Progetto ordinario

Ministero della Salute – Direzione Generale della Ricerca Scientifica e Tecnologica - Allegato B2

Abruzzo

Form 1 - General information about the project

INSTITUTION PRESENTING THE PROJECT: Abruzzo

TITLE OF THE PROJECT (max 300 caratteri): Criteria for promoting equity in accessing integrated services for non-self-sufficent people: an evaluation of cost-effectiveness

KEY WORDS:	equity , cost-effectiveness , integrated health and social services , care levels , service access,
TOTAL BUDGET OF THE PROJECT:	€ 1.152.692,86
FUNDING REQUIRED TO THE MINISTRY OF HEALTH:	€ 408.792,86
INSTITUTIONAL RESOURCES:	€ 439.900,00

[X] CO-FUNDING >= 300.000 EUROS

[ ] CO-FUNDING < 300.000 EUROS

[ ] NO CO-FUNDING

(SPECIFY THE CO- FUNDING INSTITUTION, STARTING DATE OF ITS AVAILABILITY AND ITS AMOUNT)

CO-FUNDING INSTITUTION	AVAILABLE FROM	AMOUNT
Ars Abruzzo Agenzia Sanitaria Regionale	01/03/2008	€ 40.000,00
Società della Salute Prato	01/03/2008	€ 40.000,00
Itis Trieste	01/03/2008	€ 50.000,00
Fondazione E. Zancan onlus	01/03/2008	€ 24.000,00
Regione Campania - Agenzia Sanitaria Regionale	01/03/2008	€ 150.000,00

LENGTH (MONTHS, MAX 24) 24

SCIENTIFIC COORDINATOR:

Name and Surname: Vecchiato Tiziano

Institution: Fondazione "E. Zancan" Onlus

Professional status: Director

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ADMINISTRATIVE COORDINATOR

(TO BE FILLED ONLY BY REGIONI, PROVINCE AUTONOME E AGENZIA DEI SERVIZI SANITARI REGIONALI)

LIST OF PARTICIPATING UNITS (UNITÀ OPERATIVE COINVOLTE): Name of the Institutions and of their Legal Representative (if needed an attachment should be added)

- Agenzia sanitaria regionale Abruzzo , Francesco Di Stanislao
- Az. Ulss 17 Este-Monselice , Zurlo Ugo
- Fondazione "E. Zancan" Onlus , Benvegnù-Pasini Giuseppe
- Itis Trieste , Bonetta Fabio
- Regione Campania e Arsan , Gambacorta Antonio
- Società della salute Prato , Calvani Anna

FORM 2 – DESCRIPTION OF THE PROJECT (SUMMARY OF THE ACTIVITIES OF ALL THE PARTICIPATING UNITS

WHAT IS ALREADY KNOWN ON THE SUBJECT (INCLUDE THREE RELEVANT REFERENCES IN PEER REVIEWED JOURNAL) (MAX 20 LINES)

Both researches and literature underline the many difficulties in accessing the care pathways within health care district (at home, intermediate care and residential care) and their related costs (Rigby M., 2007; Lynch J. et alii, 2004; Tsuchiya A, Dolan P., 2007; Tugwell P. e altri, 2006).

The monitoring of the essential levels of integrated health and social care is on the agenda of national and regional governments. The reason for this interest is highlighted both in literature and in legislation, mainly because in complex cases (that imply an integrated health and social care) (see art. 3 legislative decree 502/1992 and subsequent modifications) the main burden relapses over the "weakest" people and/or their families that take care of them.

Studies highlight that one of the main determinant for fairly accessing and benefit from services is represented by conditions and modes for accessing and evaluating needs. Results are not convincing yet because there is not a common way for classifying integrated social and health services: this means that is not easy to compare interventions provided in different geographical areas considering then need-effectiveness-costs.

This research proposal is based on these premises: it aims to define a multi-level strategy for monitoring the essential levels of integrated care; such a strategy aims to overcome the difficulties using a classification system based on a three-axis model (indicators of needs, effectiveness and costs) that connects access conditions to the interventions/services provided and their effectiveness. This could be a starting point for experimenting new solutions in order to evaluate their agreement to the expected results, defined in the personalised care plans and evaluating their impact on the regional welfare systems (Vecchiato T., 2005), considered in the research proposal.

Linch J. et alii (2004), Is income inequality a determinan of population health? A systematic review, The Milbank Quarterly Vol. 82, n. 1.

Rigby M. (2007), Applying emergent ubiquitos thechnologies in health: the need to respond to new challenges of opportunity, expectation, and responsibility, in International Journal of Medical Informatics 76S, 349-352.

Tsuchiya A., Dolan P. (2007), Do NHS clinicians and members of the public share the same views about reducing inequalities in health?, Social Sciences & Medicine 64, 2499-2503.

Vecchiato T., a cura di (2005), Sistemi regionali di welfare: profili e analisi comparata - Primo Rapporto, Fondazione Zancan, Padova.

Tugwell P. e altri (2006), Reduction of inequalities in health: assessing evidence-based tools, International Journal for Equity in Health 5:11.

WHAT THE PROJECT ADDS TO THE INFORMATION ALREADY AVAILABLE (MAX

10 LINES)

The research proposal aims to analyse the potentialities and conditions necessary for building up a classification system for integrated health and social services in order to better protect the needs and rights of the weakest population, from the access phase to the take in care process.

The project considers the relationship among needs, costs and effectiveness. The relationship between need and costs finds solutions and suggestions in national and international literature. The relationship between effectiveness and costs need to be better defined mainly as regards the clinical and managerial aspects. Also the possibility to use tri-polar indexes (input, output, outcome) for assessing the care levels and the protection of vulnerable persons can guarantee new possibilities for promoting the equity in different local and regional welfare system.

DETAILED DESCRIPTION OF THE PROJECT'S MAIN AND SECONDARY OBJECTIVE(S) (max 40 lines)

The title exemplifies the main objective of the research: to identify, select and validate solutions to promote the access to health care services in condition of equity and to evaluate the impact of care models, using indexes that show measures of need-effectiveness-cost.

The secondary objective is to reduce inappropriate access to care and to overcome the sectoral practices, based on the interests of service providers instead of users' ones, promoting personalised pathways, able to connect different responsibilities and cost. Expected results of this secondary objective are synthesized in terms of improvement of:

1. accessibility to services (unitarian access and organization of care);

2. ability to receive users' demand, to orientate people, particularly the fragile ones;

3. protocols for multidisciplinary need evaluation, facilitating taking care and personalized care projects.

In sum, the reaching of objectives will allow for:

- classifying different interventions according to different need groups;

- locating interventions in an analytical and evaluative structure coherent with the essential levels of social and health care;

- underlining the relationship between need and nature of provided interventions;

- showing on a comparative basis (regional, local and or service-based) the relationship between "outcome and related costs" for promoting higher equity already in the access phase.

METHODS

SPECIFY: (whenever applicable) a) Patients/population; b) Intervention(s)/Analytical procedures; c) Indicator(s); d) Study design; e) Statistical analysis (MAX 2 PAGES)

Population

The research proposal considers the need areas in which the high number of frail users, because of their non-self-sufficient condition, require to contrast inequalities already in the access phase. The population interested is represented by non self-sufficient people (severe conditions) who access services, that is estimated in 13,000 Abruzzo, 47,000 Veneto, 36,000 Tuscany and 59,000 Campania.

Analytical procedures

As compared with the health care system (based on a professional need evaluation), the social service system is characterised by three types of access that is: professional evaluation, administrative evaluation, and direct access. These three types of access make difficult the monitoring of access pathways and unclear the contents and quantity of interventions to be included into the essential levels of integrated care.

For this reason, (study 1) the first phase is based (Study 1a) on the reconstruction of access pathways into the Units participating to the research, highlighting the diagnosis criteria, the need assessment instruments, the professional resources. Subsequently (Study 1b) the health and social interventions provided in those units are classified assessing their adherence to the national recommendations.

This knowledge will constitute in phase 2 the basis for using shared criteria for understanding social and health interventions and their costs, based on the needs, the funding system (input), the interventions/services provided (output), the effectiveness (outcome). These criteria are consistent with the recommendations made by the European Economic and Social Committee (Soc/148 10 December 2003). The Social Committee suggests the use of a threefold system of indicators based on financing indicators (input), organisation of responses (output) and outcome indicators in terms of health gaining. These indicators will allow a comparison among different welfare systems. The research proposal wants to use these criteria for comparing different service models at local and regional level.

The expected result of study 1 is a Report on a) inequalities in accessing services, clinical choices and maps that consider services provided (who assesses the need, which instruments are used, how much time do they need, other documented variables); b) the proposed system for classifying interventions that allows a comparison among Regions involved in the study.

The second phase (study 2) is based on a systematic usage of a new classification model: the two different ways for accessing services (health and social access) are "treated" with mixed protocols (clinical and organisational) in order to manage the

user's demand, the definition of the problem, the definition of the personalised care plan.

Interventions provided for each territory will be classified in three macro-level of care: home care, intermediate care (ambulatory and/or semi-residential care), residential care. The classification and monitoring strategy is based on 5 elements: intervention definition, need area, main aim and functions, organisation, staff.

These syntactical characteristics of the classification make possible to build a code that combine these different dimension in a single string. The classification considers four levels for codifying interventions:

- (first coding level) access mode: (1a) single professional evaluation, (1b) multi-professional evaluation, (2) administrative evaluation, (3) direct access (this is not an evaluation/assessment);

- (second coding level) macro-area of intervention: (D) Domiciliary/Home, (I) Intermediate, (R) Residential;

- (third coding level) sector/service: daily centres, social home care, family group community, foster care;

Units will receive a software for gathering data on a web platform in order to avoid conflicts between local information systems and information system of the research. Among variables considered, a specific attention will be given to access modes, type of needs, main diagnosis, secondary diagnosis, assessing subjects, assessment instruments, care plan contents, care level, interventions and their quantity.

The final step of Study 2 consists of a sub-study that will simulate costs-efficiency indicators among units (benchmarking analysis). Such an analysis is based on the DEA model (Data Envelopment Analysis), a new tool in operational research for measuring technical efficiency. DEA is an optimization method of mathematical programming to generalize the single input / single output technical efficiency measure.

The expected result of study 2 is a Report about the experimental management of the classification model that implies the use and knowledge of specific quantities on interventions/services delivered and their quantity and costs when aggregated. The Report will include also a quantification and evaluation of outputs and inputs variables for each macro-level of integrated health and social care. Potentialities and weakness for each unit will be documented by the DEA evaluation.

The third phase (study 3) considers the relationship among needs defined in the access phase, provided interventions, costs and effectiveness indexes. In order to reach this aim, for each research unit, a sample of users will be defined (target group and control group). For similar need groups, bi-polar indexes (input-output, input-outcome, output-outcome) will be deepen and documented. The sample will be managed through a software that will help the decision process and the documentation of variables.

Subsequently to the bi-polar analysis, the same analysis will be developed using tri-polar indexes (input-output-outcome) in order to better highlight the equity conditions and/or inequalities in accessing and receiving interventions/services.

The Expected results of Study 3 is a comparison between two groups: the experimental group will be treated with a research protocol for the personalised taking care process that will be based on recommendations for access, diagnosis and management of clinical and organisational choices and it will include outcome evaluation. Approximately 300 patients will enter the experimental sample and another 300 will constitute the treated as usual group in the proposed randomised controlled trial.

Indicators: Access modes, differences in access, type of needs, characteristics of evaluation (single professional evaluation, multidisciplinary evaluation), diagnosis (main and secondary), evaluators, evaluation tools, contents of the care plan, care level

Study design

Study 1a: reconstruction of access pathways. Each unit will describe their diagnosis criteria, their need assessment instruments, their professional resources using care pathways maps.

Study 1b: Classification of health and social interventions provided in the units assessing their adherence to national recommendations, in accordance with the classification system.

Study 2: Each units will apply the classification model. Specific quantities on interventions/services delivered and their quantity and costs when aggregated will be identified for each unit. Such classification will allow the application of the DEA model.

Study 3: Approximately 300 patients will enter the experimental sample and another 300 will constitute the treated as usual group in the proposed randomised controlled trial. 300 subjects per group will allow an expected effect of [controlled average (variable x) - experimental average (variable x)]/std=0,28 (T Student, alpha=5% two-tail, 1-beta=80%). The evaluation will last a total of 12 months, with 3 months active recruitment period and 9 months treatment for each subject.

Statistical analysis: Qualitative and quantitative analysis of data in studies 1a, 1b and 2. Simulation and economic modelling in study 2 (Dea model). Analysis of two-groups in order to evaluate their differences and similarities in study 3.

GENERAL TRANSFERIBILITY AND POTENTIAL IMPACT OF RESULTS (max 1/2 page)

a) The clinical transferability is based on the usage of protocols experimented during the access phase and the taking care process, reporting the clinical choices and the allocation of resources. This transferability can be facilitated by professionals involved in the research project that will become trainers of their colleagues and tutors in the dissemination of results. Report of different studies and publications respond to the same aim.

b) transferability related to the regional and multiregional monitoring is based on the protocol to be shared for identify the variables for building cost-effectiveness evaluation based on the tripolar indexes. The transferability is promoted with meetings among regions participating to the project, with a concluding conference and the dissemination of reports. Another useful element of transferability is the possibility to continue the usage of the software experimented during the research.

c) the social transferability is related to the use of results for promoting social evaluation of services and care levels, involving all stakeholders (users associations, voluntary networks, other associations representing users and patients inside the regions involved in the research) Cost-effectiveness evaluation and its indexes will be used for the social evaluation of services in order to facilitate the comparison among services, costs and service outcomes.

OUTPUT(S) OF THE PROJECT (max 1/2 PAGE)

(DESCRIBE THE OUTPUTS THAT THE PROJECT WILL PRODUCE SPECIFYING WHEN - DURING THE PROJECT - THEY WILL BECOME AVAILABLE Example(s) of output: ANIMAL MODELS, METHODOLOGIC WORKPACKAGES, OTHER DELIVERABLES

Study 1

Study 1a. Workpackage for defining the care pathways map (available before 2 months)

Report on study 1a (av. 8th month)

Study 1b. Workpackage for defining and using the classification model (av. 3rd month)

Report on study 1b (av. 6th month)

Study 2

Literature review on inequalities in accessing services, integrated social and health care levels, classification of interventions and services (available before 6 months).

Workpackage for managing the classification data (av. 8th month)

Sisclass Software (av. 8th month)

Report on the classification model (Sisclass)(av. 14th month)

Simulation with Data Envelopment Analysis (av. 16th month)

Report on Dea Simulation (av. 18th month)

Dissemination articles on study 1 and 2 (av. 24th month)

Study 3

Research Protocol and methodological workpackage (available before 6 months).

Software and Web platform for accessing the experimental area (av. 11th month)

Training seminars on protocol and methodology of taking care devoted to professionals involved in the study (av. 11th month)

Monitoring and tutorship of units involved in the study (av. 20th month)

Report on two-group comparison (av. 22th month)

Final Report (av. 24th month)

MILESTONES ALONGSIDE THE PROJECT

(LIST UP TO TEN MILESTONES WITH RELEVANT RESULTS EXPECTED DURING THE PROJECT) (MAX 1 PAGE)

1. Care pathways analysis and Sisclass definition. Expected result: To describe the service provision.

2. Report of Study 1. Expected result: To map the units.

3. Literature review. Expected result: To understand inequalities.

4. Training on Sisclass method. Expected result: To support experimentation.

5. Sisclass analysis. Expected result: To map the classification of services in different units.

6. Dea Analysis. Expected result: To compare units highlighting potentialities and weaknesses.

7. Report on study 2. Expected result: To map the Sisclass experimentation per each unit.

8. Research protocol and training on cost-effectiveness method. Expected results: To support experimentation on two group (experimental and control groups).

9. Sample definition (target and control group). Expected result: To define an appropriate sample numerosity.

10. Protocolo for access, personalised care and evaluation. Expected results: To experiment on the two groups.

TIMETABLE OF THE PROJECT

See attached file

COORDINATING COST OF THE PROJECT

Costs items and brief description	Total	Part covered by MoH* funds [a]
1. Permanent staff dirigente regionale sanità	€ 12.000,00	None
2. Project Staff (ad hoc contracts/consultants/fellowship) coordinatore scientifico	€ 50.000,00	€ 50.000,00
3. Travel Costs and Subsistence Allowances Costs of meetings at the Units involved in the research and costs for intermediate meeting/seminars along the 24 months	€ 6.200,00	€ 6.200,00
4. Equipment	€ 0,00	€ 0,00
5. Consumables and Supplies directly linked to the Project	€ 0,00	€ 0,00
6. Dissemination of results (publications, meetings/ workshops etc.)	€ 0,00	€ 0,00
7. Data handling and analysis (specify) Data analysis study 2b	€ 7.500,00	€ 7.500,00
8. Overheads for all Institutions involved (specify)	€ 0,00	€ 0,00
Totale	€ 75.700,00	€ 63.700,00

a: MoH - Ministry of Health

OVERALL COSTS OF THE PROJECT

Costs items and brief description	Total	Part covered by MoH* funds [a]
1. Permanent staff	€ 543.900,00	None
2. Project Staff (ad hoc contracts/consultants/fellowship)	€ 528.500,00	€ 328.500,00
3. Travel Costs and Subsistence Allowances	€ 39.056,00	€ 39.056,00
4. Equipment	€ 0,00	€ 0,00
5. Consumables and Supplies directly linked to the Project	€ 0,00	€ 0,00
6. Dissemination of results (publications, meetings/ workshops etc.)	€ 12.500,00	€ 12.500,00
7. Data handling and analysis (specify)	€ 22.500,00	€ 22.500,00

Costs items and brief description	Total	Part covered by MoH* funds [a]
8. Overheads for all Institutions involved (specify)	€ 6.236,86	€ 6.236,86
Totale	€ 1.152.692,86	€ 408.792,86

a: MoH - Ministry of Health

CV of the Scientific Coordinator of the project

(LIST UP TO 10 REFERENCES FROM THE LAST 5 YEARS RELEVANT TO THE TOPIC AREA OF THIS PROPOSAL)

See attached file

FORM 2 BIS: DESCRIPTION OF EACH PARTICIPATING UNIT (UNITÀ OPERATIVA) CONTRIBUTION TO THE PROJECT (One form per Participating Unit should be filled)

PARTICIPATING UNIT: Agenzia sanitaria regionale Abruzzo

SCIENTIFIC COORDINATOR:

Name and Surname: Manzoli Lamberto

Institution: Università di Chieti

Professional status: Professor

Address: Via dei Vestini, 5, 66013 Chieti

Tel number: 347 4727282

Fax number:

E-mail address: lmanzoli@unich.it

AUTHORISED LEGAL REPRESENTATIVE: Francesco Di Stanislao

SPECIFIC CONTRIBUTION OF THE UNIT TO THE PROJECT (max 20 lines)

Regarding study 1 the Unit reconstructs the pathways to services, highlighting accessing modes, diagnosis criteria, need assessment instruments, the professional resources. Also, it classifies the health and social interventions provided consistently to the national recommendations.

This description will constitute the basis for using shared criteria for understanding integrated interventions and their costs, based funding system (input), interventions and services provided (output), effectiveness indexes (outcome).

Regarding study 2, the Unit will classify its interventions/services in three macro-level of care: home care, intermediate care (ambulatory and/or semiresidential care), residential care. The classification strategy is based on 5 elements: intervention definition, need area, main aim and functions, organisation, staff.

Regarding study 3 the Unit will consider the relationship among needs defined in the access phase, interventions provided, costs and effectiveness indexes. In order to reach this aim, a sample of users will be defined (target group = 60 and control group =60). For different need groups, bi-polar indexes (input-output, input-outcome, output-outcome) will be deepen and documented. The sample will be managed through a software that will help the decision process and the documentation of variables.

Subsequently to the bi-polar analysis, the same analysis will be developed using tri-polar indexes (input-output-outcome) in order to better highlight the equity conditions and/or inequalities in accessing and receiving interventions/services.

The Unit also supports the dissemination of results. In particular, it will be involved in the transferability related to the regional and multiregional monitoring, based on the protocol to be shared for identify the variables for building cost-effectiveness evaluation (based on the tripolar indexes) and in the social transferability, related to the use of results for promoting social evaluation of services and the equity of care levels, involving all stakeholders.

METHODS (max 1 pagina)

SPECIFY (whenever applicable): a) Patients/population; b) Intervention(s)/Analytical procedures; c) Indicator(s); d) Study design; e) Statistical analysis

Study 1a: reconstruction of access pathways. The Unit will describe its diagnosis criteria, need assessment instruments, professional resources using care pathways maps.

Study 1b: The Unit will classify health and social interventions provided, assessing its consistency to national recommendations, in accordance with the Sisclass model.

Study 2: The Unit will apply the classification model and will define the "quantities" of interventions/services delivered and their costs. Such classification will allow the application of the DEA model to the Unit and compare cost-efficiency indexes.

Study 3: Approximately 60 patients will enter the experimental sample and another 60 will constitute the treated as usual group in the proposed randomised controlled trial. 60 subjects per group will allow an expected effect of [controlled average (variable x) - experimental average (variable x)]/std=0,28 (T Student, alpha=5% two-tail, 1-beta=80%). The evaluation will last a total of 12 months, with 3 months active recruitment period and 9 months treatment for each subject.

This Unit will be involved using different active strategies:

1. Involvement of professionals in the research meetings

2. Technical training regarding the software and web platform to support the project

3. Monitoring and tutorship of their activities related to the project

4. Involvement of professionals in training their colleague regarding the implementation of the research protocols.

PERSONNEL Dedicated to the Project activities (in person-months):

Permanent staff	
Qualification* [a]	**person-months dedicated**
Nurse	3
Social worker	3
Administrative personnel	3
Physician	3
Responsible social area	3
Physician responsible of district	3
Scientific coordinator	12

a: (giurista; statistico; economista; medico; ..)

Project staff	
Qualification* [aaaaaa]	**person-months dedicated**
fellowship 1	24
fellowship 2	12

Equipment of participating units dedicated to the project:	
Type	**Days/project-length**

COSTS OF THE PARTICIPATING UNIT

Costs items and brief description	**Total**	**Part covered by MoH funds [a]**
1. Permanent staff	€ 91.500,00	None
2. Project Staff (ad hoc contracts/consultants/fellowship) 1 fellowship (24 months) plus 1 fellowship (12 months)	€ 60.000,00	€ 60.000,00

Costs items and brief description	Total	Part covered by MoH funds [a]
3. Travel Costs and Subsistence Allowances Costs of meetings at the Units involved in the research and costs for intermediate meeting/seminars along the 24 months	€ 6.060,00	€ 6.060,00
4. Equipment	€ 0,00	€ 0,00
5. Consumables and Supplies directly linked to the Project	€ 0,00	€ 0,00
6. Dissemination of results (publications, meetings/ workshops etc.)	€ 0,00	€ 0,00
7. Data handling and analysis (specify)	€ 0,00	€ 0,00
8. Spese generali delle strutture coinvolte (specificare)	€ 0,00	€ 0,00
Totale	€ 157.560,00	€ 66.060,00

a: MoH - Ministry of Health

CV of the Scientific Coordinator of the Participation Unit (Unità Operativa) (REPORT UP TO 10 REFERENCES FROM THE LAST 5 YEARS RELEVANT TO THE TOPIC AREA OF THIS RESEARCH PROPOSAL)

See attached file

PARTICIPATING UNIT: Az. Ulss 17 Este-Monselice

SCIENTIFIC COORDINATOR:

Name and Surname: Pilati Giovanni

Institution: Az. Ulss 17

Professional status: Direttore sanitario

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E-mail address: direzione.sanitaria@ulss17.it

AUTHORISED LEGAL REPRESENTATIVE: Zurlo Ugo

SPECIFIC CONTRIBUTION OF THE UNIT TO THE PROJECT (max 20 lines)

Regarding study 1 the Unit reconstructs the pathways to services, highlighting accessing modes, diagnosis criteria, need assessment instruments, the professional resources. Also, it classifies the health and social interventions provided consistently to the national recommendations.

This description will constitute the basis for using shared criteria for understanding integrated interventions and their costs, based funding system (input), interventions and services provided (output), effectiveness indexes (outcome).

Regarding study 2, the Unit will classify its interventions/services in three macro-level of care: home care, intermediate care (ambulatory and/or semiresidential care), residential care. The classification strategy is based on 5 elements: intervention definition, need area, main aim and functions, organisation, staff.

Regarding study 3 the Unit will consider the relationship among needs defined in the access phase, interventions provided, costs and effectiveness indexes. In order to reach this aim, a sample of users will be defined (target group = 60 and control group =60). For different need groups, bi-polar indexes (input-output, input-outcome, output-outcome) will be deepen and documented. The sample will be managed through a software that will help the decision process and the documentation of variables.

Subsequently to the bi-polar analysis, the same analysis will be developed using tri-polar indexes (input-output-outcome) in order to better highlight the equity conditions and/or inequalities in accessing and receiving interventions/services.

The Unit also supports the dissemination of results. In particular, it will be involved in the transferability related to the regional and multiregional monitoring, based on the protocol to be shared for identify the variables for building cost-effectiveness evaluation (based on the tripolar indexes) and in the social transferability, related to the use of results for promoting social evaluation of services and the equity of care levels, involving all stakeholders.

METHODS (max 1 pagina)

SPECIFY (whenever applicable): a) Patients/population; b) Intervention(s)/Analytical procedures; c) Indicator(s); d) Study design; e) Statistical analysis

Study 1a: reconstruction of access pathways. The Unit will describe its diagnosis criteria, need assessment instruments, professional resources using care pathways maps.

Study 1b: The Unit will classify health and social interventions provided, assessing its consistency to national recommendations, in accordance with the Sisclass model.

Study 2: The Unit will apply the classification model and will define the â##quantitiesâ## of interventions/services delivered and their costs. Such classification will allow the application of the DEA model to the Unit and compare cost-efficiency indexes.

Study 3: Approximately 60 patients will enter the experimental sample and another 60 will constitute the treated as usual group in the proposed randomised controlled trial. 60 subjects per group will allow an expected effect of [controlled average (variable x) - experimental average (variable x)]/std=0,28 (T Student, alpha=5% two-tail, 1-beta=80%). The evaluation will last a total of 12 months, with 3 months active recruitment period and 9 months treatment for each subject.

This Unit will be involved using different active strategies:

1. Involvement of professionals in the research meetings

2. Technical training regarding the software and web platform to support the project

3. Monitoring and tutorship of their activities related to the project

4. Involvement of professionals in training their colleague regarding the implementation of the research protocols.

PERSONNEL Dedicated to the Project activities (in person-months):

Permanent staff	
Qualification* [a]	**person-months dedicated**
Responsible social area	3
Social worker	3
Pshysician - Responsible of district	3
Nurse	3
Physician - Scientific coordinator	12
Pshysician	3
Administrative personnel	3

a: (giurista; statistico; economista; medico; ..)

Project staff	
Qualification* [aaaaaa]	**person-months dedicated**
Fellowship	24

Equipment of participating units dedicated to the project:	
Type	**Days/project-length**

COSTS OF THE PARTICIPATING UNIT

Costs items and brief description	Total	Part covered by MoH funds [a]
1. Permanent staff	€ 91.500,00	None
2. Project Staff (ad hoc contracts/consultants/fellowship) Fellowship for 24 months	€ 40.000,00	€ 40.000,00
3. Travel Costs and Subsistence Allowances costs of meetings at the Units involved in the research and costs for intermediate meeting/seminars along the 24 months	€ 5.260,00	€ 5.260,00
4. Equipment	€ 0,00	€ 0,00
5. Consumables and Supplies directly linked to the Project	€ 0,00	€ 0,00
6. Dissemination of results (publications, meetings/ workshops etc.)	€ 0,00	€ 0,00
7. Data handling and analysis (specify)	€ 0,00	€ 0,00
8. Spese generali delle strutture coinvolte (specificare)	€ 0,00	€ 0,00
Totale	€ 136.760,00	€ 45.260,00

a: MoH - Ministry of Health

CV of the Scientific Coordinator of the Participation Unit (Unità Operativa) (REPORT UP TO 10 REFERENCES FROM THE LAST 5 YEARS RELEVANT TO THE TOPIC AREA OF THIS RESEARCH PROPOSAL)

See attached file

PARTICIPATING UNIT: Fondazione "E. Zancan" Onlus

SCIENTIFIC COORDINATOR:

Name and Surname: Bezze Maria

Institution: Fondazione "E. Zancan" Onlus

Professional status: Senior Researcher

Address: Via Vescovado, 66, 35141 Padova

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Fax number: 049663013

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AUTHORISED LEGAL REPRESENTATIVE: Benvegnù-Pasini Giuseppe

SPECIFIC CONTRIBUTION OF THE UNIT TO THE PROJECT (max 20 lines)

The research unit of the Fondazione Zancan is encharged of facilitating the coordination of studies 1-2-3, planning and elaborating research (study design and protocol for Sisclass), developing the guide line and protocol for the experimentation (target and control group in study 3), elaborating methodological workpackages for training professionals involved in the research.

This unit guarantees the analysis of qualitative data and quantitative data deriving from studies 1-2-3. This unit will also pre-

pare the intermediate and final Reports.

In order to guarantee efficacy to different actions included in the studies, this unit will implement the technical supports for gathering and managing data, in particular the web platform for sharing the research database. The management of the database on a web platform is necessary mainly for facilitating the experimental study because it allows multidisciplinary units involved in the project to share information on case studies, even if the data are allocated to separate health and social organisations.

In order to reach the goals, the unit is composed of professionals with different competences: health, social, economic, statistical, methodological, evaluation, information technology competences.

Also, this Unit will be involved in the clinical transferability that is based on the usage of protocols experimented during the access phase and the taking care process, reporting the clinical choices and the allocation of resources. Report of different studies and publications respond to the same aim.

METHODS (max 1 pagina)

SPECIFY (whenever applicable): a) Patients/population; b) Intervention(s)/Analytical procedures; c) Indicator(s); d) Study design; e) Statistical analysis

The Unit will Report the Study 1 on a) inequalities in accessing services, clinical choices and maps that consider services provided (who assesses the need, which instruments are used, how much time do they need, other documented variables); and b) the proposed system for classifying interventions that allows a comparison among Regions involved in the study.

Also it coordinates the other Unit in using the software for gathering data on a web platform in order to avoid conflicts between local information systems and information system of the research and it will simulate the cost-efficiency analysis using the DEA model. Their results will be documented on Report of Study 2 in which the experimental management of the classification model will be described.

This Unit will also work on the comparison among experimental groups (study 3). The Unit will report on the control group and experimental group (treated with a research protocol that considers access under equity conditions, personalised taking care process, diagnosis and management of clinical and organisational choices, outcome evaluation).

This Unit will perform qualitative and quantitative analysis of data in studies 1a, 1b and 2. Simulation and economic modelling in study 2 (Dea model). Analysis of two-groups in order to evaluate their differences and similarities in study 3.

The Unit will be give a particular contribution to the following intermediate objectives:

1. To describe the service provision. Expected result: Care pathways analysis and Sisclass definition

2. To map the units. Expected result: Report of Study 1

3. To understand inequalities. Expected result: Literature review

4. To support experimentation. Expected result: Training on Sisclass method

5. To map the classification of services in different units. Expected result: Sisclass analysis

6. To compare units highlighting potentialities and weaknesses. Expected result: Dea Analysis

7. To map the Sisclass experimentation per each unit. Expected result: Report on study 2

8. To support experimentation on two group (experimental and control groups). Expected results: Research protocol and training on cost-effectiveness method

9. To define an appropriate sample numerosity. Expected result: Sample definition (target and control group)

10. To experiment on the two groups. Expected results: access, personalised care and evaluation.

PERSONNEL Dedicated to the Project activities (in person-months):

Permanent staff	
Qualification* [a]	**person-months dedicated**
Statistician	12
Economist	12

a: (giurista; statistico; economista; medico; ..)

Project staff	
Qualification* [aaaaaa]	**person-months dedicated**
information technology expert - 2	6

Project staff	
information technology expert - 1	6
fellowship	24

Equipment of participating units dedicated to the project:	
Type	**Days/project-length**

COSTS OF THE PARTICIPATING UNIT

Costs items and brief description	Total	Part covered by MoH funds [a]
1. Permanent staff Scientific coordinator (ricercatore senior) + ricercatore senior	€ 86.400,00	None
2. Project Staff (ad hoc contracts/consultants/fellowship) Fellowship for 24month, esperti software	€ 58.500,00	€ 58.500,00
3. Travel Costs and Subsistence Allowances costs of meetings at the Units involved in the research and costs for intermediate meeting/seminars along the 24 months	€ 5.796,00	€ 5.796,00
4. Equipment	€ 0,00	€ 0,00
5. Consumables and Supplies directly linked to the Project	€ 0,00	€ 0,00
6. Dissemination of results (publications, meetings/ workshops etc.) Costs for a publication that synthesises the research results + CONVEGNO	€ 12.500,00	€ 12.500,00
7. Data handling and analysis (specify) Data analysis for study 1, 2, 3	€ 15.000,00	€ 15.000,00
8. Spese generali delle strutture coinvolte (specificare)	€ 6.236,86	€ 6.236,86
Totale	€ 184.432,86	€ 98.032,86

a: MoH - Ministry of Health

CV of the Scientific Coordinator of the Participation Unit (Unità Operativa) (REPORT UP TO 10 REFERENCES FROM THE LAST 5 YEARS RELEVANT TO THE TOPIC AREA OF THIS RESEARCH PROPOSAL)

See attached file

PARTICIPATING UNIT: Itis Trieste

SCIENTIFIC COORDINATOR:

Name and Surname: Canali Cinzia

Institution: Fondazione Zancan

Professional status: senior researcher

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AUTHORISED LEGAL REPRESENTATIVE: Bonetta Fabio

SPECIFIC CONTRIBUTION OF THE UNIT TO THE PROJECT (max 20 lines)

This Unit is involved in the project with a particular attention to non self sufficient elderly people. Regarding study 1 the Unit reconstructs the pathways to services, highlighting accessing modes, diagnosis criteria, need assessment instruments, the professional resources. Also, it classifies the health and social interventions provided consistently to the national recommendations.

This description will constitute the basis for using shared criteria for understanding integrated interventions and their costs, based funding system (input), interventions and services provided (output), effectiveness indexes (outcome).

Regarding study 2, the Unit will classify its interventions/services in three macro-level of care: home care, intermediate care (ambulatory and/or semiresidential care), residential care. The classification strategy is based on 5 elements: intervention definition, need area, main aim and functions, organisation, staff.

Regarding study 3 the Unit will consider the relationship among needs defined in the access phase, interventions provided, costs and effectiveness indexes. In order to reach this aim, a sample of users will be defined (target group = 60 and control group =60). For different need groups, bi-polar indexes (input-output, input-outcome, output-outcome) will be deepen and documented. The sample will be managed through a software that will help the decision process and the documentation of variables.

Subsequently to the bi-polar analysis, the same analysis will be developed using tri-polar indexes (input-output-outcome) in order to better highlight the equity conditions and/or inequalities in accessing and receiving interventions/services.

The Unit also supports the dissemination of results. In particular, it will be involved in the transferability related to the regional and multiregional monitoring, based on the protocol to be shared for identify the variables for building cost-effectiveness evaluation (based on the tripolar indexes) and in the social transferability, related to the use of results for promoting social evaluation of services and the equity of care levels, involving all stakeholders.

METHODS (max 1 pagina)

SPECIFY (whenever applicable): a) Patients/population; b) Intervention(s)/Analytical procedures; c) Indicator(s); d) Study design; e) Statistical analysis

Study 1a: reconstruction of access pathways. The Unit will describe its diagnosis criteria, need assessment instruments, professional resources using care pathways maps.

Study 1b: The Unit will classify health and social interventions provided, assessing its consistency to national recommendations, in accordance with the Sisclass model.

Study 2: The Unit will apply the classification model and will define the "quantities" of interventions/services delivered and their costs. Such classification will allow the application of the DEA model to the Unit and compare cost-efficiency indexes.

Study 3: Approximately 60 patients will enter the experimental sample and another 60 will constitute the treated as usual group in the proposed randomised controlled trial. 60 subjects per group will allow an expected effect of [controlled average (variable x) - experimental average (variable x)]/std=0,28 (T Student, alpha=5% two-tail, 1-beta=80%). The evaluation will last a total of 12 months, with 3 months active recruitment period and 9 months treatment for each subject.

This Unit will be involved using different active strategies:

1. Involvement of professionals in the research meetings

2. Technical training regarding the software and web platform to support the project

3. Monitoring and tutorship of their activities related to the project

4. Involvement of professionals in training their colleague regarding the implementation of the research protocols.

PERSONNEL Dedicated to the Project activities (in person-months):

Permanent staff	
Qualification* [a]	**person-months dedicated**
Administrative staff	3

Permanent staff	
Responsible of residential setting	6
Nurse	3
Social worker	6
Manager	6

a: (giurista; statistico; economista; medico; ..)

Project staff	
Qualification* [aaaaaa]	**person-months dedicated**
Scientific coordinator	12

Equipment of participating units dedicated to the project:	
Type	**Days/project-length**

COSTS OF THE PARTICIPATING UNIT

Costs items and brief description	Total	Part covered by MoH funds [a]
1. Permanent staff Costs pertaining to administrative staff, social worker, responsible of the residential setting, nurse, manager of Itis	€ 78.000,00	None
2. Project Staff (ad hoc contracts/consultants/fellowship) 24 month fellowship (40,000)and payment for the unit scientific coordinator	€ 90.000,00	€ 40.000,00
3. Travel Costs and Subsistence Allowances Costs of meetings at the Units involved in the research and costs for intermediate meeting/seminars along the 24 months	€ 6.720,00	€ 6.720,00
4. Equipment	€ 0,00	€ 0,00
5. Consumables and Supplies directly linked to the Project	€ 0,00	€ 0,00
6. Dissemination of results (publications, meetings/ workshops etc.)	€ 0,00	€ 0,00
7. Data handling and analysis (specify)	€ 0,00	€ 0,00
8. Spese generali delle strutture coinvolte (specificare)	€ 0,00	€ 0,00
Totale	€ 174.720,00	€ 46.720,00

a: MoH - Ministry of Health

CV of the Scientific Coordinator of the Participation Unit (Unità Operativa) (REPORT UP TO 10 REFERENCES FROM THE LAST 5 YEARS RELEVANT TO THE

TOPIC AREA OF THIS RESEARCH PROPOSAL)

See attached file

PARTICIPATING UNIT: Regione Campania e Arsan

SCIENTIFIC COORDINATOR:

Name and Surname: Romano Rosanna

Institution: Azienda Sanitaria Locale Salerno 1

Professional status: Sociologo dirigente

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Fax number: 081 7969383

E-mail address: r.pirro@maildip.regione.campania.it

AUTHORISED LEGAL REPRESENTATIVE: Gambacorta Antonio

SPECIFIC CONTRIBUTION OF THE UNIT TO THE PROJECT (max 20 lines)

Regarding study 1 the Unit reconstructs the pathways to services, highlighting accessing modes, diagnosis criteria, need assessment instruments, the professional resources. Also, it classifies the health and social interventions provided consistently to the national recommendations.

This description will constitute the basis for using shared criteria for understanding integrated interventions and their costs, based funding system (input), interventions and services provided (output), effectiveness indexes (outcome).

Regarding study 2, the Unit will classify its interventions/services in three macro-level of care: home care, intermediate care (ambulatory and/or semiresidential care), residential care. The classification strategy is based on 5 elements: intervention definition, need area, main aim and functions, organisation, staff.

Regarding study 3 the Unit will consider the relationship among needs defined in the access phase, interventions provided, costs and effectiveness indexes. In order to reach this aim, a sample of users will be defined (target group = 60 and control group =60). For different need groups, bi-polar indexes (input-output, input-outcome, output-outcome) will be deepen and documented. The sample will be managed through a software that will help the decision process and the documentation of variables.

Subsequently to the bi-polar analysis, the same analysis will be developed using tri-polar indexes (input-output-outcome) in order to better highlight the equity conditions and/or inequalities in accessing and receiving interventions/services.

The Unit also supports the dissemination of results. In particular, it will be involved in the transferability related to the regional and multiregional monitoring, based on the protocol to be shared for identify the variables for building cost-effectiveness evaluation (based on the tripolar indexes) and in the social transferability, related to the use of results for promoting social evaluation of services and the equity of care levels, involving all stakeholders.

METHODS (max 1 pagina)

SPECIFY (whenever applicable): a) Patients/population; b) Intervention(s)/Analytical procedures; c) Indicator(s); d) Study design; e) Statistical analysis

Study 1a: reconstruction of access pathways. The Unit will describe its diagnosis criteria, need assessment instruments, professional resources using care pathways maps.

Study 1b: The Unit will classify health and social interventions provided, assessing its consistency to national recommendations, in accordance with the Sisclass model.

Study 2: The Unit will apply the classification model and will define the "quantities" of interventions/services delivered and their costs. Such classification will allow the application of the DEA model to the Unit and compare cost-efficiency indexes.

Study 3: Approximately 60 patients will enter the experimental sample and another 60 will constitute the treated as usual group in the proposed randomised controlled trial. 60 subjects per group will allow an expected effect of [controlled average (variable x) - experimental average (variable x)]/std=0,28 (T Student, alpha=5% two-tail, 1-beta=80%). The evaluation will last a total of 12 months, with 3 months active recruitment period and 9 months treatment for each subject.

This Unit will be involved using different active strategies:

1. Involvement of professionals in the research meetings

2. Technical training regarding the software and web platform to support the project

3. Monitoring and tutorship of their activities related to the project

4. Involvement of professionals in training their colleague regarding the implementation of the research protocols.

PERSONNEL Dedicated to the Project activities (in person-months):

Permanent staff	
Qualification* [a]	**person-months dedicated**
Administrative Personnell	3
Responsible social area	6
Scientific coordinator	12
Psychiatrist	3
Physician responsible of district	3
Physician	3
Social Worker	6

a: (giurista; statistico; economista; medico; ..)

Project staff	
Qualification* [aaaaaa]	**person-months dedicated**
Fellowship	24

Equipment of participating units dedicated to the project:	
Type	**Days/project-length**

COSTS OF THE PARTICIPATING UNIT

Costs items and brief description	**Total**	**Part covered by MoH funds [a]**
1. Permanent staff	€ 130.500,00	None
2. Project Staff (ad hoc contracts/consultants/fellowship) 150,000 euro per study 2 on the regional territory. Fellowship for 24months funded by the Ministry	€ 190.000,00	€ 40.000,00
3. Travel Costs and Subsistence Allowances Costs of meetings at the Units involved in the research and costs for intermediate meeting/seminars along the 24 months	€ 5.260,00	€ 5.260,00
4. Equipment	€ 0,00	€ 0,00
5. Consumables and Supplies directly linked to the Project	€ 0,00	€ 0,00
6. Dissemination of results (publications, meetings/ workshops etc.)	€ 0,00	€ 0,00
7. Data handling and analysis (specify)	€ 0,00	€ 0,00

Costs items and brief description	Total	Part covered by MoH funds [a]
8. Spese generali delle strutture coinvolte (specificare)	€ 0,00	€ 0,00
Totale	€ 325.760,00	€ 45.260,00

a: MoH - Ministry of Health

CV of the Scientific Coordinator of the Participation Unit (Unità Operativa) (REPORT UP TO 10 REFERENCES FROM THE LAST 5 YEARS RELEVANT TO THE TOPIC AREA OF THIS RESEARCH PROPOSAL)

See attached file

PARTICIPATING UNIT: Società della salute Prato

SCIENTIFIC COORDINATOR:

Name and Surname: Bavazzano Antonio

Institution: Centro regionale di coordinamento rete assistenziale persone con demenza

Professional status: Director

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Tel number: 055 4382111

Fax number: 055 211233

E-mail address:

AUTHORISED LEGAL REPRESENTATIVE: Calvani Anna

SPECIFIC CONTRIBUTION OF THE UNIT TO THE PROJECT (max 20 lines)

This Unit is involved in the project with a particular attention to non self sufficient elderly people. Regarding study 1 the Unit reconstructs the pathways to services, highlighting accessing modes, diagnosis criteria, need assessment instruments, the professional resources. Also, it classifies the health and social interventions provided consistently to the national recommendations.

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Subsequently to the bi-polar analysis, the same analysis will be developed using tri-polar indexes (input-output-outcome) in order to better highlight the equity conditions and/or inequalities in accessing and receiving interventions/services.

The Unit also supports the dissemination of results. In particular, it will be involved in the transferability related to the regional and multiregional monitoring, based on the protocol to be shared for identify the variables for building cost-effectiveness evaluation (based on the tripolar indexes) and in the social transferability, related to the use of results for promoting social evaluation of services and the equity of care levels, involving all stakeholders.

METHODS (max 1 pagina)

SPECIFY (whenever applicable): a) Patients/population; b) Intervention(s)/Analytical procedures; c) Indicator(s); d) Study design; e) Statistical analysis

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Study 1b: The Unit will classify health and social interventions provided, assessing its consistency to national recommenda-

tions, in accordance with the Sisclass model.

Study 2: The Unit will apply the classification model and will define the "quantities" of interventions/services delivered and their costs. Such classification will allow the application of the DEA model to the Unit and compare cost-efficiency indexes.

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This Unit will be involved using different active strategies:

1. Involvement of professionals in the research meetings

2. Technical training regarding the software and web platform to support the project

3. Monitoring and tutorship of their activities related to the project

4. Involvement of professionals in training their colleague regarding the implementation of the research protocols.

PERSONNEL Dedicated to the Project activities (in person-months):

Permanent staff	
Qualification* [a]	**person-months dedicated**
Social worker	3
Administrative staff	3
Physician responsible of district	3
Director Società della salute	3
Nurse	3
Physician	3

a: (giurista; statistico; economista; medico; ..)

Project staff	
Qualification* [aaaaaa]	**person-months dedicated**
fellowship	18
scientific coordinator	4

Equipment of participating units dedicated to the project:	
Type	**Days/project-length**

COSTS OF THE PARTICIPATING UNIT

Costs items and brief description	**Total**	**Part covered by MoH funds [a]**
1. Permanent staff	€ 54.000,00	None
2. Project Staff (ad hoc contracts/consultants/fellowship) Fellowship for 18 months and payment for the unit scientific coordinator	€ 40.000,00	€ 40.000,00
3. Travel Costs and Subsistence Allowances	€ 3.760,00	€ 3.760,00

Costs items and brief description	Total	Part covered by MoH funds [a]
Costs of meetings at the Units involved in the research and costs for intermediate meeting/seminars along the 24 months		
4. Equipment	€ 0,00	€ 0,00
5. Consumables and Supplies directly linked to the Project	€ 0,00	€ 0,00
6. Dissemination of results (publications, meetings/ workshops etc.)	€ 0,00	€ 0,00
7. Data handling and analysis (specify)	€ 0,00	€ 0,00
8. Spese generali delle strutture coinvolte (specificare)	€ 0,00	€ 0,00
Totale	€ 97.760,00	€ 43.760,00

a: MoH - Ministry of Health

CV of the Scientific Coordinator of the Participation Unit (Unità Operativa) (REPORT UP TO 10 REFERENCES FROM THE LAST 5 YEARS RELEVANT TO THE TOPIC AREA OF THIS RESEARCH PROPOSAL)

See attached file