

# **CURRICULUM VITAE**

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Professor in  
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**Studies:** I studied Political Sciences and Public Administration at the National and Kapodistrian University of Athens, Greece (1983). I obtained my **PhD degree** on Management and Economics from the Faculty of Law, Economics and Political Sciences of the same University in 1998 (Thesis title: “Efficiency Evaluation in the Organization and Financing of Hospital Services in Greece”). I have a **postgraduate diploma** in Hospital Administration from Athens National School of Public Health, Greece (1990) and a **Master’s degree** in Healthcare Planning and Financing from the London School of Economics and Political Science (1993). As a **Research Fellow** (funded by British Council), supported the scientific activities (Health Units Management) of London School of Economics and Political Science, UK (1997). As a **Research Associate**, supported the scientific activities of Statistics in Biomedical Sciences of Hellenic Statistical Authority, Greece (1994) as well as supported the scientific activities of Informatics and Financial Management of Hellenic Management Association (EEDE), Greece (1991).

**Professional Experience:** My professional activity started in 1978 as an employee (accounting officer) in a private company in Athens (1978-1979) and continued with my appointment in the St. Sophia Children’s Hospital, Athens, Greece as a senior administrative officer (1980–1993). In 1993, I moved to the Greek Ministry of Health and Social Security as a scientific member to support the team of experts appointed by the Minister of Health on issues of strategic health planning and health policy analysis (1993-1996). During 1998-1999, I moved to the private hospital “HYGEIA”, in Athens, Greece as a management consultant. My professional activity continued as a **CEO** of Greek National Bank-owned hospital “Melathron Health Clinic – TYPET” (1999 – 2000), as a **CEO** of Onassis Cardiac Surgery Centre, Greece (2000-2002) and as a **Managing Director** and BoD Chairman of the NHS “Attikon” General Hospital (2002-2004). During 2006-2008 I worked as a consultant and **Research Fellow** at Bank of Greece being involved in various issues, mainly on health planning and financing. During 2009-2012, I worked as **Secretary General** of the Greek Ministry of Health, appointed through the e-gov system. During this period, I was involved in the planning and implementation of almost all health care reforms in Greece such as: (i) the Creation of a Unified Health Insurance Fund, (ii) the Reforms in the Greek NHS, (iii) Implementation of e-procurement materials and medicines drugs (iv) the Reorganization of the National Health System, (v) the implementation of double-entry accounting systems and balance sheets in all NHS

hospitals, (vi) the evaluation of all administrations through managerial indicators, (vii) the implementation of KEN-DRGs, (viii) NHS.net, etc.

From November 2018 until June 2019, I was appointed as **Chief Executive Officer (CEO)** of the State Health Services Organization (SHSO) of the Ministry of Health of Cyprus. SHSO is a new (2017) semi-governmental organization, under the responsibility of which belong all public hospitals, PHC health centers and sub-centers, ambulances and psychiatric services with their personnel. Some of the main CEO's activities are the submission and approval of 2019 budget and 2019-20 business plan, recruitment policy and decisions, appointment of directorate management, financial procedures, appointment and regulation of scientific councils, nursing standards etc.

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**Academic Positions and Teaching:** 1. During 1996-2006, and while working at the Ministry of Health and private/public sector, I worked as **Adjunct Professor** at the Technological Institute of Athens (TEI Athens) (1996-7, 1998-1999), the National School of Public Administration (1999-2000), the Department of Business Administration at the University of Patras (2001-2006). More specifically, I taught the course "Health Economics", which is part of the BA degree programme in Nursing and the Master's degree in Public Administration. In addition, I taught the course "Health Services, Quality of Health Services, Health Policy and Health Economics" which is part of the BA degree programme in Business Administration, University of Patras and the course "Introduction to the management of health services" and 2. At the Hellenic Open University (2007-2008) in the Master's degree programme "Health Care Management". In addition, I was the academic coordinator at the Universities of Crete and Piraeus, as well as at the Greek program of the National Conservatoire des Arts et Métiers (CNAM), of the Master's degree programme "Health Services Management" (2005-2009) and Frederick University (Cyprus (up to 2009)).

In June 2006, I was elected **Associate Professor** in Financial Management at the School of Management & Economics, Department of Health and Welfare Management, Technological Institute of Peloponnese, Kalamata, Greece. I taught the course "Financial Management in health sector", "Quality in health services" and "Costing analysis" which is part of the **BA degree** (2006-2009). In addition, I taught the module 60 "Health Care Management" of the **Master's degree programme "Health Care Management" at the Open University of Cyprus** (2009-2010), the courses "Administration of Health Services" and "Applied Methods of Organization and Management of Health Services" of the **Master's degree programme "Public Health and Health Services Management" University of Crete, Greece** (2009-2013), the course "Health Care Strategic

Planning and Evaluation” of the **Master’s degree programme “Health Policy and Planning” at the Open University of Cyprus** (2012-2015, 2017-2018) and the course “Health Management” of the **Master’s degree programme “Health Services Management”, University of Piraeus, Greece** (2012-2013).

In November 2009 I was elected as **Associate Professor** in Health Service Management at the department of Social Administration of Democritus University of Thrace (DUTH), Greece. In August 2014 (2014-present), I was promoted to the **rank of Professor** at the Department of Social Administration and Political Science, Democritus University of Thrace (DUTH). I taught the courses “Administration and Organization of Social Services” and “Methods of Economic Evaluation of Social Programs which are part of the **BA degree** (2009-2018). I also taught the courses “Administration and Organization of Health Services” and “Financial Management” (2012-2018) and “Principles of Administration and Organization” (2013-2018), which are part of the **BA degree**. In addition, I taught the courses “Organization and Administration of Social Services” and “Methods of Economic Evaluation of Social Programs” of the **Master’s degree program in “Social Policy and Social Work”** at the Department of Social Administration and Political Science, Democritus University of Thrace, Greece (2009-2010, 2012-2018). Since then, I was cofounder and now teacher of the newly established **Master’s degree program in “Health and Welfare Service Management”** (Medical School of Aristoteles’ University jointly with DUTH).

**Academic experience in distance learning Education:** I worked as a tutor at the Open University of Cyprus (2009-2010, 2012-2015, 2017-2018) as well as the Hellenic Open University (2007-2008), in three different postgraduate programs in the fields of administration and financing of health services. I was also involved in the preparation of the educational material in the Health Service Management module (HOC) and in the Health Service Planning, Evaluation and Human Resources Management (OUC). During the 1<sup>st</sup> year of the pandemic covid-19 I thought through and worked on e-class (DUTH).

**Positions of Administrative Responsibility:** In 2008, I was elected as Vice Rector at the Technological Institute of Peloponnese, Kalamata, (2008-2009), responsible for financing and research projects committee (creating all relative procedures and certified them). In 2012, I was elected as a member of the University’s Research Committee (2012-2016), at the DUTH. Finally, in 2016, I was elected Head of the Department of Social Administration and Political Science, (President), at the Democritus University of Thrace (until August 2018).

**Other Positions:** (i) Member of the National Health System Planning Advisory Board (1994), (ii) HOPE (Hospital Committee of European Union) member (1994-96), (iii) WHO and EU Consultant (1996-98), (iii) Member of the ESF Actions Co-ordination & Monitoring Authority, General Secretariat of European Funds, Greek Ministry of Health (2009-2012), (iv) Member of national Committee of Public Health Experts (2021-).

**Publications:** I have in total over 110 publications, in the following categories: 42 papers in international peer-reviewed journals, 28 in Greek peer-reviewed journals and 2 other papers and abstracts in peer-reviewed conference proceedings and volume of abstracts. In addition, I have authored or co-authored 11 books, 13 book chapters and 24 research & technical reports. Of these publications, 30 appear in PubMed and 30 in Scopus and EBSCO, with 200 citations in Google scholar, 400 in Research Gate and 200 in Scopus *(see full list of publications on pages 7-21)*.

**Papers and Posters Presented at Conferences:** More than 80 announcements and posters were presented at national and international conferences, while I was member of the scientific or organizational committee in several other conferences *(see detailed description on pages 15-21)*.

**Participation in Research Projects:** I have participated in over 40 research projects and studies, of which the vast majority as a project coordinator (15) or principal investigator (15). These include projects funded by EU, WHO, the Health Ministry of Greece, Private Companies, Greek Hospitals and Universities etc. *(see detailed description on pages 21-23)*.

**Research and Scientific Collaborations:** Over the last 15 years, I have regular scientific and research collaboration with research centers in Greece and abroad, and close research links with other universities and institutes. *(see detailed description on page 23)*.

**Supervision of Doctoral and Masters Theses:** Under my supervision, two post-doc and five Doctoral theses have been completed, three are in progress, while two more which have been completed, I was co-supervisor. Additionally, during the last 25 years I have supervised numerous Masters Theses at the Democritus University of Thrace, the Hellenic Open University, and the Open University of Cyprus. Some of these Theses have led to publications in peer-reviewed journals.

**Reviewer in Journals and other Scientific Activities:** I have reviewed papers for the following journals: Health Policy, HEALTH, Archives of Hellenic Medicine, Hippocratia, etc.

**Evaluation of University and other Training Programmes**

In 2008-9, I was responsible of proposing 3 new undergraduate programs of my then University (speech therapy, radiotherapy and winery) submitted to the Greek Ministry of Education (the 1<sup>st</sup> approved and developed). At the same time, I was the 1<sup>st</sup> scientific director of MSc in Health Management in Frederick University. In 2016-18, I was responsible for the evaluation of the program of my department, as President, at DUTH.

**Research Interests: Past, Current Research Work and Future Plans:** My main areas of research interest are health services management, health policy and financing. The areas and topics include, among others: health service planning and organization, hospital production function, Health Human Resources, Evaluation of Health Services, Unification of Sickness Funds, PHC, Evaluation of prescribing patterns of physicians, HR and patient satisfaction, financing health systems etc (*see detailed description for my past and current research work as well as my future plans on pages 23-25*).

## 1. PUBLICATIONS

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### **1.1. Books**

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2017	Karmperis A., Dikaios K., Polyzos N., Public and Social Services Management, Guteberg Publications, textbook.
2014	Polyzos N., Health Services Management, Kritiki Publications, textbook.
2013	Polyzos N., Operational Hospital Management Plan (for efficient operation) [ISBN 978-618-5082-09 -3].
2013	Polyzos N., Study on the organization and financing of PHS contributing to the EOPYY, Dionikos publications. [ISBN 978-960-91247-1-3].
2012	Polyzos N., Report on the Results of the National Health Insurance Fund and the NHS Hospitals 2011, Dionikos Publications [ISBN 978-960-334-121-5].
2009	Polyzos N., Education and Research in Health Services in Greece and Abroad Papazisis Publications [ISBN 978-960-02-2327-9].
2007	Polyzos N., Financial Management of Health Services, Dionikos Publications, textbook.
1999	Polyzos N., Efficiency of Hospitals based on patient classification (D.R.Gs), T.Y.P.E.T. publications, Athens. [monograph in Greek, based on my PhD thesis]
1996	Tragakos E. and Polyzos N., Health System Review. Health Systems in Transition, Greece (1996). Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Care Systems and Policies.
1995	Sissouras A., Karokis A., Polyzos N., Theodorou M., (1995), Unified Health Fund: The financing of the system and the decentralization of health services. <i>Hellenic Republic, Ministry of Health and Welfare</i> , Athens, [in Greek, pages 70]
1993	Moraitis E., Georgousi E., Zilidis C., Theodorou M., Polyzos N., (1993), Study for the organization and function of an integrated primary health care system. <i>Hellenic Republic, Ministry of Health and Welfare</i> , Athens. [in Greek, pages 286]
1994	Ranos C. - Polyzos N. "Pharmaceutical Policy within the Greek N.H.S." in Mossialos E. - Abel - Smith B. - Ranos C. "Cost Containment, Pricing and Financing of Pharmaceuticals in the European Union" (1994), Pharmetrica.

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## **1.2. Books Chapters**

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1. 2019 N. Polyzos, Public Administration in Health Services before and after crisis, in Contiades X., Emilianides A. and Anthopoulos H. book "Public Administration after crisis", Sakkoulas Publications.
2. 2014 Grintzalis St., Katsikas S., Mitsios A., Polyzos N., Spinellis D., Stratigaki M., Takis A., From the University to the Public Service: a Trip with a Return, Papazisis Publications.
3. 2004 N. Polyzos - B. Bardis - D. Bartsokas - G. Pierrakos - K. Pantelakis - Ch. Kostopoulos - I. Tsagos - N. Karapostolis, "The Cost of Psychotherapy: Economic and Functional Evaluation of a Daily Psychotherapeutic Unit ), Alternative Publications, Athens.
4. 2000 Doumoulakis G. - Polyzos N. - Chrysochoidis G., "Economic and Financial Management of Health Services", Hellenic Open University of Athens.
5. 2000 G. Kyriopoulos, C. Economou, N. Polyzos, A. Sisouras "Priorities for the Reform of the Administration-Management of the Health Services System".
6. 1999 Dikaios-Koitousis-Polyzos-Sigalas-Chletsos, "Basic Principles of Management of Health Services", Hellenic Open University.
7. 1999 Polyzos N., "Drug Control Measures in Europe and Greece", in the book of Gitona M., Kyriopoulos G., et al. "Politics and Economics of the Pharmaceuticals in Greece", 272-289.
8. 1997 Polyzos N., "Policies for Retaining Costs and Cost Control in the Health Sector" in the book of Sissoura A., Kyriopoulos G., et al. "Uniform Health Body: Neophyte or Autopsy", chap. 40, 251-274.
9. 1995 Moraitis E., Georgoussis E., Zilidis Ch., Theodorou M., Polyzos N., "Study on the Organization and Operation of an Integrated Primary Care System".
10. 1995 Dervenis Ch. - Polyzos N., YYYY, "Study - proposal for the organization and management of the NHS and the development of medical resources"
11. 1995 Sissouras A., Karokis A., Polyzos N., Theodorou M., "SINGLE HEALTH ORGANIZER, Organization of the Financing System and Decentralization of Health Services", Ministry of Health and Welfare.



12. 1994 Polyzos N. et al. Study on Organization and Design of the NHS. Ministry of Health Welfare and Social Insurance. (YPPA).
  13. 1994 Polyzos N., Secondary and Tertiary Care, Chapter 4 In for the Planning and Organization of Health Services, Polyzos N., Theodorou M., Karokis A., Roupas Th., Sisriras A., Yfantopoulos J. Ministry of Health of Welfare and Social Insurance.
  14. 1994 Polyzos N., "The Drug", Chapter 5 In Study for the Planning and Organization of Health Services. Polyzos N., Theodorou M., Karokis A., Roupas Th., Sisouras A., Yfantopoulos J.
  15. 1994 Polyzos N., "Human Potential", Chapter 7 In: Study for the Planning and Organization of Health Services s N., Hellenic Republic, Ministry of Health and Welfare, Athens. [in Greek]
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### **1.3. Papers Published in International Peer Reviewed Journals**

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1. Letsios A., Polyzos N, Pouloupoulos Ch, Skamnakis Ch., 2022, Hospital managers' participation in operational planning: insights from a recent study in the Greek National Health System, Hippokratia, 26: 3 (91-97).
2. Mavridoglou G., Polyzos N., 2022, Sustainability of Healthcare Financing in Greece: A Relation Between Public and Social Insurance Contributions and Delivery Expenditures, Inquiry, 59 (1-12).
3. Mavridoglou G., Hatzopoulos P., Polyzoidis P., Polyzos N., 2020, The efficiency of Health Care System in Greece before and during the crisis: Data Envelopment Analysis and Malquist Approach, Archives of Economic History, XXXII/2/2020.
4. Karampli E., Souliotis K., Polyzos N., Chatzaki E., 2020, Why do physicians prescribe new antidiabetic drugs? A qualitative study in the Greek healthcare setting, Health Policy and Technology, v. 9, i. 2, p. 166-173 (<https://www.sciencedirect.com/science/article/abs/pii/S2211883720300149?via>)
5. Mitropoulos P, Mitropoulos I, Karanikas H, Polyzos N. The impact of economic crisis on the Greek hospitals' productivity. Int J Health Plann Manage. 2018;33(1):171-184
6. Farmakas A, Theodorou M, Galanis P, Karayiannis G, Ghobrial S, Polyzos N, Papastavrou E, Agapidaki E, Souliotis K. Public engagement in setting healthcare priorities: a ranking exercise in Cyprus. Cost Eff Resour Alloc. 2017 Aug 9;15:16
7. Xenos P., Yfantopoulos J., Nektarios M., Polyzos N., Tinios P., Constantopoulos A., 2017, Efficiency and Productivity Assessment of Public Hospitals in Greece during the crisis period 2009-12, Cost Effectiveness and Resource Allocation, 15: 6.

8. Karakolias S., Kastanioti C., Theodorou M., Polyzos N., 2017, Primary Care Doctors' Assessment of and Preferences of their Remuneration: evidence from Greek Public Sector, *Inquiry*, 54 (1-8).
9. Isaia M., Theodorou M., Galanis P., Nikolentzos A., Polyzos N., 2017, Breastfeeding Determinants in Cyprus: a cross sectional study, *Journal of Neonatal Nursing*, xxx (1-8).
10. Agathokleus N., Nena E., Chadolias D., Zissimopoulos A., Polyzos N., et al, 2017, Estimating Life Expectancy of the Population in Cyprus with the use of life tables, *Hippokratia*, 20 (2): 99-103.
11. Polyzos N., Kastanioti C., Zilidis C., Mavridoglou G., Karakolias S., Litsa P, Menegakis V, Kani C., 2016, Greek National e-prescribing system: preliminary results of a tool for rationalizing pharmaceutical use and cost, *Global Journal of Health Science*, 8(10): 55711
12. Kastanioti C., Mavridoglou G., Karanikas H., Polyzos N., 2016, ABC analysis: a tool of efficiency controlling pharmaceutical expenditure in Greek NHS Hospitals, *JPHSR* 7(3): 173-179.
13. Tagarakis G., Dikeos C., Tsilimingas N., Polyzos N., 2016, Reevaluation of DRG system in Greece: the example of coronary artery graft procedure, *Journal of Social Science Research*, 10 (3).
14. Tagarakis G., et al, Polyzos N., 2017, Total Hip Replacement and related DRGs in the Greek Health Care System, *International Journal of Management and Information Technology*, 11 (5).
15. Zilidis C., Kastanioti C., Polyzos N., Yfantopoulos J., 2015, Development of a Health Workforce Monitoring System in Greece, *Journal of Investment and Management*, 4 (5):.
16. Nikolentzos A., Kontodimopoulos N., Polyzos N., Thireos L., Tountas J., 2015, Reengineering NHS hospitals in Greece: redistribution leads to rational mergers, *Global Journal of Health Science*, 7(5): .
17. George Gourzoulidis, Nick Kontodimopoulos, Catherine Kastanioti, Thaleia Bellali, Konstantinos Goumas, Dikaios Voudigaris & Nikolaos Polyzos. Do Self-Perceptions of Emotional Intelligence Predict Health-Related Quality of Life? A Case Study in Hospital Managers in Greece. *Global Journal of Health Science*. 2014; 7(1) 210-219
18. Nikos Polyzos, Stefanos Karakolias, Costas Dikeos, Mamas Theodorou, Catherine Kastanioti, Kalomira Mama, Periklis Polizoidis, Christoforos Skamnakis, Charalampos Tsairidis, Eleutherios Thireos. The introduction of Greek Central Health Fund: has the reform met its goal in the sector of Primary Health Care or a new model is needed? *BMC Health Service Research*, 2014.
19. Tagarakis G., et al., Polyzos N., 2014, The significance of clinical protocols in surgical disciplines, *Journal of Social Science Research*, 6 (1).
20. Karampli E., Souliotis K. Polyzos N., Kyriopoulos J., Chatzaki E., 2014, Pharmaceutical Innovation: impact on expenditure and outcomes and subsequent challenges for pharmaceutical policy, with a special reference to Greece, *Hippokratia*, 18(2): 100-106.
21. Nikolaos Polyzos, Stefanos Karakolias, George Mavridoglou, Panagiotis Gkorezis, Christos Zilidis. Current and Future insight into human resources for Health in Greece, *Open Journal of Social Sciences* 2014;3:5-14.
22. Karakolias S. & Polyzos N., The newly established unified healthcare fund (EOPYY): current situation and proposed structural changes, towards an upgraded model of primary health care, in Greece, *Health*, 31.01.2014

23. Charalambous, C., Maniadakis, N., Polyzos, N., Fragoulakis, V., & Theodorou, M. (2013). The efficiency of the public dental services (PDS) in Cyprus and selected determinants. *BMC health services research*, 13(1), 420.
24. N Kontodimopoulos, C Kastanioti, E Thireos, H Karanikas, N Polyzos. The contribution of generic substitution to rationalizing pharmaceutical expenditure in Greek public hospitals under recent economic crisis, *Journal of Pharmaceutical Health Services Research*, 2013;4(4):211-216
25. N. Polyzos, H. Karanikas, E. Thireos, C. Kastanioti, N. Kontodimopoulos, Reforming reimbursement of public hospitals in Greece during the economic crisis: Implementation of a DRG system. *Health Policy*, 2013; 109: 14-22.
26. C Kastanioti, N Kontodimopoulos, D Stasinopoulos, N Kapetaneas, N Polyzos, Public procurement of medical technology in Greece in an era of economic crisis. *Health Policy*. 2013;(109): 7-13.
27. N. Polyzos, A three-year Performance of the NHS Hospitals in Greece, *Ippokratia Journal*, 2012; 16(4): 350-5.
28. C. Dervenis, C. Kastanioti, N. Polyzos, Restructuring the Finances of the Greek Health Care System in the Era of Economic Crisis. *World J Surg*, 2012; 37(3):707-9
29. N. Polyzos, Health and Financial Crisis in Greece, *The Lancet*, v. 379(9820):1000, 2012 [letter to the editor].
30. C. Kastanioti, S Koutalianos, G Mavridoglou, N Polyzos, Health care costs and related socio-economic factors of cholecystectomy: an evaluation of two operative techniques in Greece, *HSJ – HEALTH SCIENCE JOURNAL®* 2011; 5(1):48-59
31. N. Polyzos – C. Dikaios, A political approach to the Greek Health Care finances, and the public/private mix: a hint of hidden inequalities, *International Journal of Health Sciences*, vol. III, issue 3, 2010
32. M. Theodorou, K. Samara, A. Pavlakis, N. Middleton, N. Polyzos, N. Maniadakis, “The Public’s and Doctors’ Perceived Role in Participation in Setting Health Care Priorities in Greece”, *Hellenic J Cardiol*, 2010; 51: 200-208.
33. N. Polyzos, Ch. Oikonomou, Ch. Zilidis, “National Health Policy in Greece: Regulation or Reforms? The Sisyphus Myth”, *European Research Studies*, vol. XL, issue 3, 2008.
34. N. Polyzos, contributor for chapter “Greece” (p. 121-124) in H. Legido-Quigley, M. McKee, E. Nolte, I. Glinos, “Assuring the Quality of Health Care in the EU”, *European Observatory No 12*, 2008.
35. A.Sissouras, A. Karokis, N. Polyzos, J. Mylonakis, Rationing and Priority Managerial Setting and Organization in the Hellenic Health Care Services System, *Leadership and Organizational Management Journal* (Sept. 2007).
36. N. Polyzos, J. Mylonakis, J. Yfantopoulos, “An Empirical Evaluation of Employees’ Job Satisfaction in Public - Private Hospitals in Greece”, *European Journal of Social Sciences*, (2007), 4(2) 160-170.
37. Polyzos N. – Mylonakis J., «Cost and Average Length of Stay Evaluation per Pediatric Diagnostic Category in Greece», *European Journal of Economics, Finance and Administrative Sciences*, (2006), 5, 31-45.
38. Theodoros A. Roupas, Nikolaos M. Polyzos, “Managerial dysfunctions in the public sector: is entrepreneurship the solution or the public-private cooperation?”, στο βιβλίο πρακτικών του 2ου διεθνούς συνεδρίου «Advances in Applied Financial Economics”, Research and Training Institute of East Aegean, Samos, July 2005.

39. N. Polyzos et al., «Factors Affecting Outpatient and Inpatient Hospital Satisfaction», European Journal of Scientific Research, (2005) Vol. 11, No 2, pp. 131-144.
40. Polyzos N., "Striving towards Efficiency in the Greek Hospitals by reviewing Case Mix Classifications", Health Policy, 2002: 305-328.
41. Tragakes E. - Polyzos N. "The Evolution of Health Care in Greece. Starting a course of change", The International Journal of Health Planning and Management, 13, (1998).
42. Ranos C. - Polyzos N. , "Pharmaceutical Policy within the Greek N.H.S." in Mossialos E. - Abel - Smith B. - Ranos C. *"Cost Containment, Pricing and Financing of Pharmaceuticals in the European Union"* (1994), Pharmetrica.

#### **1.4. Papers Published in Greek Language Peer Reviewed Journals**

1. Dafopoulou Ch., Kandylaki A., Tsergas N., Tsatsou I., Polyzos N., The value of mindfulness on consulting process, Asclepios Step, 115, 1/4/2023.
2. Dafopoulou Ch., Kandylaki A., Tsergas N., Tsatsou I., Polyzos N., The implementation on midfullness of health professionals, Hellenic Medical Archives, 4627, 28/1/2023.
3. Letsios A., Polyzos N., 2023, Functional and economic evaluation of MHS hospitals 2010–2020; Hellenic Medical Archives, 40 (1-10).
4. Pontisides G., Platis Ch., Galanis P., Polyzos N., Belali Th., 2021, Knowledge and skills of Greek health professionals concerning triage in emergency departments, Hellenic Medical Archives, 38: 1-11.
5. Karakolias S., Bartzokas D., Polyzos N., 2021, Primary Health Care. The Greek case in front of the reform, Hellenic Medical Archives, 38: 1-7.
6. Dalakaki, E., Karakolias, S., Kastanioti, C., Polyzos, N. Analysis of out-of-hospital pharmaceutical prescribing and health insurance system expenditure. Archives of Hellenic Medicine. 2018; 35(6): 791-801
7. Karakolias, S., Dikeos, C., Kastanioti, C., Polyzos, N. Application of an organizational assessment tool of primary health care. Archives of Hellenic Medicine. 2018;35(4):497-505
8. Kastanioti C. & Polyzos N. Hospital performance evaluation based on ESY.net in public hospitals, Arch Hellen Med, 33(2), March-April 2016, 198-206
9. Zilidis Ch., Polyzos N., Karakolias S., 2016, Comparative Evaluation of Efficiency between Similar Segments and NHS Sections of a University Hospital, Arch Hellen Med, 33 (1).
10. Karakolias S. & Polyzos N., 2015, Application and Evaluation of a model for the prediction of the financial model in private general clinics, Archives of Hellenic Medicine, 32 (4).

11. Karampli E., Hatzaki A., Polyzos N., Souliotis K., Kyriopoulos I., The evolution of health expenditure in the developed countries, 2014, MEDICAL.
12. Karampli E., Hatzaki A., Polyzos N., Souliotis K., Kyriopoulos I., The influence of technological change on the evolution of health expenditure over time, Archives of Hellenic Medicine, 2014, 30: 1-8
13. Xenos P., Nektarios M., Polyzos N., Yfantopoulos I., Modern methods of hospital financing, competition and financial incentives, Archives of Hellenic Medicine, 2014, 31 (1-14).
14. C. Kastanioti, E. Siouroni, G. Mavridoglou, N. Polyzos, Comparative Assessment of Organizational Culture of Health Units, ARCHIVES OF HELLENIC MEDICINE 2011, 28 (1): 70-78
15. Polyzos N., Mavridoglou G., Argyriadis A., Siouroni E., Kastaniotis A., Evaluation of the implementation of financial-accounting systems of NHS hospitals in Greece, GALINOS 2010; 52 (2): 129-147
16. N. Polyzos and D. Bartzokas, "Hospital Quality Management System Structure", Society, Economy and Health, Period B, Volume 6, Issue 3, 2010
17. N. Polyzos & S. Drakopoulos, "Economic Assessment of the Greek Health System", Social Cohesion and Development, vol. 3, issue 2, 2008
18. N. Polyzos, "Towards a Modern and Effective Management of Health Units", Scientific Social Policy Society, Newsletter, 3 / Jan. 2008
19. N. Polyzos, Th. Sinoogorgou, D. Mariatou, "Primary Care of Health and Quality: Patient Satisfaction in a Health Center", Primary Health Care, 19 (1) 10-9 (2007).
20. G. Piperakos, N. Polyzos, G. Yfantopoulos, D. Bartzokas, V. Mougia, D. Varelis, "Employee Problems at the Hospital", NOSHLEYTIKI, (2005), 44 (1).
21. N. Polyzos et al., "Comparative Analysis of Hospital Satisfaction Studies in Attica" Archives of Hellenic Medicine. 2005;22 (3).
22. Costopoulos - Karapostolis - Polyzos - Bardis - Bartsokas - Pierrakos-Chegos, "The Cost of Services of a Daily Psychotherapeutic Unit", Psychiatry. 2001; 5.
23. Polyzos N., Yfantopoulos G., "The Human Potential of Health in Greece", Archives of Hellenic Medicine, 2000;17(6).
24. Polyzos N., "Transfer of Management Experience from Other Health Systems", Health Inspection, Mar-Apr, (1995)
25. Polyzos N., "Total Quality Management and Indicators of Hospital Product", Health Inspection, Mar-Apr, (1995)

26. N. Polyzos, A. Douli, V. Kyritsis, N. Chrysopoulou, "Demand of Health Services Abroad", Health Inspection, 52 (116), 1992.
27. Georgoussis E., Kyriopoulos G., Niakas D., Polyzos N., Skoutelis G., "Trends in Resource Allocation in the Health Sector in Greece", Primary Care of Health, 3, 9, 1991, 77 -82
28. Polyzos N. et al., "Cultural Concepts of Administrative Executives of Greek Public Hospitals", Health Inspection, 1991; 26 (13): 52-56.

### **1.5. Research Reports - Technical Reports**

1. Sissouras - Yfantopoulos - Karokis - Polyzos - Roupas - Theodorou, Report on the Organization and Management of the Health Services in Greece, the Greek Advisory Committee on the N.H.S., Ministry of Health, Welfare and Social Security, (1994).
2. Polyzos N. "HEALTH POLICY IN GREECE", Ministry of Health and Welfare, (1994).
3. Antoniadou -Iliodromitis -Karokis -Kontogiannis - Polyzos, "CARDIOVASCULAR DISEASES - Evaluation of scientific research concerning certain aspects of health care in the less favored regions of the European Union", European Parliament, (1995).
4. Kremastinou, Yfantopoulos, Politi, Kostopoulos, Petersen, Polyzos, Kontogiannis, Garani, "Prevention and treatment of genetic diseases -The evaluation of scientific research in less favored regions of the E.u.", European Parliament, (1995).
5. Polyzos N., "Study for the Collection and Processing of General and Special Wet Mesh Factors in the Prefecture of ACHAIA", Mediforce, (1995)
6. Polyzos N., EU HOPE EXCHANGE PROGRAM - DENMARK, (1995).
7. Liaropoulos L., Bardis V., Bila N., Polyzos N., "Strategic Planning and Development of MHTERA Therapy Center", (1996).
8. M. Theodorou, N., Polyzos, "Proposal for an Integrated Primary Care of Bank Employees", (1996).
9. Theodorou-Karpathopoulou, Polyzos, "Program for the health protection of the Aegean Sea - Ippokratis", (1996).
10. Polyzos N., "Evaluation and proposal for the allocation, planning, organization and financing of health services in the region of Crete", (1997).
11. Liaropoulos, Polyzos, Study - Report on the determination of hospitalization, CY, (1997).
12. Gounaris, Polyzos-Sisouras, OPERATIONAL RESEARCH AND TECHNOLOGY PROGRAM - "Overview of hospital behavioral models and basic data of the Greek public hospital system", Ministry of Research and Technology - EKKE, (1997).
13. Theodorou M., Polyzos N., Medical / Health Services: A complete health system, OA 2004, (1998).
14. "Study on waiting lists in Europe", European Council, (1999) (translation into 15 official languages of the member countries), Participation of N. Polyzos, as representative and rapporteur of Greece.

15. Polyzos N., Bardis V., Bartsokas D., Pierrakos G., "Economic and Functional Evaluation of the Open Psychotherapeutic Center", (2000).
16. Polyzos N., Bardis V., Bartsokas D., "PeSY - Hospital Organization", Economic and Technical Study of the Reform and New Draft Laws, CY, (2001).
17. N. Polyzos, D. Bartsokas, Study of the Upgrading of the 3rd and 6th IKA Hospital, IKA, (2001).
18. N. Polyzos, D. Bartzokas, "Operational Plan 2001-2 on Cardiac Surgery Center", OKK, (2001).
19. N. Polyzos. "The Social Situation in Europe in 2000", 5th Directorate of European Communities, (2002) (translation into 15 official languages of the member countries),
20. N. Polyzos et al., "Study-proposal for the Reorganization of the Private Health Sector in Greece", CYF, (2002).
21. N. Polyzos, D. Bartzokas, "Operational Plan 2003-5 of ATTIKON General Hospital", ATTIKON, (2003).
22. N. Polyzos, D. Bartzokas, "Quality Program at ATTIKON General Hospital", ATTIKON, (2004).
23. N. Polyzos, "Bank of Greece Health Bank Reorganization Study", 2006-7.
24. G. Sakelis, D. Ziomas, P. Giannoulatos, N. Polyzos, "Evaluation and Proposal for the Greek Health System in view of CSF", EKKE, 2007.

## **1.6. Production of Teaching Material**

2014 Polyzos N., Health Services Management, Kritiki Publications [textbook in Greek]  
Department of Social Management & Political Sciences, University of Thrace

2012 Polyzos N, Siskou O, Theodorou M., Study Guide for the module "Strategic Planning and Health Services Evaluation" of the postgraduate program "Health Policy and Planning", Open University of Cyprus.

2012 Polyzos N, Gorezis P., Theodorou M., Study Guide for the module "Human Resources Management" of the postgraduate program "Health Policy and Planning", Open University of Cyprus.

2007 Polyzos N., Health Services Financial Management, Dionocos Publications [textbook in Greek] Department of Health and Welfare Management, Technological Institute of Peloponnese.

## **2. PAPERS & POSTERS PRESENTED AT CONFERENCES**

1. 4-6 December 1991 - Athens - Eugenides Foundation 3rd Pan-Hellenic Conference on Economics and Administration of Health Services with International Participation and subject "Competition in Health Systems" / Subject: "Demand for Hellenic Health Services Abroad"
2. 4-6 November 1993 – Athens Introductory Speech by the CYPR at the International Conference on Case Mix and Resource Management
3. April 16, 1994 – Athens Meeting of Young Health Managers on: Hospital Management
4. 21-22 October 1994 – Athens "Financial Implications of Quality Control of Medical Practice" - Hellenic Psychiatric Society
5. 4-6 November 1994 – Thessaloniki "Quality Control and Hospital Indicators", Young Health Managers
6. 17-19 November 1994 - London "Greece: Prospects of Modernization - The Evolution and reforms of the Greek Health Care System", LSE
7. 31/3/95 -1/4/95 – Athens "Transfer of Management Experience from Other Health Systems"
8. 14-17 June 1995 - Madrid Evaluation Meeting and Conference HOPE Exchange Program 1995
9. 9-12 November 1995 – Crete President at the conference table "The 21st Century Hospital" with theme "Hospital and Europe"
10. 9-12 March 1996 – Athens Chairman of the conference "Biomedical Technology" on the subject "Hospital Management"
11. 18-19-20 March 1996 – Athens "Human Potential in Health" at the Conference "Public Health in Twilight of the 21st Century»
12. 13-15 June 1996 - Portugal IX Evaluation meeting and Seminar of the HOPE Exchange Programme 1996
13. 20-21 June 1996 –Karpnissi "Measures to contain costs and control expenditures in the Greek Health System", 5th Conference of Health Economics.
14. May 12, 1997 – Athens "Health Systems in the European Union", 7th Nursing Department Meeting, 251 General Aviation Hospital
15. 12-13 June 1997 – Olympia "Comparative Analysis of Pharmaceutical Care Systems in Europe", 6th Conference of Health Economics
16. 2-3 October 1997 - Denmark "Health Systems for the Future in Europe"
17. 6-8 November 1997 – Mytilene "Comparative Analysis of CPC Funding Systems", Conference on the PSC
18. 6-7-8 November 1997 – Lesbos "Primary Health Care Networks", FORUM HEALTH 4th Meeting



19. 4 May 1999 – Seville "Hospital efficiency in the Greek Hospital following case-mix classifications", Health Planning Group Coordinator, HOPE (Hospital Committee of EU)
20. May 22-23, 1999 – Tilos island "Health Screening of the Aegean: The Hippocrates Program" on "Hospital Care and the Efficient Use of Resources in Special Areas"
21. 15-16 January 2000 – Athens "Reform Now: For a Health Sector Development Project", Special Session, topic: "The Modern Hospital"
22. 21-22-23 February 2000 – Athens "HEALTH 21 - Interventions, Effectiveness, Quality - Greece, Balkans, Europe", 3rd Panhellenic Conference on Public Health and Health Services ", on" Management / Management of Health Services in Greece. Challenges for the 21st Century »15-16 June 2000 - Athens - The Economist The Public & Private Sector in the Healthcare Industry - Competition or Collaboration?
23. 24-25 of May 2001, - Athens, «Public or Private Health?- Advantages and Disadvantages. Cooperation or Competition?», European Health Managers Forum – Greece
24. 2 November 2001 – London Leadership and Learning for better quality healthcare: Just what does it take? NHS Education Center
25. 8-9 November 2001 – Athens "Reforms in Healthcare - Implications in the hospital sector in Greece and the experiences from abroad" (Onassis Cardiac Surgical Center - Chairman of the Organizing Committee - Scientific Committee).
26. 26-27 February 2002 – Hamburg – Germany "Hospital Financial Management Practice in Greece", International Symposium for Hospital Administrators, European Surgical Institute (ESI)
27. 19 May 2003 – Athens "Managerial and Cost Evaluation of the therapy and training services provided by a day psychotherapy unit", 7th World Hellenic Biomedical Congress.
28. October 16, 2004 – Athens "The private practice. Prerequisites for Legislation and Operation ", 2nd Conference of EPETG (Professional Association of Gastroenterologists of Greece)
29. 4-7 November, 2004, Thessaloniki "Towards the "Smart" Hospital, International Hospital Federation, Coordinator in Session 6: The smart Hospital as organizational and administrative system – II
30. 9/4/2005, Thessaloniki 11th Post-Training Seminar of the Association of Mayors, "Design and Development of a New Hospital and Clinic (Obstetrics-Gynecology)"
31. 7/6/2005, Nicosia, Ministry of Health International Conference on Medical Records and e-Health (key speaker)
32. 17/6/2005, Patras, 2nd International Operational Research Conference, "Health Systems Performance Measurement Standards"

33. 2/12/2005, Nicosia, CCCI – CTO "Possibilities and Prospects for the Development of Medical Tourism in Cyprus"
34. 1/4/06, Athens, 1st Workshop of NHS Managers, "Measures of Medical Practices and Remuneration of Doctors"
35. 19/5/06, Patras, 7th Workshop of OATTY "Effectiveness of Funding Medical Practices"
36. 14-6/11/06, 2nd Pan. Co-Administrator-Economist Health, Hilton, ESCS "Rational Funding & Effective Hospitality Management"
37. 22-23/9/07, International Scientific Conference, eRA – 2, Information Technology, TEI of Piraeus and University of Paisley, «Evaluation of a Regional Health care system intervention in financial management of its hospital, the case of C' DYPE a Attikis»
38. 4-6/10/07, International Conference on Applied Business & Economics (ICABE), University of Piraeus, «Microeconomics-Health Economics: Evaluation of a Regional Health care system intervention in financial management of its hospital, the case of C' DYPE Attikis»
39. 12-15 / 12/07, EACI, Athens, Health: who will pay? The search for reform in medical care. Two free announcements, a. "Supply and Supply Chain Management in Hospitals"; and b. "Cost analysis of autologous transplantation from progenitor hematopoietic cells".
40. 24-25 /10/08, 3rd International Conference of the Scientific Society of Social Policy, Social Reform and changes in the Public-Private mix in the field of social policy, "Public Private Relations in the Health Sector - the Case of PPPs"
41. 16-17/5/08, Kalamata, A.TEI, 1st National Symposium, Education and Research in Management and Health Economics in Greece and abroad,
42. 3-6/12/08, NAPC, Athens, Major Diseases and Major Questions in Health and Medical Care, Round Table Coordinator, "Can hospital deficits be controlled?"
43. 12-14 / 06/2009, Crete, 9th WONCA, Rural Health World Conference, Health Inequalities, poster presentation «Financial inequalities: is that a case of the Greek health care system»?
44. 16-17/10/2009, Nafplion, TEI of Athens and Kalamata, 2nd Panhellenic Symposium, Education, Labor Market and Health Systems.
45. 28-29/11/2009, Athens, 5th Panhellenic Congress of Occupational Therapy, Human Work. Creative and innovative approaches, main speaker.
46. 15/12/2009, Athens, ISTAME - Andreas Papandreou Foundation, "For a New National Health System (ESY) We have created in the past - We are developing in the future", speaker.
47. 07/01/2010, Athens, Joint European Commission / European Central Bank Visit, main speaker on health services.

48. 26/01/2010, Athens, Official Visit of Mr. Peter Stub Jorgensen - General Director of Employment, Equal Opportunities & Social Affairs, ESPA's main speaker.
49. 29-30 / 01/2010, Athens, 2nd Panhellenic Symposium of General Medicine: Primary Health Care: the charm of the constant search, the main speaker.
50. 17-19 /02/2010, Athens, 7th Conference on Pharmaceutical Marketing, The Pharmaceutical Market in the New Decade: Evolution or Overthrow, main speaker.
51. 26-27/02/2010, Cyprus, "Health Care Business", The Future of Health Service Management in Times of Economic Crisis, Principal Speaker.
52. 02/11/2010, Athens, ISTAME - Andreas Papandreou Foundation, "NHS Supplies 2010", main speaker.
53. 19-21 / 11/2010, Delphi, Health Forum and Health Policies: Health Insurance Policies: Reduce spending and improve service quality, keynote speaker.
54. 22-23/11/2010, Athens, Hygiene Index Indicator Generation System, Active Expert Convergence, Laboratory Meeting, Hospital Evaluators, Principal Speaker.
55. 10-13 / 05/2011, Chios, ESNE, 38th Panhellenic Nursing Congress, main speaker.
56. 01/06/2011, Athens, Pharma Conference, The Pharmaceutical Market during the Economic Crisis, "Evaluation of the Implementation of the Memorandum in the Pharmaceutical Area", speaker.
57. 21/06/2011, Athens, Shaping the future of healthcare in Greece: From past weaknesses and present challenges to a new vision, Stakeholders and their perspective in the role of Healthcare system in contributing to social welfare and economy; Is Healthcare an Expense or an Investment? Speaker on "Re-engineering the National Health System under conditions of uncertainty".
58. 24-26/06/2011, Levidi Arcadia, Forum for Health and Health Policies, 2nd Period / 4th Meeting: Primary Health Care is the appropriate gateway to the start of the Health Reform, main speaker.
59. 07-08/05/2011, Athens, 7th Panhellenic Obesity Surgery Conference 2011, Experts Approach Obesity Disease, Opening Work.
60. 16/09/2011, Thessaloniki, Technical Chamber of Greece - Department of Central Macedonia, Electronic Prescription and Patient Electronic Folder: Perspectives after the first step, Health and Social Solidarity and its implementation ", main speaker.
61. 10-11/03/2012, Athens, Presentation of the National Center for Quality Assessment and Health Technology (EKAPTY), Improving Quality in Health Services, Greeting, Presenting Conclusions and Closing Works.

62. 24-27/04/2013, Cyprus, 4th World Congress, "Cost reduction in health in a period of economic crisis", invited speaker.
63. 25/04/2013, Cyprus, 1st Pancyprian Public Health Day, "Health Services in the Time of Crisis: Assessment of a Endless Battle", keynote speaker.
64. 09/05/2013, Halkidiki, 25th Anniversary Pan-Hellenic Conference of the Hellenic Society of General and Family Medicine, "PFI and General / Family Medicine - Prospects and Future of the NHS and EOPY", rapporteur
65. 22-25/05/2013, Athens, 39th Annual Panhellenic Medical Congress, "The evolution of the health system and the role of EOPY", intergroup discussion.
66. 19-20/09/2013, Athens, 12th Health world Conference: Reconstruction of the EIFY as a prerequisite for the sustainability of the healthcare system, invited speaker in "The Re-Design and Reconstruction of the Health Insurance System EOPY and its relationship to hospital care
67. 27/09/2013, Athens, 2nd International Symposium & 24th National Conference on Operational Research, "An un-ended battle"
68. 25-26/10/2013, Athens, Conference: EOPY - PFY (with the announcement of results of the project of the Democritus University of Thrace), "Announcement of research results - study for EOPY and PHI"
69. 04/11/2013, Athens, ISTAME-Andreas Papandreou Foundation: "Health Reforms", Speaker "Hospital Reform".
70. 05-07/12/2013, Athens, National Health System: 30 years, 9th Panhellenic Conference on Administration, Finance and Health Policies 2013
71. 14.09.2015, Athens, 6th Pharma & Health Conference, key speaker.
72. 24-26/5/2015 "Current and future insight into human resources for health in Greece" Health Economics Conference, China
73. 10-12 December 2015, 11th Pan-Hellenic Conference in Management, Economics and Health Policies, Athens, 10-12. Volume of Abstracts [in Greek].
74. 24/6/2016 European University Institute Robert Schuman Centre for Advanced Studies High Level Dialogue on Policy Conditionality, Florence
75. 12-13/10/2017 7o PanHellenic Conference Social Welfare Units, Chania
76. 4/11/2017, The Future of Health Care in Cyprus, International conference in Nicosia.
77. 17/11/2018, Quality in Health Care, SHSO, Medical School, University of Cyprus
78. 4/12/2018, The Future of Health Care in Cyprus, International conference in Nicosia.

79. The Future of Health care in Cyprus (Dec. 2019) Athens (general coordination, introductory speech and conclusion)
80. The Future of Health care in Greece (Oct. 2020) Athens (general coordination, introductory speech and conclusion)
81. R & D and Innovation in Health care (March 2021) Athens (general coordination, introductory speech and conclusion)
82. The Future of Health care in Greece (June 2021) Athens (general coordination, introductory speech and conclusion)
83. Hospitals, Medicines and Biomedical Technology (Sept. 2021) Athens (general coordination, introductory speech and conclusion)
84. R & D and Innovation in Health care (Febr. 2022) Athens (general coordination, introductory speech and conclusion)
85. Health Technology Assessment (April 2022) Athens (general coordination, introductory speech and conclusion)
86. The Future of Health care in Greece (Sept. 2022) Athens (general coordination, introductory speech and conclusion).

### **3. PARTICIPATION IN RESEARCH PROGRAMMES & STUDIES**

1. Scientific Coordinator of the project funded by the Ministry of Health on Reorganization of the Institution of Family/Personal Doctors and PHC, 10/2022 – 03/2023.
2. Scientific Coordinator of the project funded by Greek Patients' Association on Evaluation of Hospital Drugs, 2015-2020, 1/1/2021-31/12/2021.
3. Scientific researcher on\_Horizon 2020: Heart Failure and Real Big Data (responsible for clinical and technical requirements including doctors', carers', patients', ITs', on questionnaire in Greece, Spain, Italy and Germany), 2021.
4. Coordinator and special researcher on: A. PEDOBESITY, DEVELOPMENT OF AI INFORMATION SYSTEMS AND SPECIFIC ALGORITHMS FACING CHILDREN OBESITY, B. TRANSITION, TRANSLATING DIAGNOSIS COMPLEXITY OF SKIN CANCER FOR RATIONAL TREATMENT, C. IMPILO – AN INNOVATIVE OPEN WORLD SOCIAL NETWORK OF HEALTH SERVICES WITH BLOCKCHAIN TECHNOLOGY, 2019-21.
5. Scientific Coordinator of the project funded by Central Greece Region on Health of the Citizens and Planning Health Service in Evritania District, 2017.

6. Scientific Study for the analysis and evaluation of data on outpatient pharmacological care of EOPYY insured persons, Coordinator and co-author of the final report funded by DUTH, KE 81692, 25.02- 09.07.2016.
7. Scientific study of a model for anticipating a change in supply and demand for the human resources of the NHS, Coordinator and co-author of the final report funded by GITZ-WHO, KE 81446, 11.11-05.01 .2015.
8. Scientific Study for the evaluation of data and the formulation of a framework for drug management in the NHS and EOPYY, Coordinator and co-author of the final report funded by DUTH, KE 81487, 01.01- 31.03.2015.
9. Assessment of NHS hospital based on indicators and esy.net, Coordinator and co-author of the final report funded by National Strategic Reference Framework (ESPA) and MoH, KE 81363, 17.06-16.07. 2015.
10. Scientific and research study of redefining a health map of public health services in Evros, Coordinator and co-author of the final report, funded by the University Hospital of Evros, KE 81362, 01.05-15.06. 2014.
11. Scientific Material Handling Toolkit for the Supplies and the Pharmacy and the KEN Coordinator and co-author of the final report, funded by University of Thrace, KE 81377, 06.06-06.09.2014.
12. Scientific study of the existing situation and proposals for the human resources of the NHS, Coordinator and co-author of the final report funded by GITZ-WHO, KE 81416, 11.09-11.11. 2014.
13. Financial Management and Configuration of the NHS Hospital Evaluation Framework, Coordinator and co-author of the final report funded DUTH, entitled, KE 81272, 2013-14.
14. Provision of Education and Dissemination of Results Coordinator and co-author of the final report funded by DUTH, KE 81280, 2013.
15. Operational Plan of Hospital Administration, Coordinator and co-author of the final report funded by DUTH, 10/4/13 - 20/8/13, KE 81185.
16. Setting up a framework for supply and management of hospital drugs, Coordinator and co-author of the final report funded by Athens Medical Society and Hellenic Association of Pharmaceutical Companies, 1/5/13-31/7/13.
17. Study-development-implementation of a compensation system of PHC providers contributing to EOPYY - Methodology-Study-development (and implementation) funded by National Strategic Reference Framework (ESPA) as Coordinator and co-author of the final report, 1/09/12 - 31/12/15, KE 81078,

18. Study of Compensation System of Public and Private Units Contributing to EOPYY", Coordinator and co-author of the final report funded by DUTH
19. Development of 13 General Guidelines for the Management of the Most Common Diseases in the Public Health Service, Research Associate, funded by the National Strategic Reference Framework, University of Crete, project coordinator Professor C. Lionis, 5/11 / 12-5 / 5/13, OIS 464637.
20. Evaluation of Health Units of the Peloponnese, research-scientific project, Coordinator and co-author of the final report funded by EDEL-ELKE of TEI, Kalamata 2009.

#### **4. COOPERATION WITH INTERNATIONAL ORGANIZATIONS, RESEARCH CENTERS & UNIVERSITIES etc.**

2009-2012	Representative of the Greek Ministry of Health and Welfare in the Social Protection Committee of the EU Social Affairs Council.
2010-present	External associate at the Center of Health Services, Management and Evaluation, Nursing department, National and Kapodistrian University of Athens.
2009-present	Research cooperation with scholars and researchers from other universities such as the LSE, Cyprus Universities, the National and Kapodistrian University of Athens, the Democritus University of Thrace, the University of Crete and others.
2021-present	Member of national Committee of Public Health Experts.

#### **5. RESEARCH INTERESTS, PAST and CURRENT RESEARCH WORK: FUTURE PLANS**

My research work began 25 years ago with my doctoral thesis on the topics of Hospital Management and Financing in order to reach the target of efficiency. It was the first study in Greece with full time series data on utilization and finance leading in regression analyses of average length of stay (ALS) and cost acting separately as dependent factors versus various indicators presenting as independent factors of all NHS Hospitals. The main findings showed strong correlation between ALS and cost (and vice versa), and both to the case mix and other factors related. Conclusion of the results showed that economies of scale have been reached at a size of 300 beds on average (above 200 and below 400).

Later on, it was published as "Striving towards Efficiency in the Greek Hospitals by reviewing Case Mix Classifications", Health Policy (2002). My research was also focused on hospital performance measurement and activity based costing in pediatric services with relative publications to the above as well.

At the same time, my research focused on health policy and reforms, acting also as consultant to WHO, EU, etc, leading to publications on the related issues, such as "the Evolution of Health Care in Greece. Starting a course of change", the International Journal of Health Planning and Management (1998). Further, my scientific interests took account business planning, quality and HR satisfaction, with relative publications.

My first permanent academic position led to a textbook on "Financial Management of Health Services" (2007). Upon taking up my duties at the Democritus University of Thrace, in November 2009, my research interests have extended to other topics focused on various health policy and management issues in collaboration with colleagues from Greek universities and research centers.

My appointment as Associated Professor on Health Service Management at (DUTH) Democritus University of Thrace (2009-2014) and then as MoH Secretary General (2009-2012) leads me to establish a permanent scientific team in order to work on health reforms and regulations. My second permanent academic position has led to a textbook on "Organizational Management of Health Services" (2014).

The setting up and operation of the esy.net (NHS network of utilization and financial data) gave me the unique opportunity to evaluate the whole system and publish reports and articles like "a three-year Performance of the NHS Hospitals in Greece" (Hippokratia, 2012), "restructuring the Finances of the Greek Health Care System in the Era of Economic Crisis (World J Surg, 2012) and "Health and Financial Crisis in Greece (Lancet, 2012).

After 2012, continuing my research on the above issues at DUTH, I investigated on my establishment of the DRG scheme in Greece, along with other innovations, e.g. e-procurement and generic medicines, leading to relative publications: "the contribution of generic substitution to rationalizing pharmaceutical expenditure in Greek public hospitals under recent economic crisis (Journal of Pharmaceutical Health Services Research, 2013), "reforming reimbursement of public hospitals in Greece during the economic crisis: Implementation of a DRG system" (Health Policy, 2013) and "public procurement of medical technology in Greece in an era of economic crisis" (Health Policy, 2013).

Becoming a Professor (8 years ago), I continued my research coordinating variously funded projects and theses (doc and post-doc). Four areas-topics were on my main scientific interests:

1. The unification of sickness funds, during my previous duties, and primary health care, through a huge project on that (2013), leading to a relevant e-book and publications such as "the introduction of Greek Central Health Fund: has the reform met its goal in the sector of Primary Health Care (PHC) or a new model is needed?" (BMC Health Service Research, 2014),
2. HR in Health, with two studies on demand (Health) and supply (Education), leading to a relative model specification (2014) and relative publications and announcement in international conference (2015).



3. Studies (2014-16) on the evaluation of the e-prescription system established at the Central Health Fund (EOPYY) in 2012 included 2013-15 data on prescriptions and their values per region-district, doctors' specialty, separation of branded, off patent and generic drugs, as well as their therapeutical category, and the level of patient co-payment, either in PHC or in Hospitals, leading in various publications (2016-18) e.g. Greek National e-prescribing system: preliminary results of a tool for rationalizing pharmaceutical use and cost, Global Journal of Health Science, ABC analysis: a tool of efficiency controlling pharmaceutical expenditure in Greek NHS Hospitals, JPHSR, etc,
4. Clinical protocols and DRGs, doctors' remuneration in PHC, hospitals' reorganization, etc.
5. Studies (2019-22) on the evaluation of hospital drugs, following be the evaluation of the 10-year e-prescription system, Horizon 2020 etc, primary care and public health projects.

## 6. ACADEMIC REFEREES

**1. Elias Mossialos.** is Brian Abel-Smith Professor of Health Policy at the Department of Social Policy at the London School of Economics and Political Science, Director of LSE Health.

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<http://www.lse.ac.uk/researchAndexpertise/experts/profile.aspx?KeyValue=e.a.mossialos%40lse.ac.uk>

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