Research Management: the case of RN4CAST

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Introduction

- The methodological approach for the efficient management of research has been discussed many decades ago in research papers

**Nowadays research involves international collaboration**

- resource mobilization and use of proper methods of dissemination to different stakeholders
- success is based on the ability to mobilize multi-country and multi-disciplinary teams while knowledge management and use of essential informatics tools for health research

The role of coordination is equally important for the efficient management of a large scale research.
This new approach requires partners’ active participation, but also of the communities, potential interest groups, policymakers and stakeholders.

General management practices in research management include:

- the need for empowering partners
- equally working together beyond institutional boundaries
- communicating effectively with stakeholders to create new knowledge
- utilize this knowledge throughout unique practices

The link between research strategies & successful management is important while the achievements of a research can be proved to be the key of scientific research management.
To explore the strategy to successfully manage the RN4CAST study, one of the largest ever multi-country nursing workforce research projects.

The case study focuses on the RN4CAST practices agreed through a common consensus & collaborative work to tackle lingual, Conceptual, organizational variations between the countries, developing an effective and at the same time equal multi-country research environment.
Successful research management does not only imply project management in financial & administrative terms but also involves strategies addressing the scientific content of the research itself.

*Recently authors define research management as opposed to the “research administration” which is a centralized approach to conduct a medical research.*
Research management
VS “research administration”
Research management

“research administration”
Research management
AND "research administration"
Research Management: the case of RN4CAST

- RN4CAST is the **largest nurse workforce study in Europe** and will add to accuracy of forecasting models and generate new approaches to more effective management of nursing resources in Europe.

- RN4CAST is a **consortium of 15 partners in 11 European countries**. Each European partner conducted surveys from over **50,000 nurses** and outcomes of **tens of thousands of patients**.
Our focus

- Common Study Protocols
- Data Sources
- Common Definitions
- Data Collection and Analysis
- Dissemination of the results

Aiming to identify common approaches and strategies
Common Study Protocols

- **Nursing job varies** across European countries participating in the RN4CAST study.

- Despite common characteristics, there are **differences in the organization of the healthcare system**.

- In order to agree on common research methodology in all countries, an **international protocol was prepared** to
  
  (1) standardize data collection process  
  (2) standardize instruments for the cross-country analyses

- **Differences** between the national study protocols **were reported by each team**, discussed by the consortium and approved by the coordinator.
Critical point: AND REQUIRES

the balance between

“scientific democracy” and
coherence

1. In depth knowledge of the knowledge background
2. Good communication skills
3. Realisation and knowledge of the “different”
Data Sources and definitions

Do all countries have availability of the data requested for the purposes of the survey in exactly the same form?

- Discussion regarding data sources identified a limitation in the case of some countries, regarding the availability and the quality of routinely collected data.

This limitation was tackled using an additional instrument to primarily collect patient data not readily available in routinely collected databases. This strategy allowed the timely inclusion in the analysis. This may be a cumbersome process but at least it served as an alternative.
Data Sources and definitions

- Participating hospitals were selected through a common strategy, explicitly describing
  - the type and size of eligible hospitals
  - the type of nursing units
  - the categories of eligible nurses

- ‘Nurses’ have been clearly defined in all countries based on the EU definition (2005/36/EC), therefore variations in the local interpretation of what is a nurse have been overcome- to a degree.
Data Sources and Definitions

- The survey instruments were based on a common template that all partners agreed to use.

- The instruments were translated into all primary languages using the backward-forward translation method and evaluated with the CVI instrument by experts in every country, while no changes to the core template were allowed.

- Standard definitions of all variables were agreed, based on (i) previous knowledge (ii) well-known validated instruments and (iii) research team expertise adopted to fit in all countries

- Finally, identifiers indicating survey variables (i.e., International Classification of Diseases-ICD, Diagnosis Related Groups-DRGs) were decided and commonly used by most national studies.
In two words:

Standardisation
Harmonisation
The strategy followed to facilitate data collection has been decided to be the same in all countries: the enrollment of a field manager in each hospital as key contact with national research teams.

Once data was collected by all countries, there have been gathered centrally by the research coordinator.

1. Identify out-of-range, missing values and data entry errors, producing a cleaned version.

2. Perform preliminary analyses of the raw datasets.

A statistical analysis model was selected to explore specific research questions within each country but also through cross-country analyses.
The strategy for the dissemination of the results is comprised by

(i) yearly stakeholder meetings during the project life circle

(ii) agreement upon common strategy for publications & authorship

(iii) a special issue of scientific journal dedicated to RN4CAST

(iv) drafting and co-authoring a synthesis document presenting and comparing the conclusions of the data analyses across countries, with possible Europe-wide conclusions.

(v) an observatory book bringing together a sample of country case studies and contextual contribution of nursing in the quality of care.
The case of RN4CAST indicates that the road to the successful management of a multi-country large scale research crosses two levels of challenges.

Other than successful financing, mobilization, reporting etc., which mainly refer to the project management/administration, there are challenges directly addressing the content and methodology of the research itself.
Challenges address

- the methods of the survey
- data harmonization issues
- data collection
- multi-level data analysis strategies and
- dissemination of the results

....providing **added value on the national surveys in EU level**

- The above mentioned challenges are **key factors for the validity of the survey results** and the **scientific quality of large scale surveys**.
Research management AND "research administration"
THANK YOU!