a) management, informational, and administrative coordination of care

b) relational, informational and management continuity;

c) quality of care - a combination of structure, process and outcome indicators will be used.

The framework and measures developed will provide validated tools for measuring health organisations' performance; to be used, for example, in purchasing agencies' information systems to support the evaluation of healthcare provision; in benchmarking initiatives to compare results among providers.

II) Enhancement of research cooperation links to promote excellence

In order to conduct this research, it is necessary to develop strong scientific partnerships on basis of mutual interest, to generate and exchange knowledge needed to contribute to provide a scientific base for ICPC to improve their health systems. These partnerships will take place at two levels:

i) between European and Latin American research institutions, to enable production and exchange of knowledge about care integration that will serve as an evidence base that ICPCs can use in improving their health systems;

ii) between research institutions and local health services networks involved in the action research process. This, together with the personnel training plans, will facilitate the process of translating research findings into practice.

This will be achieved by:

- Research design. In the way it has been designed (participatory action research), the research will contribute to research ownership by Latin American countries, establishing links between them, and also with European countries. It will contribute to sustainable development and also to strong North-South collaborative links. Within both groups this collaboration should persist following the project's culmination.

- Improving the research capabilities of universities and research institutions in the field of health systems research and health policy analysis in the six Latin American participant countries. Not only by training and research experience, but also by establishing collaborative links within and among participating countries. It will have a particular emphasis on improving capabilities to getting research results into policy and practice.

- Interacting throughout the research process, the project will enhance the collaboration between these research/training institutions, health service providers, policy makers, and civil society organisations involved in the project. Every research institution involved in this project has long-standing agreements with the Ministry of Health of its own country and with health services providers.

- Involvement, from the very start, of policy makers, and other stakeholders, such as health providers, civil society organisations and academics in the research process of diagnosis and identification of solutions of problems in IHNs will facilitate the process of moving from diagnosis to action and getting research results into policy.

- Fostering social ownership of the knowledge generated by the project. This will be achieved, in addition to involving key social actors, through the wide dissemination of results using materials and means appropriate to different audiences (including, meetings, workshops, round tables, short reports, scientific papers, conferences, etc) and through the integration of research results and methods into the curricula of universities and health services training programmes.

- Contributing to further development of collaborating links between European and Latin American countries and within both groups, will open up avenues for future scientific and technological collaboration. The involvement of PAHO (Pan American Health Organisation) and the coordination with other international agencies and networks will guarantee dissemination of results beyond the six Latin American countries involved.

- Addressing priority areas of research in health systems, sector policy and services management.

- The participation of a scientific committee, which will contribute to the scientific excellence of the research process and at the same time to results dissemination

- The gender mainstreaming strategy adopted by the Commission would form the basis for integrating the gender dimension in the project. Gender equality and the empowerment of women will be addressed in two ways: in the process of research, encouraging gender balance in all committees as well as in researchers, data collectors and analysts, and in the substance of research, contributing to enhanced understanding of gender issues regarding management of healthcare.

III) Getting Equity-LA II Research results into Policy and Practice (GRIPP)[182]

In order to get an impact on health systems performance, special emphasis has been put on getting research results into practice. Therefore, all participating Latin American research teams have long-standing collaboration links with the Ministries of Health of their respective countries. In addition, a strategy will be developed from the very beginning of the project that will take into account factors identified as enhancers of health research utilization in policy-making: the interactions across the interfaces between researchers and policy-makers, the role of policy-makers as "receptors", and the need for careful priority setting (see 3.2). There will be open access to publications of research results from the beginning through the Webpage. Moreover, tools will be developed to translate evidence on best practice of integration of care into innovative and effective policies and practices for better organisation of IHN in Latin America.

Policy tools and guidelines will be developed to help policy makers to better translate knowledge, empirical and operational data into policies and planning conducive to more effective health systems and services, through the improvement in the integrated healthcare networks. These guidelines will include strategies on: policy advocacy, involvement of stakeholders, use of evidence, scaling up small scale examples.

Potential users of research results include European Commission, Health Ministries and Public Health Institutes of Members States, international and national policy makers and other stakeholders (WHO/PAHO, Health Ministries of ICPC) external funding agencies and NGO which support health sector policies aimed at improving integration of care and quality of services; local integrated healthcare providers; finally, the results will be used by scholars to enhance understanding of the relationship between integrated healthcare providers, on the one hand, and overall health sector organisation and development in middle income countries on the other. Most of the researchers in the project have academic tasks and will apply the generated knowledge in their training courses, where possible taking pilot IHNs as practical demonstration fields.

B3.1.3 European and international approach

This research aims at achieving scientific excellence by bringing together international, multi-disciplinary institutions in carrying out the research. It will analyse the effectiveness of different integration strategies in improving coordination and quality of care in IHN in different national and health systems contexts. This objective can only be achieved through European-Latin American collaboration, as was already shown in the previous Equity-LA project. On the one hand it will allow cross-countries comparisons to establish relevant factors for different health systems and care settings, to benchmark interventions and to establish best practices. On the other hand, it will allow building upon the European experiences of integration and research. Several European health systems have a long experience in care coordination in different health systems: Spain[91;92], Sweden[183], Netherlands[184], UK[185] and Belgium[186]. Moreover, the European participants are involved in several related research projects.

Through a European and multidisciplinary approach, whereby economists, business administrators, sociologists and health professionals are involved in the design and implementation, the project will:

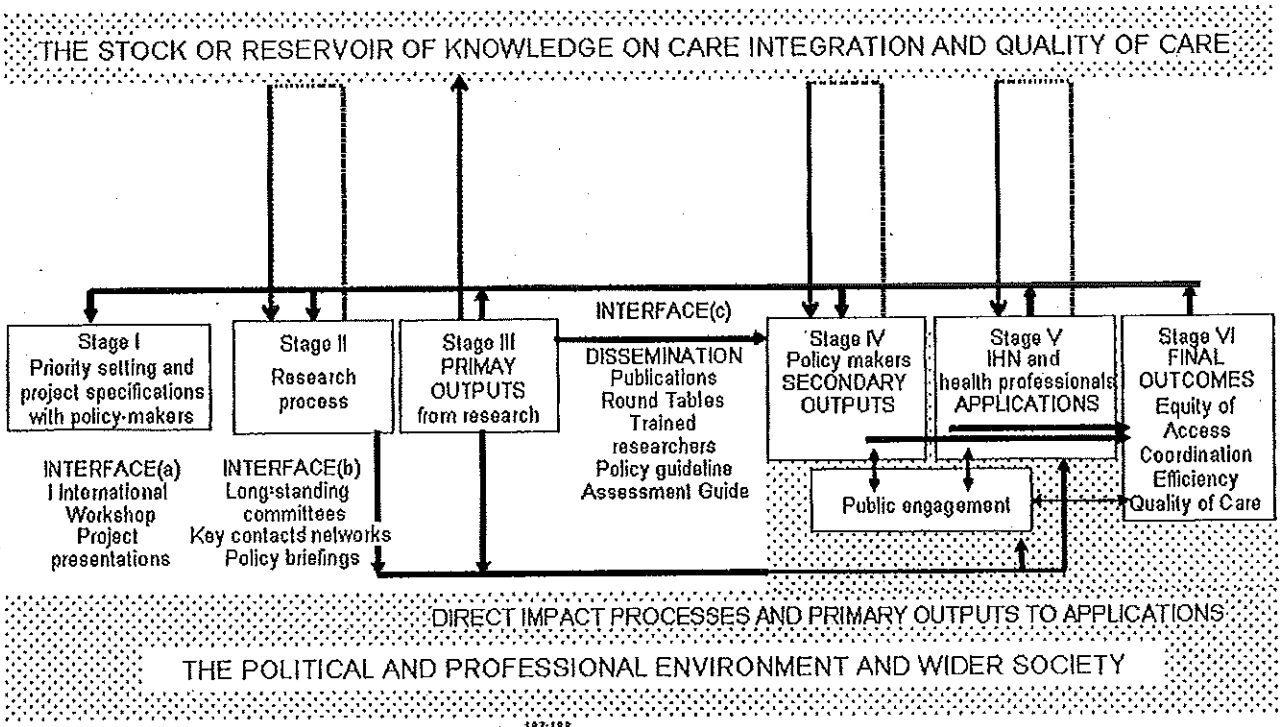
- bring together existing knowledge on integration of health services and participatory action research from expert institutions in Europe and Latin America. The health systems of the EU reflect values of universal access to good healthcare, solidarity and equity.
- foster exchange between participants to maximise expertise and shared learning
- generate new knowledge on integration of health services and high quality services from case studies in countries involved
- generate new research approach and instruments
- contribute to exchange of knowledge, capacity building and network building
- get research into practice
- develop practical guidelines to strengthen evidence-based policies to improve continuity of quality care

B3.2 Plan for the use and dissemination of foreground

Research projects often fail to ensure that their findings are used to inform policy and practice and disseminated to the greater public. Common weaknesses of knowledge management and poor dissemination of results can lead to an insufficient impact on practice policy. A separate work package (WP6) is dedicated to knowledge management, with a *plan for the use and dissemination of results of the project* in order to ensure that their findings are disseminated to the greater public and changes conducive to better coordination and more quality of care are implemented into policy practice. This will include different mechanisms, which will involve all the stakeholders.

The dissemination plan will again follow the framework proposed by González-Block and Hanney and Kuruvilla[187;188] to build successful dissemination strategies (Fig. 5). This strategy has produced the desired results in the on-going Equity-LA project and will thus also be adopted in Equity-LA II.

Figure 5: Strategies for the utilization and dissemination of research results



(Adapted from González-Block and Hanney and Kuruvilla[187;188])

Stage I. Priority setting and project specification with policy-makers

Engaging with key stakeholders (policy makers, health professionals, civil society, potential users etc.)

Stage II. Building networks of collaboration between stakeholders in the research process

a) networks of key contacts among relevant organisations (academics, government, civil society organisations, etc.) in the 6 LA countries and international agencies and networks, such as EC, WHO/PAHO, World Bank, ALAMES, etc.;

b) committees at national levels to allow researchers and policy-makers to discuss issues;

c) provision of periodical policy briefing for policy-makers in research process.

Stage III. Primary outputs from research

Primary outputs from research will be disseminated to user groups through specially designed materials and mechanisms, including: meetings, workshops, round tables (with brief summary reports) of key findings and policy recommendations, participation in regional and/or international meetings, Webpage, a book, short reports, research papers in peer-reviewed journals etc.

Stage IV. Policy maker secondary outputs

The secondary outputs are policies and strategies oriented at national (policy briefs) and local policy makers and IHN.

Stage V. IHN and health professional's applications

Managers and health professionals will develop and apply new evidence-based practices regarding coordination and quality of care. This process will be twofold: a) promoted by the changes in policy framework and guidelines (stage IV), b) participating in the definition and implementation of interventions, which will help to bridge the theory-practice gap.

Stage VI. Final outcomes

Final outcomes expected from this research are increased integration of healthcare delivery systems and increased continuity and quality of care, with gains in access to healthcare. It is expected that the intra-country analysis of the results of the micro-level interventions on care coordination, quality and continuity, particular in chronic conditions, in the six Latin American countries and a subsequent cross-country analysis with recommendations on effective interventions for policy makers will contribute, in the medium and long term, to an improvement of their in these three tracer indicators an in the field of chronic conditions.

B3.2.1 Management of knowledge

Mechanisms for the management of newly generated knowledge that will be considered are:

a) Round tables in the 6 LA countries to discuss preliminary results and bring together researchers and a variety of local and national interest groups (policy makers, managers, and civil society organisations).

b) Meetings and workshops (with brief summary reports) of key findings and policy recommendations to local and national interest groups as a tool for improving integrated delivery systems' performance.

c) Participation in regional and/or international meetings concerned with health sector organisation and policy will be undertaken, to disseminate methods and findings for comparative research in other countries, relevant to donor agencies and other governments.

d) Short reports and research papers, peer-reviewed journals and other relevant publications for dissemination among the academic communities.

e) Building networks of key contacts among relevant organisations (academic, governmental, non-governmental, civil society, including users' organisations etc.) in the 6 LA countries and other Latin American countries and international agencies, such as the PAHO, World Bank, WHO, EC etc, and coordinating with already established networks.

f) Specific materials and meetings, where appropriate, with local and national stakeholders on partial results in the 6 research countries well as, including comparative results.

g) A best practices report on care integration in the region.

h) Integrating research results into capacity building processes in research and training (in related areas) at the health services and training institution levels.

i) Policy guidelines will be produced to ensure that results inform policy making. These guidelines will include strategies on: policy advocacy, involvement of stakeholders, use of evidence, scaling up of small scale pilot examples.

B3.2.2 Management of intellectual property agreement

A management of intellectual property agreement will be developed and signed by all participants in order to promote a clear understanding of their respective intellectual property rights over project's results. The ownership shares, use of results, authors' rights and responsibilities, and general procedures will be clearly stated. The agreement will regulate intellectual property related to the book on project results, papers in peer-reviewed journal and scientific databases generated. The agreement will include clauses to protect confidentiality of information resulting from the project. More detailed instructions may be provided after the start of the project.

B3.2.3 Standard communication material to be provided to the European Commission

In support to the communication activities of the Commission services, and in addition to a presentation leaflet that it may initiate, the consortium will provide to the Commission, within 3 months after the start of the project, a 2 pages information sheet (double sided A4) which will be drafted in a standard format communicated by the Commission. The consortium will also provide an updated version of this information sheet on an annual basis.

The commission services may also request one illustration (picture, schema or drawing) to illustrate such communication material.

B3.2.4 Project web site

In support to its activities, including dissemination activities, the consortium will set up a specific project web site. The structure of this web site will depend on the project specific needs but should contain minimum information about the project, its objectives, work plan and involved participants. It may continue and update the existing website of the Equity-LA project (www.equity-la.eu). It will also acknowledge European Commission FP7 support and display the EU flag and FP logo in conjunction with the name and contact details of the EC project officer assigned and the coordinators contact details.

B3.2.5 Open access

In addition to Article II.30.4, beneficiaries shall deposit an electronic copy of the published version or the final manuscript accepted for publication of a scientific publication relating to foreground published before or after the final report in an institutional or subject-based repository at the moment of publication. Beneficiaries are required to make their best efforts to ensure that this electronic copy becomes freely and electronically available to anyone through this repository:

- immediately if the scientific publication is published "open access", i.e. if an electronic version is also available free of charge via the publisher, or

- within 6 months of publication.

(Special clause 39 on the "Open Access Pilot in FP7")

B3.2.6 Contributions to European research on integrated delivery systems

Policy lessons will also be relevant for EU countries. Improving access to, and quality of, healthcare provision by introducing different ways of organising the health sector, such as integrated delivery systems has attracted increasing interest worldwide. In many countries around the world, including some in Europe, there is a growing awareness of the need for integrated care. Countries are faced with an increasing number of people suffering from complex health problems that require coordination of multiple agencies, professionals and financial streams. Co-operation between different levels of care providers is considered a remedy to fragmentation and discontinuity and it is also expected that integration will contribute to cost reduction and quality of care[8]. Consequently different initiatives have evolved, also in Europe, such as the growth of networks of healthcare providers or the introduction of integrated care programs[91;92;189]. In particular research results may be of importance for European countries: Spain, and especially Catalonia is implementing integrated delivery systems; the UK would seem to have by far the most integrated health system but is experimenting with contracting elements of it out to the private sector. Belgium has some experience with comprehensive care delivered by family doctors and multi-disciplinary teams, and is testing integrated local care systems[190;191]. Medical errors due to lack of coordination have been quantified in seven European countries[192].

B4. ETHICAL ISSUES

The project has been developed and will be carried out with full adherence to current EU legislation (Charter of Fundamental Rights of the EU, Directives 95/46/EC of the European Parliament and of the Council of 24 October 1995 and European Clinical Trial Directive 2001/20/EC), international conventions and declarations (latest version of Helsinki Declaration and other), current national legislation (**Spain**: Law 15/1999 and Royal Decree 994/1999; **Belgium**: LEHP 7th May 2004; **Colombia**: Law 23/1981, Statutory Law 1266/2008, Law 1273/2009, Resolution 13437/1991 and Resolution 008430/1993; **Brazil**: Resolution 196/96 12th December 1996; **Chile**: Law 20.120/2006m Law 19.628/1999 and Ethic standard no. 57/2001; **Mexico**: FOIA/11 June 2002, Law 848/7 June 2008; General Health Act/14th December 2011; **Argentina**: Law 17622/68, Decree 995/2000, Resolution 1480/11-Ms and Resolution 35/2007; **Uruguay**: Law 18.331/2008 and Decree 379/008) and regulations ethics rules, data protection and professional code of conduct of each involved country. The proposal will be submitted to the corresponding ethical committees in the countries involved.

The project will adopt a quasi-experimental design - a controlled before and after design - in the context of a participatory action research approach and will assure that it complies with all requirements needed in order to maintain its commitment to ethics: scientific rigor; social and scientific value; confidentiality of subject/participants' data; favourable risk–benefit ratio, independent review and informed consent.

To ensure social value, the research results will be widely disseminated so as to make maximum use of the research results and to inform policy making as much as possible. To ensure participants information key social actors communities, health workers and health providers, policy makers involved in the project will be kept informed of all results and steps taken.

The proposal will be submitted to the corresponding **ethical committees** in the eight countries involved, following current legislation and regulations in each country:

Spain: Comité Ético de Investigación Clínica (CEIC-Parc de Salut Mar).

Belgium: IRB (Institutional Research Board), Institute of Tropical Medicine, Antwerp.

Colombia: Comité de Ética en Investigación, de la Escuela de Medicina y Ciencias de la Salud de la Universidad del Rosario.

Brazil: Comissão Nacional de Ética em Pesquisa (CONEP / Conselho Nacional de Saúde, Ministerio de Saúde), Comitê de Ética em Pesquisas em Seres Humanos do Instituto de Medicina Integral Prof. Fernando Figueira, Comitê de Ética em Pesquisas da Universidade de Pernambuco.

Chile: Comité de Bioética de la Universidad de Chile and Comité de Ética del Servicio Metropolitano Sur.

Mexico: Technical Council of the Institute of Public Health of the UV states that when a project is approved by an external body, no additional authorization is necessary. In case of human research, informed consent is required, detailed in the protocol and expressed in the evaluation board.

Argentina: Comité de Bioética de la Universidad Nacional de Rosario and Comité de Ética del Servicio Metropolitano.

Uruguay: Ethics committee of the National health research system of the Ministry of Health

When submitting the applications to the competent legal local/national Ethic Boards/Bodies/ administrations detailed information about the informed consent procedure and type of personal information to be gathered will be provided and accompanied by copies of the Informed Consent Forms and Information Sheets. Furthermore, detailed information on privacy/confidentiality, procedures collection, storage, access, sharing policies, protection, retention and destruction, and confirmation of the accomplishment of the current legislation and regulations in each country will be given.

Once the favourable opinion has been received, reports will be provided to the EC. Before the start of work package 2 (M7) copies of ethical approvals by the competent legal Ethic Boards will be submitted to the EC and reported as a deliverable (D1.2). Principal investigators will be responsible for the surveillance of all ethical issues.

Informed consent will be sought from all participants. Data protection and confidentiality will be ensured with full adherence to the laws of the countries involved:

Informed consent

All informants will be asked for informed consent forms regarding participation in the study. Before consent is sought, participants will be informed about the study objectives and dissemination strategies of results. For qualitative interviews they will be informed that the entire interview will be recorded and later transcribed for analysis and assured that the information provided will be used in strict confidentiality and only in the context of the study, with full respect of the country's current legislations.

There will be no financial inducements to take part in the research. All participants will be informed that the participation is voluntary and that they are free to refuse to participate in the study or to interrupt or abandon the interview at any time. The withdrawal from the study will be possible without any negative consequence for the informants. Participant will also be informed about the right to withdraw themselves and their data from the project at any time, to ask questions and receive understandable answers before making a decision, to know the burden involved in participation, to know the benefits from participation and to know that there will be no commercial exploitation of the research.

The informed consent will be written in Spanish and Portuguese languages and in terms understandable to participants, and the document will include researchers' contact data in case participants want to seek further information about participation in the study or the study's content.

Data protection

The project and the data processing will comply with the European Union Data Protection Legislation as well as with laws on data protection in each country. The project is aware of the major reform of the EU legal framework on the protection of personal data which have been proposed by the EC in January 2012. This research will adapt to the reform when it enters into force.

Unnecessary collection and use of personal data will be avoided by seeking only data that will be necessary for the study which will be guaranteed by using previously elaborated action plans.

Confidentiality will be further guaranteed by means of a contract of confidentiality with both institutions and researchers/interviewers involved. They will be committed to keep strict confidentiality of the data transferred by individual or individualized; that will access the data for the sole purpose of research within the project; to use confidential information only with the purpose and in administratively authorized conditions and to preserve and ensure that people in charge and colleagues will preserve the rights to personal privacy and when necessary, the rules governing statistical confidentiality.

Opinions retrieved from qualitative studies as well as data provided from quantitative studies will not be associated to individuals' names, at any moment. Data will no contain any sensitive information such as names, addresses, social security numbers or any other identifiers. Individual names will be replaced by a code. Results from both qualitative and quantitative studies will be treated and presented in an aggregated form, so that confidentiality of data will be ensured.

Recordings and transcripts of interviews and other personal data will be retained throughout the project and subsequently destroyed, as required by regulations. Likewise, the data storage during the period 2013 – 2018 will be carried out by applying the security measures that regulations provide: all data will be stored on a secure computer located at each participant's institution behind a firewall. Any hard-copy printout, data tapes, CDs, USB drives and zip drives or other removable media being used to transfer protected health information and all passwords for password-protected file will either be destroyed after transmission is completed, or given to the Data Security Administrator to be stored in a fireproof safe room.

Table B.4.1 Ethical issues

	Research on Human Embryo/ Foetus	YES	Page
	Does the proposed research involve human Embryos?		
	Does the proposed research involve human Foetal Tissues/ Cells?		
	Does the proposed research involve human Embryonic Stem Cells (hESCs)?		
	Does the proposed research on human Embryonic Stem Cells involve cells in culture?		
	Does the proposed research on Human Embryonic Stem Cells involve the derivation of cells from Embryos?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	✓	

	Research on Humans	YES	Page
	Does the proposed research involve children?		
	Does the proposed research involve patients?		
	Does the proposed research involve persons not able to give consent?		
	Does the proposed research involve adult healthy volunteers?		
	Does the proposed research involve Human genetic material?		
	Does the proposed research involve Human biological samples?		
	Does the proposed research involve Human data collection?	✓	19,20
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		

	Privacy	YES	Page
	Does the proposed research involve processing of genetic information or personal data (e.g. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?	✓	19,20
	Does the proposed research involve tracking the location or observation of people?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		

	Research on Animals	YES	Page
	Does the proposed research involve research on animals?		
	Are those animals transgenic small laboratory animals?		
	Are those animals transgenic farm animals?		
	Are those animals non-human primates?		
	Are those animals cloned farm animals?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	✓	

	Research Involving non-EU Countries (ICPC Countries)	YES	Page
	Is any material used in the research (e.g. personal data, animal and/or human tissue samples, genetic material, live animals, etc) : a) Collected and processed in any of the ICPC countries?	✓	19,20
	b) Exported to any other country (including ICPC and EU Member States)?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		

In accordance with Article 12(1) of the Rules for Participation in FP7, 'International Cooperation Participant Country (ICPC) means a third country which the Commission classifies as a low-income (L), lower-middle-income (LM) or upper-middle-income (UM) country. Countries associated to the Seventh EU Framework Programme do not qualify as ICP Countries and therefore do not appear in this list. (ver Annex 1-5 pág 2 y 3)

	Dual Use	YES	Page
	Research having direct military use		
	Research having the potential for terrorist abuse		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	✓	

B5. GENDER ASPECTS (OPTIONAL)

The project takes into account the European policy of equal opportunities between women and men as set forth in the European Union Treaty. The gender dimension of the project will be based on the gender mainstreaming strategy of the Commission.

The project will promote gender equality both in the process of research as well as in the substance of the research:

Process:

- The participation of female researchers has been encouraged with good result: 66% of principal investigators and 55% of main investigators are female.
- The project will also ensure that training and development opportunities are available to both male and female researchers.
- The participation of women will be encouraged throughout the life of the project. Particular attention will be given to maintaining the gender balance in the membership of national and international scientific committees as well as, in data collection teams.
- Dissemination of project results will ensure that communication channels reach both male and female audiences as appropriate.

Substance:

The data collection and analysis will pay attention to gender issues:

- The analysis of coordination, continuity and quality of health services will be conducted from a gender perspective to contribute to understanding the different needs perceptions of women and men.
- By ensuring informants and other sources of information are gender balanced
- Findings and conclusions will be provided taken into account differences on effects for men and women.

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