

**ESPACOMP 2024 Workshop: Health Economics** 

# The role of Health Economics in adherence research and policy

23 November 2024, Naples (Italy)
In-person meeting

#### Faculty (in alphabetical order)

Dr. Ignacio Aznar-Lou, PhD (Fundació Sant Joan de Déu, Spain)

Prof. Dyfrig Hughes, PhD (Bangor University, Wales)

Dr. Maria Rubio-Valera, PhD (Parc Sanitari Sant Joan de Déu, Spain)

Ms. Alba Sánchez-Viñas, PharmD, MSc (Fundació Sant Joan de Déu, Spain)

#### Introduction

Health economics is the study of how scarce resources are used to meet our health and social care needs. As such, and given that non-adherence significantly undermines the effectiveness of healthcare interventions leading to poorer health outcomes and increasing healthcare costs, health economics has a pivotal role in the study of medication adherence. The integration of health economics into adherence research offers a comprehensive framework to understand and address these challenges.

Health economics encompasses a range of methods, from economic evaluation, service evaluation and delivery, through to preference elicitation and behavioral economics. Applications of the methods of health economics into adherence research can provide valuable insights into the broader economic implications of non-adherence, such as the costs associated with disease progression, hospitalizations, and lost productivity. Furthermore, we can evaluate the cost-effectiveness of adherence-enhancing strategies, ensuring that resources are allocated efficiently to improve health outcomes.

We will firstly introduce health economics and explain its role in adherence research. Then, we will go in depth into the methods of cost-effectiveness analysis, understanding how efficiency is estimated and how economic evaluations are interpreted. Practical exercises will be performed and published papers will be reviewed to better understand these type of studies.

#### **Learning objectives**

After the workshop, participants will have an enhanced understanding of:

- Policy contexts and methods of health economic evaluation in adherence research and evaluation.
- Studies to assess the economic burden of non-adherence, such as cost-of-illness studies.
- Basic methods for cost-effectiveness and cost-utility studies.
- Interpretation of cost-effectiveness analyses and the consideration of uncertainty.
- The role of health economics in implementation science.

Participants will be able to conduct basic cost-effectiveness calculations and they will be able to differentiate a broad type of methodologies for health economics and its applications.

## **Learning methods**

The workshop combines theoretical lectures with group exercises and plenary and group discussions.

## **Target group**

All researchers/clinicians/others interested in health economics with or without previous experience/competence.

# Maximum number of participants: 30

## **Preparations for the workshop**

Please read the following paper:

- (2012). An introduction to the methods of cost-effectiveness analysis. Drug and Therapeutics Bulletin, 50(7), 81–84. doi:10.1136/dtb.2012.06.0118.

# **Program (preliminary)**

Time	Content	
09:00 - 09:15	Welcome and opening	Maria Rubio-Valera
09:15 – 10:15	<u>Lecture</u> : Introduction to health economics and the economic impact of non-adherence	Dyfrig Hughes
10:15 – 10:30	Break	
10:30 – 11:15	<u>Lecture</u> : Assessing the efficiency of interventions to improve adherence	Ignacio Aznar-Lou
11:15 – 11:30	Exercise: Estimation of Incremental Cost-Effectiveness Ratios	Individual work
11:30 – 12:30	<u>Lecture</u> : Uncertainty in cost-effectiveness studies	Maria Rubio-Valera
12:30 – 13:30	Lunch	
13:30 – 14:30	Exercise: Interpreting cost-effectiveness results	Group work
14:30 – 15:30	<u>Lecture</u> : The role of economics in implementation science	Alba Sánchez-Viñas
15:30 – 15:45	Break	
15:45 – 15:45	Exercise: Paper review	Group work
15:45 – 16:15	Discussion and conclusion	Dyfrig Hughes

#### **Leaders:**



#### **Dr. Ignacio Aznar-Lou**

Ignacio Aznar-Lou is a Postdoctoral Research Fellow at the Sant Joan de Déu Research Institute in Barcelona, Spain. He has a background in Pharmacy. Ignacio completed his PhD in 2017 which included a deep analysis of medication non-initiation based on real world data. This analysis included prevalence and associated cost estimations. Since his PhD he has been working in several projects, leading some of them, focused and combining medication adherence, real world data and health economics.



# **Prof. Dr. Dyfrig Hughes**

Dyfrig Hughes is a pharmacist/pharmacologist/health economist and Professor of Pharmacoeconomics at Bangor University, Wales and honorary Professor at the Department of Pharmacology and Therapeutics at the University of Liverpool. His research portfolio, which has led to over 250 publications, concern pharmaceutical economics and policy, health technology assessment, pharmacogenomics and medication adherence. He is the vice-chair of the All Wales Medicines Strategy Group, which makes recommendations on the availability of new medicines in Wales, and was previously a member of the NICE appraisal committee. He was inaugural president of ESPACOMP, and currently co-chairs ESPACOMP's Research, Policy and Implementation sub-group.



## Dr. Maria Rubio-Valera

Maria Rubio-Valera, pharmacist, is a health services researcher and principal investigator of the PRISMA Research Group at Parc Sanitari Sant Joan de Déu. She is a professor in Health Economics at Universitat Pompeu Fabra. Maria is an expert in quality improvement and her research uses mixed methods to improve the quality and efficiency of public healthcare provision, with a special focus on adequate use of drug therapy and medication adherence. She has studied adherence and other health related behaviors in primary and secondary care. She has published over 80 papers and holds the prestigious ERC Starting Grant from the European Commission. She is currently chair of the ESPACOMP research Network.



Alba Sánchez-Viñas

Alba Sánchez-Viñas is a pharmacist, a MSc in Health Economics and a PhD student. Her research has focused on the evaluation of the cost-effectiveness of complex interventions, particularly interventions addressed to improve adherence. Her research concerns the economic evaluation of health interventions using data derived from randomized controlled trials, real world data and economic modelling.