

THE PHARMAECONOMIC EVALUATION OF PAPER DRUG AND MEDICAL DEVICE UTILIZATION AS A TOOL FOR ASSESSING ORGANIZATIONAL PERFORMANCE

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■ PREFACE

Pharmacoeconomics is the discipline that describes and analyses the costs and consequences of pharmacological therapy, through which studies and investigations can be developed with the aim of better understanding a phenomenon from economic, organizational, managerial, and not just clinical perspectives.

A very important branch of this discipline is precisely the one that compares the costs and benefits of a specific method (Cost-Benefit Analysis), in order to understand and analyse if there are other methods more suitable for that specific purpose (pharmaco-utilization). The use of such tools in modern healthcare, characterized by a continuous

pursuit of optimization, rationalization, and reorganization of expenses, can be considered a support in making a process as effective as possible, but above all, efficient, or a streamlined and less costly organization of a process or a clinical practice.

To achieve these objectives, it's necessary to understand both the phases and the locations where a process takes place, in order to study its details and evaluate adjustments and improvements. The territory of the ASL Napoli 2 Nord represents an excellent source for conceiving, developing and conducting scientific, clinical, and pharmacoeconomic studies, considering its complex structure and extensive nature.

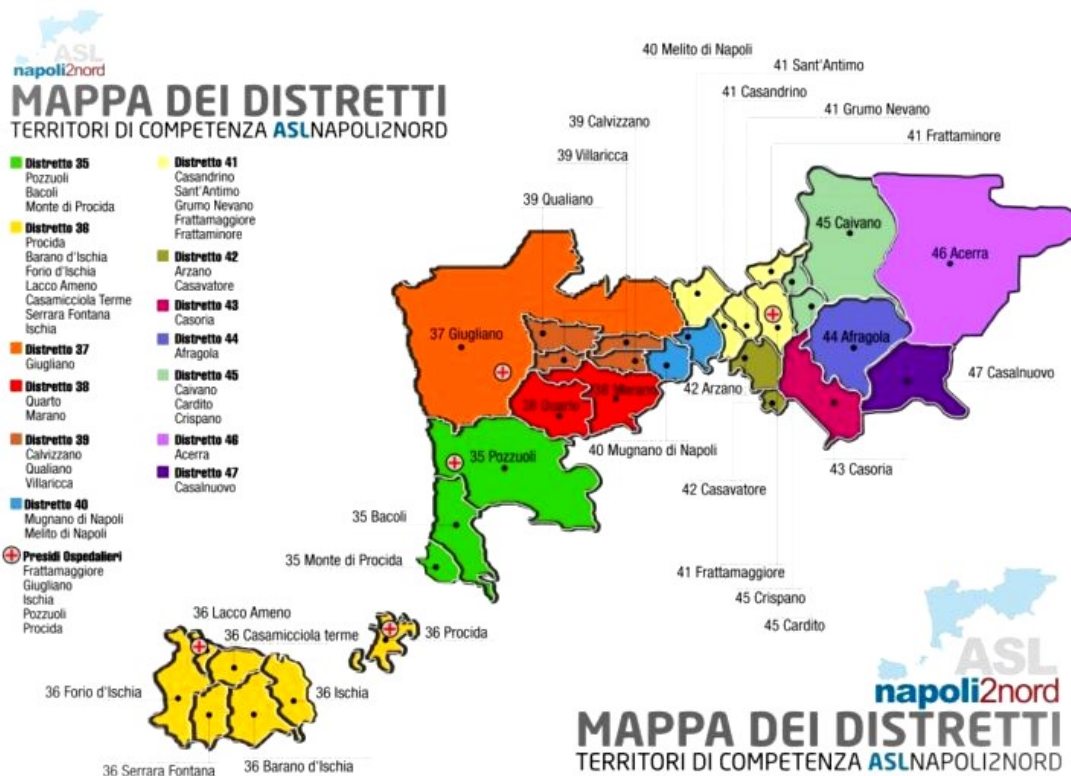


Fig.1 Map of the hospitals and districts of the ASL Napoli 2 Nord

It includes:

- Four Hospital Facilities with just over 400 total beds (Pozzuoli, Giugliano, Frattamaggiore, and island of Ischia);
- A First Aid Facility with 7 beds (in Proci-da);
- 13 Districts covering more than 1200 square kilometers and serve approximately 1,000,000 residents in around 33 Municipalities.

The vast and complex territory has its own heterogeneity that is structured as follows:

- Hospital "S. Maria delle Grazie" in Pozzuoli is a level II Emergency Department and serves a very large area inhabited by around 100,000 people;
- Hospital "San Giuliano" in Giugliano, collects more than 120,000 inhabitants, being Giugliano the third largest town in the Metropolitan City of Naples and the fourth largest in the Campania Region;
- Hospital "San Giovanni di Dio" in Frattamaggiore extends to the southern province of Caserta and the Agro-Aversano Region;
- Hospital A. Rizzoli in Ischia, serves more than 60,000 inhabitants residing in the 6 island municipalities. Thanks to thermal tourism, it has a constant influx of at least 10,000 more visitors than its permanent residents. During the summer months, its population increases by about four or five times.
- The hospital facility "G. Scotto" in Proci-da, with 10.000 inhabitants and the daily arrivals of day-trip tourists that can even reach up to 5000, can count up to 15.000 presence.

The numbers of residents/inhabitants/visitors in the territory are an indication of the challenges which must be addressed to ensure a quality, fast, and safe healthcare service.

In consideration of the above, cost monitoring represents one of the essential tools in the hands of who is leading a Local Health Authority, in order to ensure the optimization of economic resources.

Pharmacoeconomics remains a useful and precise tool for the correct daily management of departments. Moreover, it represents a strategic instrument for making decisions and facing the renewal challenge that the National Health Service (SSN) is called upon, in order to make the best use of Measure 6 of the National Recovery and Resilience Plan (PNRR), to shift the strategic perspective from hospital-centred to territory-centred as quickly as possible.

The following papers are the result of the activities of the Pharmacy team at San Giuliano Hospital Facility of the ASL Napoli 2 Nord, led by Dr. Immacolata Filoso.

Before starting the research activity, the authors

came up with an acronym *G.S.E.D.P.*, hoped that, from a pharmacoeconomic point of view, the works could:

- Gather increasingly precise data aimed at understanding the analysed processes in a more detailed and comprehensive way;
- Stimulate decision makers to use Pharmacoeconomics to arrive at conclusions that should be translated into measures to be implemented in order to improve the provided service;
- Evaluate the pharmacoeconomic tool, not only for cost assessment but especially to develop the practice of pharmacoutilization that takes into account multiple aspects in the overall care procedure;
- Design and Propose a continuous exchange of ideas among different stakeholders in Healthcare, which allows individual professional growth and promotes service improvement in terms of effectiveness and efficiency.

The reviewers of the Special Edition, detailed below:

- Dr. Crescenzo Pezone, Acting Director U.O.C. Obstetrics and Gynecology, A. Rizzoli Hospital in Ischia (Na) and Doctor in Charge of U.O.S.D. Voluntary Termination of Pregnancy San Giuliano Hospital in Giugliano (Na);
- Dr. Pietro Vasseti, Doctor in Charge U.O.S.D of Pain Therapy Pain Hub San Giuliano Hospital in Giugliano (Na);
- Mr. Gerardo Tesone, Operating Room Coordinator U.O.C. Anesthesia and Resuscitation San Giuliano Hospital in Giugliano (Na);
- Mr. Nicola Veneruso, Nurse Specializing in Advanced Medications U.O.C. Orthopaedics and Traumatology San Giuliano Hospital in Giugliano (Na);
- Mr. Giuliano D'Antonio, Professional nurse of the operating room complex San Giuliano Hospital in Giugliano (Na);

have been able to verify, among other criteria of their assessment, that each of the five works adhered to the *G.S.E.D.P.*, or at the very least, that they could generate further insights and points for ongoing interprofessional comparisons.

The paper on home-patient management titled "Design and Organization of an Interprofessional Network for Home Management of Patients implemented during COVID-19 Pandemic at ASL Napoli 2 Nord, suitable also in the Daily Management of Chronic Patients living in the Same Area", should be considered as a successful case of a project founded on interprofessional collaboration. It is highly reproducible not only in emergency situations, but also as an evident example of organizational models in the management field. This work can serve as a reference point for deve-

loping new collaborations aimed at optimizing organizational management processes.

The remaining papers are based on the logic of analysing therapy costs and occasionally comparing different approaches to dealing with clinical cases.

For example, the one titled "Efficacy and Pharmacoeconomics Study of Spinal Cord Stimulation (SCS) conducted at the Pain Therapy Hub P.O. San Giuliano Asl Na2 Nord", compares costs and impact on the patient's quality of life for those suffering from chronic pain, comparing traditional therapies with methods of spinal cord stimulation with electrodes.

Analyses, comparing the costs of various therapeutic approaches for the same clinical practice, have been developed. This logic was also applied in the paper on abortion titled "Retrospective and single-centre study with the aim of pharmaco-economic analysis in pregnancy terminations at San Giuliano Hospital Asl Napoli 2 Nord", where pharmacological and surgical procedures were compared in terms of costs and patient impact.

Moreover, the last two papers analyse the costs incurred for the treatment of two potential events resulting from therapeutic practices, which can greatly affect the costs to be borne.

Therefore, in the study titled "Observational Study of Costs and Appropriateness of Use of Haemostatic Devices and Drugs in Different Types of Bleeding", it has been conducted an analysis of the correct therapeutic use of certain drugs and devices for haemostatic balance.

Lastly, with the paper titled " Incidence on cost and duration of therapy of possible postoperative wound infections from trauma with prosthetic devices, preventively treated and untreated, using antibacterial gels at San Giuliano Hospital, Asl Napoli 2 Nord", the study carries out how much the treatment or lack thereof of wounds and devices with antibacterial gel following osteosynthesis and prosthetic procedures, affects the costs to be incurred in terms of potential complications.

This collection embraces and adapts the enlightenment idea of the plurality of knowledge in the development of individual works, based on the necessity of interprofessional comparison even in disciplines such as Pharmacoeconomics, the use of which is still to be fully implemented, in order to continue reaping the knowledge and evaluative benefits for healthcare management that it offers.