



National Institute of Science and Technology
for Health Technology Assessment

CNPq REPORT
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The National Institute of Science and Technology for Health Technology Assessment (IATS) was launched in May 2009 within the National Institutes for Science and Technology (INCT) program of CNPq. It was constituted by researchers with proven experience in clinical research and qualified to work in different stages of HTA and to support the formulation of health policies that meet governmental and non-governmental demands from institutions that provide services and from society as a whole. Throughout this first year of activities, IATS researchers have carried out activities of research and education and have been able to build a network of collaboration for expanding knowledge in the area, assessing the economic, ethical, and health consequences related to adding or removing technology in the public health system (SUS), including the supplementary health system. As described in the original proposal, the intent is to build strong ties among the institutions and research groups of excellence, strengthening, expanding, and creating national and international prominence and credibility through activities of research, human resource training, and product transfers for managers and the population at-large. The main products and results achieved to date are described below, and represent the accomplishments of a part of a set of actions planned for the first three years of the Institute.

The Institute is organized with the existence of an executive board located at the IATS headquarters (Clinical Research Center, Hospital de Clinicas de Porto Alegre), which carries out the operational management of the project as well as develops planning, growth, and monitoring of actions focused on achieving the objectives and targets set for the institute.

The managing committee is made up of nine representatives from the headquarters and from other centers of the institute, meets regularly presentially or virtually to decide on budget execution, research projects, general requests from members, the establishment of future activities, and overall assessment of actions carried out.

The institute also has an external committee that evaluates the progress of the projects along with making sure the institute is keeping to the budget, assessing the activities of IATS, and suggesting actions for improvement.

There were three meetings held of the Managing committee (on July 10, 2009, October 19, 2009, and May 14, 2010)—main topics addressed and resolutions (minutes attached below):

1) MANAGING COMMITTEE – MEETINGS HELD AND DECISIONS:

1st Meeting of the Managing Committee – Porto Alegre, RS, July 10, 2009 – Main decisions:

- ✓ Create an Administrative Management for IATS located in the institution's headquarters
- ✓ Forward the creation of a IATS web site on Internet
- ✓ Standardize the quotation forms of IATS in publications prepared by IATS researchers
- ✓ Create working groups for the three areas of activities: research, education and training, and knowledge transfer to society
- ✓ Resolved to hold training in HTA for students of all centers.

- ✓ Selected scholarship holders for nomination to CNPq and CAPES according to the profiles of the candidates, scholarships available, and equal distribution among the centers.

2nd Meeting of the Managing committee – Porto Alegre, RS, October 19, 2009 – Main decisions:

- ✓ Discussed the possibility of a training course that would encompass students, researchers and teachers in HTA with highly renown international teachers
- ✓ Conduct an in-class TreeAge course for students of graduate programs
- ✓ Approved the rendering of accounts and resolutions of resources for the organization of the centers.

3rd Meeting of the Managing committee – Porto Alegre, RS, May 14, 2010 – Main decisions:

- ✓ Approved the faculty for the School for Advanced Studies as well as the budget, participation rules, and course dates.
- ✓ Defined rules for incorporation of new researchers to IATS in order to expand the beneficiaries and research groups.
- ✓ Approved the rendering of accounts.
- ✓ Validated the way that scholarship holders participate in preparing reviews and commenting on articles for the lay public.

2) ACTIVITIES OF COOPERATION BETWEEN THE GROUPS PARTICIPATING IN INCT

General Activities

2.1 - IATS launch meeting (Porto Alegre, May 14 and 15, 2009):

This meeting was held to promote the official launch of IATS with an opening session that was attended by researchers from all centers as well as the President of the Clinical Hospital of Porto Alegre, Dr Amarílio Viera de Macedo Neto, Dr. Reinaldo Guimarães from SECIT, and Professor Wrana Panizzi, vice- president of CNPq.

This launch was an opportunity to review the activities planned for the Institute in addition to the integration among the project participants. Thirty-four researchers participated during one day of activity and were divided into the following 3 groups: research, human resource training and transfer of knowledge to society. Each group discussed joint activities and actions for INCT, which were later presented and approved by the assembly with all the representatives.

2.2 - Elaboration of the site – the institute's website was launched in April 2009. The web page developed is used as a tool for dissemination of activities in education, researches in development, interaction with society, project management, and integration among researchers and students.

In Google the institute's site today is already the first and fourth response to the words "IATS" and "health technology assessment", respectively. Our site has an average visit of 600 accesses per month and has been accessed by other countries such as Portugal, UK, Spain, Mozambique, Peru, Austria, Germany, Ireland, Australia, and Russia. www.iats.com.br

2.3 - Participation of IATS researchers in PAHO – WHO – The researchers Maria Novaes, Ana Sartori (USP), Denizar Vianna, and Luciana Bahia (UERJ) are part of the Center of Excellence in Decision Analysis for Evaluating Vaccines of the Pan American Health Organization (PAHO-WHO). These researchers participated in the meeting that took place in Washington from May 25 to 28. The purpose of the meeting was to define the priority projects in 2010 for the countries in Latin American and the Caribbean. In February the group was selected as PAHO/WHO Center of Excellence for studies on vaccine decision analysis.

2.4 - Visit to teaching institution and NICE in England. - Prof. Dr. Carisi Anne Polanczyk was part of the committee formed by representatives from Anvisa, from the National Health Agency, Ministry of Health, Department of Science and Technology (DECIT), which visited the University of York and the National Institute for Health and Clinical Excellence (NICE). They had the opportunity to be familiar with the departments responsible for the economic assessment studies in the United Kingdom. On this occasion the visitors participated as spectators in a monthly meeting of NICE where details about the incorporation of new technologies in the English healthcare system were discussed by a steering committee. This meeting was a great opportunity to exchange experiences since a discussion between patients and physicians came up regarding new drugs, researches, and procedures. During the visit, the Brazilian representatives also had the opportunity to be acquainted with an electronic database that the British use to store all the studies made, including authors, results achieved, and some comments about the researches.

2.5 - Research Seminars at the School for Advanced Studies (Viamão, RS, May 28 to June 2, 2010):

The School for Advanced Studies in Health Technology Assessment held an intensive seminar between June 28 to July 2 with the participation of 105 students and researchers and four international professors (David Banta, France; Joseph Mathew, India; Anushua Sinha, USA; Ursula Rochau, Austria) with lectures and discussion workshops on topics such as systematic review, cost-effectiveness modeling studies, Markov model, a global perspective of Health Technology Assessment in Health Care, ethics, among others.

The complete schedule (folder attached) totaled five mornings and four afternoons of work with 36 total class hours of study and case discussions.

Specific Activities

Other complementary activities for developing research projects that are ongoing.

Event: Workshop with researchers from IATS involved in the proposed cost-effectiveness of the hepatitis A vaccine according to the schedule attached. Initially there was a seminar with a presentation on the methodology and previous experience with economic studies on the vaccine and about the national survey on viral hepatitis. This stage was open for the participation of graduate level students and teachers of graduate study courses in UPE, Aggeu Magalhães/Fiocruz Research Center, and UFPE.

During this workshop the steps were discussed to collect the information needed to assess the cost-effectiveness of the vaccine with task assignments and a proposed work schedule for the next six months.

Researchers: Ricardo Ximenes and Helena Santos.

Location: Graduate Studies Center of the School of Medical Sciences at UPE in October 2009.

Report of the event: Mar/29/2010 – Full-time

1- Two proposals were submitted for critical review of economic studies of implementing the vaccination routine against hepatitis A in children (up to 2 years) by the researchers Patricia da Veiga and Andréia Santos. The objectives, key words, inclusion criteria, and definitions were defined with the protocol being submitted for critical review.

2- Data from different information sources was presented by the members of the group with discussion about additional information to be collected and possible difficulties/barriers.

3- A work schedule was made up to be accomplished in a short amount of time (~2 months) to establish the dynamic model for evaluating the cost-effectiveness of the vaccine against hepatitis A. There was a distribution of tasks/assignments to collect data on mortality and health care costs related to hepatitis A.

Mar/30/2010 – Full-time

1 - Conclusion of the agenda of tasks with deadlines for delivery set, specifying how to work the data for the evaluation proposed by the group.

Discussion on inserting new sources of information regarding the costs of ambulatory assistance, hospital care, and transplant.

2 - Discussions and agreement on the formulation of the force of infection curves by regions and the dynamic model with Professors Dr. Raymundo Azevedo and Dr. Marcos Amaku (USP)

Researcher: Celina M T Martelli and Ricardo Ximenes

Location: Preventive Medical Department of the School of Medicine at USP.

Event: Meeting for discussing research activities about the systematic review of literature on cost-effectiveness studies against hepatitis A.

Participating researchers: Andréia Santos and Patrícia Soarez

Location: School of Medicine at USP on May 26, 2010.

3) ACTIVITIES OF COOPERATION BETWEEN INCTs AND WITH OTHER INSTITUTIONS:

Pan-American Health Organization - The researchers Maria Novaes, Ana Sartori (USP), Denizar Vianna, and Luciana Bahia (UERJ) are part of the Center of Excellence in Decision Analysis for Evaluating Vaccines of the Pan American Health Organization (PAHO-WHO) to develop studies in this area.

REBRATS - Some researchers of IATS were already part of the Brazilian Network of Health Technology Assessment. During this last year of activity IATS and REBRATS have developed a project for the elaboration a technical opinion regarding HTA studies completed through the participation of ad hoc consultants selected among institute's researchers.

CYTED - Partnership signed between IATS and the Institute of Clinical and Sanitation Effectiveness (IECS) of Argentina presented a joint proposal for creating an Ibero-American network of health technology assessment. This network intends on working in cooperation with entities such as Incien, Inahta, Htai, Eunetha, Ispor, Cochrane and Paho.

DAB / MS - Through its body of researchers, IATS prepared this biennium (2009-2010) manual on an instrument validated tool for assessing services of Primary Health Care, entitled Primary Care Assessment Tool - Brazil to be published in coming months. Moreover, two of its researchers (Bruce Duncan and Erno Harz) participated in the Brazilian Research Network in PHC coordinated by DAB/MS and ABRASCO.

PAHO-Brazil - One of its researchers (Erno Harz) participated in the 2009-2010 biennium of an Innovation Lab on the role of Primary Care in the consolidation of Integrated Networks for Health Care, producing a document to be published in September about technologies in health that contribute to the strengthening of integrated networks.

Seminar of Cooperation Networks of the National Science and Technology Institutes - Two researchers from IATS (Dr. Luciane Cruz and Juliana Juk) participated in a seminar held in Salvador on the 8th and 9th of July that had the purpose of getting to know the activities of INCTS in health in order to establish partnerships in multi-center studies, share their teaching activities, and exchange experiences in managing INCTs.

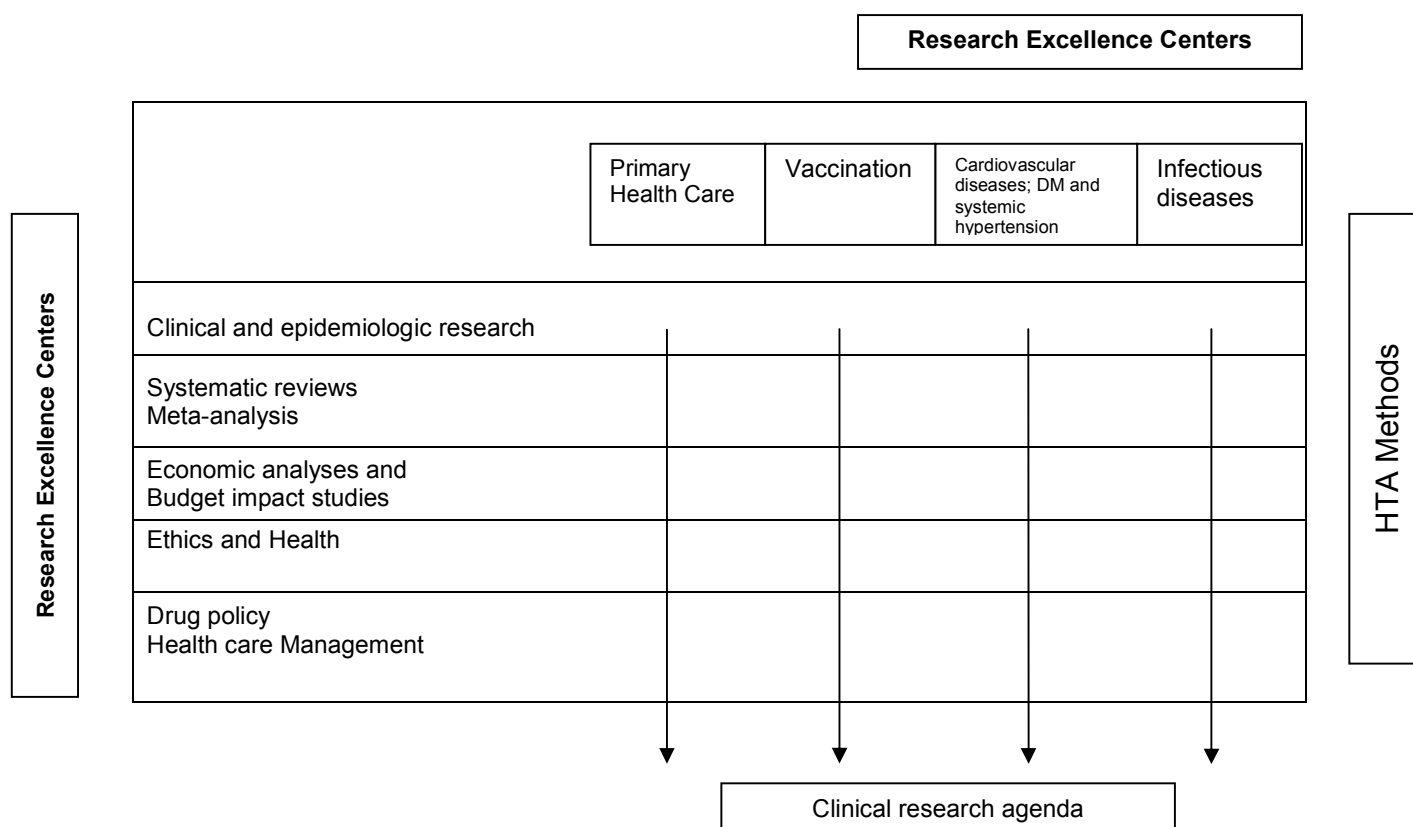
INCT Mental Health Disorder of Children and Adolescents - IATS, through the research group of Prof. Carisi A Polanczyk, established a partnership with Prof. Luis Augusto Rohde for carrying out economic analysis studies in health for hyperactivity disorders in children. Other teachers from this institute also gave classes at the School for Advanced Studies.

Study on H1N1 - Researcher Bruce Duncan, together with Dr. Wanderson Kleber de Oliveira, Gerson Penna, and other employees of the Department of Epidemiological Surveillance investigated the notification system for influenza H1N1, publishing the first article, on the national level, focusing the H1N1 epidemic in Brazil (Oliveira WK et al. Pandemic H1N1 influenza in Brazil: An analysis of the first 34,506 notified cases of influenza-like illness with severe acute respiratory infection (SARI). Eurosurveillance 2009).

Now they are in the process of an analysis of SIS-Hiperdia. Having already been analyzed at a global level together with Deborah Malta and others from CGDANT, and of the head office, the performance of Public Health Care in terms of changing the profile of morbidity and mortality from chronic diseases in Brazil is on the way: Schmidt MI, Duncan BB, Stevens A, Iser BPM, de Moura L and Malta DC. Mortality and morbidity due to noncommunicable chronic diseases and their risk factors in Brazil. Saúde Brasil 2010 (ready for print).

4) Main Topics of Research

The research agendas were structured according to the social-sanitary demand of the Brazilian population and the expertise the of research groups participating. The lines of research focus the area of technology assessment (ATS) in cardiovascular diseases, diabetes and hypertension, involving primary studies of public interest such as the randomized clinical trial PREVER and cohorts of individuals with hypertension, diabetes mellitus, and in cardiovascular risk. Systematic reviews, meta-analysis, and economic analysis of various technologies - with low and high complexity - are under development for these conditions in health. Another research group studies infectious diseases such as HIV/AIDS, hepatitis, malaria, toxoplasmosis, among others and focuses on reviewing, analyzing, and building knowledge that is based on health policies in the area. Under this same branch, vaccine-preventable diseases are a focus of interest of the group to evaluate vaccination programs, clinical trials, systematic reviews, and economic models. Besides these, groups of specialists in programs of primary health care have developed tools to evaluate the health care qualifications by using tools to monitor it and to increase the efficiency of the system, such as the use of tele-medicine, for example. The cross tabulation of fields of interests and methods of research is presented in the figure below.



Areas of expertise and relationship between the research lines of the Brazilian Institute of Technology in Health

Currently IATS has the participation of 77 researchers and works with nine university institutions (USP, UNIFESP, UPE, UFG, UnB, UFMG, UERJ, UFPE, HCor).

4.1) Publications

The group of researchers from IATS together with other authors published between February 2009 and July 2010 a total of 41 articles in different scientific journals. Most of them had proper citation of the INCT-IATS member according to the pre-determined model:

CITATION

Kind of relationship with study	Descrição em português	Descrição em inglês
Support - be related to HTA and be one of the researchers of the group	Instituto Nacional de Ciência e Tecnologia para Avaliação de Tecnologias em Saúde (IATS) – CNPq/Brasil	National Institute of Science and Technology for Health Technology Assessment (IATS) – CNPq/Brazil
Financing	Este estudo recebeu apoio financeiro do Instituto Nacional de Ciência e Tecnologia para Avaliação de Tecnologias em Saúde (IATS) – CNPq/Brasil	This study was supported with grants from the National Institute of Science and Technology for Health Technology Assessment (IATS) – CNPq/Brazil
Authored by members of IATS, but study with no direct relationship with ATS	Prof. Xxx é pesquisador do Instituto Nacional de Ciência e Tecnologia para Avaliação de Tecnologias em Saúde (IATS) – CNPq/Brasil	Prof. Xx is a member of the National Institute of Science and Technology for Health Technology Assessment (IATS) – CNPq/Brazil

4.2.) Main Scientific-Technical Results:

With abstract:

Fonseca MF, Araújo GT, Araújo DV. Cost Effectiveness of Peginterferon Alfa-2b Combined with Ribavirin for the Treatment of Chronic Hepatitis C in Brazil. The Brazilian Journal of Infectious Diseases 2009;13 (3):191-199.

Abstract

The treatment of chronic hepatitis C (CHC) with peginterferon alpha-2b/ribavirin (PegIFN + Rib) produced larger sustained viral response (SVR) compared to the conventional (nonpegylated) interferon/ribavirin (IFN + Rib), but its cost-effectiveness was not assessed in Brazil. We developed a Markov model to mirror the natural disease history and cohorts of patients with hepatitis C virus (HCV), that received PegIFN + Rib or IFN + Rib treatment for 48 or 24 weeks, according to viral genotype and liver histology. The SVRs for the treatments PegIFN + Rib and IFN + Rib were respectively 48% and 34% (genotype 1), and 88% and 80% (genotype non-1). Three Delphi panels were conducted with hepatologists and intensivists, and another one with oncologists. The costs are expressed in 2006 Brazilian Reais (R\$) and the benefits were discounted at 3%. In genotype 1 HCV patients, PegIFN + Rib increases the life expectancy (LE) in 0.51 year, and the quality-adjusted life years (QALY) in 0.78, as compared to IFN + Rib. In genotype non-1 HCV patients, PegIFN + Rib increases the LE in 0.29 years and the QALY in 0.44 years, as compared to IFN + Rib. The incremental cost-effectiveness rate, considering all the genotypes, was of R\$19,848.34 per QALY. Peginterferon alpha-2b with ribavirin is a cost-effective therapy for the treatment of naïve CHC adult patients compared to the interferon alpha-2b and ribavirin regime, irrespective of the viral genotype.

Ribeiro RA, Stella SF, Camey SA, Zimmerman LI, Pimentel M, Rohde LE, Polanczyk CA. Cost-Effectiveness of Implantable Cardioverter-Defibrillators in Brazil: Primary Prevention Analysis in the Public Sector. Value Health. 2010;13(2):160-8.

Abstract

Background: Several studies have demonstrated the effectiveness and cost-effectiveness of implantable cardioverter-defibrillators (ICDs) in chronic heart failure (CHF) patients. Despite its widespread use in developing countries, limited data exist on its cost-effectiveness in these settings. **Objective:** To evaluate the cost-effectiveness of ICD in CHF patients under the perspective of the Brazilian Public Healthcare System (PHS). **Methods:** We developed a Markov model to evaluate the incremental cost-effectiveness ratio (ICER) of ICD compared with conventional therapy in patients with CHF and New York Heart Association class II and III. Effectiveness was evaluated in quality-adjusted life years (QALYs) and time horizon was 20 years. We searched MEDLINE for clinical trials and cohort studies to estimate data from effectiveness, complications, mortality, and utilities. Costs from the PHS were retrieved from national administrative databases. The model's robustness was assessed through Monte Carlo simulation and one-way sensitivity analysis. Costs were expressed as international dollars, applying the purchasing power parity conversion rate (PPP US\$). **Results:** ICD therapy was more costly and more effective, with incremental cost-effectiveness estimates of PPP US\$ 50,345/QALY. Results were more sensitive to costs related to the device, generator replacement frequency and ICD effectiveness. In a simulation resembling the MADIT-I population survival and ICD benefit, the ICER was PPP US\$ 17,494/QALY and PPP US\$ 15,394/life years. **Conclusions:** In a Brazilian scenario, where ICD cost is proportionally more elevated than in developed countries, ICD therapy was associated with a high cost-effectiveness ratio. The results were more favorable for a patient subgroup at increased risk of sudden death.

Fuchs FD. Diuretics: still essential drugs for the management of hypertension. Expert Review of Cardiovascular Therapy - 2009;7:591-8.

Abstract

According to most current international guidelines for hypertension, diuretics are indicated for elderly and black patients, unless they have any of a long list of other preferential indications. These recommendations are mostly based on the results of corporate-sponsored and biased trials, which have unsuccessfully tried to demonstrate the existence of pleiotropic effects of newer agents. Metaregression analyses have shown that the benefits of treatments are directly proportional to the difference in blood pressure between trial arms. New analyses of the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack (ALLHAT) trial demonstrated the superiority of chlorthalidone over other agents in the prevention of end-stage renal disease in diabetics and of cardiovascular events in newer cases of diabetes. Despite this evidence, patients continue to withdraw from effective therapies in recent trials. The use of diuretics has also been challenged by the results of the Avoiding Cardiovascular Events in Combination Therapy in Patients Living with Systolic Hypertension (ACCOMPLISH) trial, which employed hydrochlorothiazide, a diuretic with lower potency and duration of action than chlorthalidone. Diuretics are still essential drugs for hypertension management, but diuretics with higher potency and duration of action, such as chlorthalidone, should be preferred.

Tonelli de Oliveira AC, Martinez D, Vasconcelos LF, Gonçalves SC, Lenz MC, Fuchs SC, Gus M, Moreira LB, Abreu-Silva EO, Fuchs FD: Diagnosis of obstructive sleep apnea syndrome and its outcomes with home portable monitoring. Chest 2009; 135:330-6.

Abstract

BACKGROUND: The use of portable respiratory monitoring (PM) has been proposed for the diagnosis of obstructive sleep apnea syndrome (OSAS), but most studies that validate PM accuracy have not followed the best standards for diagnostic test validation. The objective of the present study was to evaluate the accuracy of PM performed at home to diagnose OSAS and its outcomes after first validating PM in the laboratory setting by comparing it to polysomnography (PSG). **METHODS:** Patients with suspected OSAS were submitted, in random order, to PM at the sleep laboratory concurrently with PSG (lab-PM) or at home-PM. The diagnostic performance was assessed by sensitivity, specificity, positive and negative predictive values, positive likelihood ratio (+LR), negative likelihood ratio (-LR), intraclass correlation coefficients, kappa statistic, and Bland-Altman plot. **RESULTS:** One hundred fifty-seven subjects (73% men, mean age +/- SD, 45 +/- 12 yr) with an apnea-hypopnea index (AHI) of 31 (SD +/- 29) events/h were studied. Excluding inadequate recordings, 149 valid comparisons with lab-PM and 121 with unattended home- PM were obtained. Compared to PSG for detecting AHI > 5, the lab-PM demonstrated sensitivity of 95.3%, specificity of 75%, +LR of 3.8, and -LR of 0.11; the home-PM exhibited sensitivity of 96%, specificity of 64%, +LR of 2.7, and -LR of 0.05. Kappa statistics indicated substantial correlation between PSG and PM results. Bland-Altman plot showed smaller dispersion for lab-PM than for home-PM. Pearson product moment correlation coefficients among the three AHIs and clinical outcomes were similar,

denoting comparable diagnostic ability. **CONCLUSIONS:** This study used all available comparison methods to demonstrate accuracy of PM in-home recordings similar to that of repeated PSGs. PM increases the possibility of correctly diagnosing and effectively treating OSAS in populations worldwide.

Luft VC, Giugliani C, Harzheim E, Schmidt MI, Duncan BB. Prevalence of use and potential impact of increased use of primary care interventions to prevent cardiovascular hospitalizations in patients with diabetes. Diabetes Res Clin Pract. 2009 Sep;85(3):328-34.

Abstract

AIMS: To estimate the reduction in hospitalizations due to cardiovascular complications of diabetes which could result from greater use of interventions of known effectiveness in a primary health care setting. **METHODS:** In a representative survey of adults with diabetes in Porto Alegre, Brazil, we estimated current prevalence of interventions use (metformin, hypertension control, ACE inhibitors, statins, influenza vaccination, cardioprotective diet) and hospitalization rate. We calculated absolute risk reductions for interventions by applying relative risk reductions derived from literature to the baseline cardiovascular hospitalization rate. Increments in interventions use were obtained by subtracting current use prevalences from potential targets. We then modeled the number of diabetic patients needing primary health care coverage to prevent 1 hospitalization (disease impact number; DIN) and the total number of hospitalizations that might be prevented through this increased use. **RESULTS:** In 5 years, for every 100 diabetic patients in the community, we ascertained 30 cardiovascular hospitalizations. Large gaps were observed between target and current use of interventions. With greater implementation, 48% of cardiovascular hospitalizations could possibly be prevented. **CONCLUSIONS:** Major reduction in hospitalizations due to cardiovascular complications of diabetes could possibly be obtained through optimized use of effective treatments in primary health care settings such as this. Oliveira W, Carmo E, Penna G, Kuchenbecker R, Santos H, Araujo W, Malaguti R, Duncan B, Schmidt M. Pandemic H1N1 influenza in Brazil: analysis of the first 34,506 notified cases of influenza-like illness with severe acute respiratory infection (SARI).

Surveillance Team for the pandemic influenza A(H1N1) 2009 in the Ministry of Health. Euro Surveill. 2009 Oct 22;14(42).

Abstract

Recently, the brunt of the current influenza pandemic has been felt in the southern hemisphere. We report an analysis of the first 34,506 cases of influenza-like illness with severe acute respiratory infection (SARI) notified in Brazil during the epidemiological weeks 16 to 33. The 5,747 confirmed cases of pandemic H1N1 influenza showed two incidence peaks across the age span: one in children up to the age of five years (3.8/100,000) and one in individuals aged 20 to 29 years (4.6/100,000). People over the age of 60 had the lowest incidence (1.1/100,000 inhabitants). The epidemic peaked rapidly. Ninety-four percent of cases were concentrated in two of Brazil's five geographic regions - the south and southeast, regions that have a more temperate climate and thus colder winters. Case-fatality of

pandemic influenza presenting with SARI was 11.2% (95% confidence interval (CI): 10.4%-12.1%). People with a reported comorbidity had approximately twice the risk of those without (relative risk=1.89; 95%CI: 1.64-2.18).

Vespa G, Constenla DO, Pepe C, Safadi MA, Berezin E, de Moraes JC, de Campos CA, Araujo DV, de Andrade AL. Estimating the cost-effectiveness of pneumococcal conjugate vaccination in Brazil. Rev Panam Salud Publica. 2009 Dec;26(6):518-28

Abstract

OBJECTIVE: To compare the costs and benefits of pneumococcal conjugate vaccination compared with no vaccination from the perspectives of the health care system and society. **METHODS:** Using data from established sources, we estimated the incidence and mortality due to invasive pneumococcal disease, pneumonia, and acute otitis media (AOM) for a hypothetical birth cohort of children from birth to 5 years. **RESULTS:** A universal pneumococcal conjugate vaccination program was estimated capable of annually avoiding 1 047 cases of invasive disease, 58 226 cases of pneumonia, and 209 862 cases of AOM. When herd immunity effects were considered, the program prevented 1.3 million cases of pneumococcal disease and over 7 000 pneumococcal deaths. At a vaccination cost of R\$ 51.12 (US\$ 26.35) per dose, vaccination would cost annually R\$ 4 289 (US\$ 2,211) per disability-adjusted life years averted. This does not take into account herd immunity effects. **CONCLUSIONS:** At the current vaccine price, conjugate vaccination could be a cost-effective investment compared to other options to control childhood diseases. Further analysis is required to determine whether vaccination at the current price is affordable to Brazil.

Esmeralci Ferreira, Denizar Vianna Araújo, Vitor Manuel Pereira Azevedo, Cyro Vargues Rodrigues, Alcides Ferreira Jr., Camillo de Lellis Junqueira, José Geraldo de Castro Amino, Mara Lucia Farias, Antonio Farias Neto, Denilson Campos de Albuquerque. Analysis of the cost-effectiveness of drug-eluting and bare-metal stents in coronary disease. Arq Bras Cardiol 2010; 94(3): 306-312.

Abstract

BACKGROUND: There is a scarcity of cost-effectiveness analyses in the national literature comparing drug-eluting stents (DES) with bare-metal stents (BMS), at late follow-up. **OBJECTIVE:** To estimate the Incremental Cost-Effectiveness Ratio (ICER) between DES and BMS in uniaxial coronary artery disease. **METHODS:** 217 patients (130 DES and 87 BMS), with 48 months of follow-up (mean = 26 months) were assessed. Primary outcome: cost per prevented restenosis, with effectiveness being defined as the decrease in major events. The analytical model of decision was based on the study by Polanczyk et al. The direct costs were those used directly in the interventions. **RESULTS:** The sample was homogenous for age and sex. The DES was more used in diabetic patients: 59 (45.4%) vs 16 (18.4%)($p<0.0001$) and with a history of coronary artery disease (CAD): 53 (40.7%) vs 13 (14.9%)($p<0.0001$). The BMS was more used in simple lesions, but with worse ventricular function. The DES were implanted preferentially in proximal lesions: ($p=0.0428$) and the BMS in the mid-third ($p=0.0001$). Event-free survival: DES = 118 (90.8%) vs BMS=74 (85.0%) ($p=0.19$); Angina: DES=9

(6.9%) vs BMS=9 (10.3%) (NS): Clinical restenosis: DES=3 (2.3%) vs BMS=10 (10.3%) ($p=0.0253$). Cardiac deaths: 2 (1.5%) in DES and 3 (3.5%) in BMS (NS). Costs: the tree of decision was modeled based on restenosis. The net benefit for the DES needed an increment of R\$7,238.16. The ICER was R\$131,647.84 per prevented restenosis (above the WHO threshold). CONCLUSIONS: The DES was used in more complex lesions. The clinical results were similar. The restenosis rate was higher in the BMS group. The DES was a non-cost-effective strategy.

Giugliani C, Duncan BB, Harzheim E, Breyse S, Jarrige L. The impact of a shortterm intervention using the WHO guidelines for the management of severe malnutrition at a rural facility in Angola. Arch Dis Child. 2010 Mar;95(3):198-202

Abstract

OBJECTIVE: To measure the impact of practice review and in-service supervision based on WHO guidelines on outcomes of severely malnourished children in a rural facility with minimal resources staffed only by nurses. **DESIGN:** Intervention (January to August 2006) with historical comparison of outcomes (January to August 2005). **SETTING:** Therapeutic feeding centre in rural Angola. **PATIENTS:** All children admitted to the feeding centre during the study period. **INTERVENTION:** Médecins Du Monde implemented an intervention that consisted of weekly physician supervision of staff activities and establishment of a study group composed of nurses in the centre. **MAIN OUTCOME MEASURES:** Routine practices in the centre and measured indicators for outcomes of admitted children, which were compared to indicators before the intervention. **RESULTS:** During the intervention the authors observed improved delivery of important tasks such as frequent feeding and avoidance of intravenous rehydration. Among the 379 children admitted during the intervention, compared to the 358 children admitted previously, successful treatment increased from 73.2% to 82.6% (RR 1.13; 95% CI 1.04 to 1.22) and fatalities decreased from 15.6% to 8.7% (RR 0.56; 95% CI 0.37 to 0.83). **CONCLUSION:** This short-term intervention with in-service supervision based on the WHO guidelines in a setting of limited resources apparently contributed to a reduction in fatality rates. These findings support the view that such guidelines can be effectively implemented in underresourced facilities in Angola and similar settings if they are introduced using an interactive approach and if in-service supervision continues to be provided.

4.3) Outras Publicações:

Research line: Cardiovascular diseases and risk factors.

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Wolff FH, Fuchs SC, Barcellos NN, de Alencastro PR, Ikeda ML, Brandão AB, Falavigna M, Fuchs FD. Co-infection by hepatitis C virus in HIV-infected patients in southern Brazil: genotype distribution and clinical correlates. PLoS One. 2010 May 5;5(5):e10494.

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Silva E, Araújo DV. Economic and Social Burden of Severe Sepsis. *Yearbook of Intensive Care and Emergency Medicine* 2009. pag. 129-138

Karthikeyan G, Moncur RA, Berwanger O, Levine O, Heels-Ansdell D, Chan MTV, Alonso-Coello P, Yusuf S, Sessler D, Villar JC, McQueen M, Mathew A, Hill S, Gibson S, Berry C, Yeh H-M, Devereaux PJ. Is a preoperative brain natriuretic peptide or N-terminal pro-B type natriuretic peptide measurement an independent predictor of adverse cardiovascular outcomes within 30 days of noncardiac surgery? A systematic review and meta-analysis of observational studies. *J Am Coll Cardiol.* 2009; 54:1599-1606.

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femoral fracture due to osteoporosis at two medicine school hospitals of the Sistema Único de Saúde. *J Brasileiro de Economia em Saúde* 2009(1); 1:3-10.

Ribeiro RA, Rohde LE, Polanczyk CA. Levosimendan in acute decompensated heart failure: systematic review and meta-analysis. *Arq Bras Cardiol*. 2010 Jun 18.

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Fuchs FD. Corporate influence over planning and presentation of clinical trials: beauty and the beast. *Expert Rev Cardiovasc Ther*. 2010 Jan;8(1):7-9.

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Research line: Primary Health Care and Epidemiology

Feldens CA, Giugliani ER, Duncan BB, Drachler Mde L, Vítolo MR. Long-term effectiveness of a nutritional program in reducing early childhood caries: a randomized trial. *Community Dent Oral Epidemiol*. 2010 Aug;38(4):324-32.

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Infectious and vaccine-preventable diseases

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5) Activities of Training and Qualification of Human Resources

IATS supported, promoted and organized over the last 18 months qualification lined up with the specific objectives of establishing a group of researchers with skills and technical-scientific capacity to perform full assessment of technologies, considering clinical research, meta-analysis and systematic reviews, health economic analysis and budget impact, and management of incorporating technology. This goal has been achieved by promoting courses of excellence at the post-graduate level to train qualified human resources.

The following initiatives are highlighted.

- Seminar at the Graduate Program of Nursing at UFRGS - Challenges in health research and nursing. On May 22, 2009, with the following participation: Anita Molzahn - Director of the Faculty of Nursing at University of Alberta <http://www.uofaweb.ualberta.ca/nursing/amolzahn.cfm>; Judy Mill - Associate Professor of the Faculty of Nursing and Associate Director of Global Health at the University of Alberta. <http://www.uofaweb.ualberta.ca/nursing/jmill.cfm>. Teachers from the Faculty of Nursing from the University of Alberta.
- Meta-analysis Course in the EAD system given by the company Statistics.com - Prof. Michael Borenstein in August 2009 where 9 students underwent the training, replicating later on their knowledge to another 13 students, totaling 22 trained in the IATS centers of MG, SP, RS, GO, and PE.
- Survival Analysis Course - in EAD system given by Statistics.com - Prof. Dr. Anthony Babinec in October 2009. Participation by a senior researcher.
- Time Series Course - statistical area, given under the HCPA - Graduate Program of epidemiology and medical sciences. With the participation of 20 students between February 23 and 26, 2010 and total class hours of 16/hours class. The external Professor invited was Silvia Moura.
- Seminar on Health Economics - The Centro Paulista de Economia da Saúde (CPES), or Center for Health Economics of São Paulo, is a member of IATS, and on April 27 to 29 organized the 9th International Symposium on Health Economics held in São Paulo. The meeting brought together researchers from all regions of Brazil and the different areas of expertise (doctors, economists, pharmacists, among others) and was attended by speakers nationally and internationally renowned. The symposium focused on the sustainability of the health sector. The opening was done by the Cpes director, Dr. Marcos Ferraz, who showed the importance of the implementation and integration of three pillars: environmental, social, and economic in order to reach the sustainability of the health system. Ferraz also noted that current investments in Brazil are equivalent to what was invested in developed countries in the 80s and that our country's social indicators are similar to indicators that these countries had in the 70s. Furthermore, two international speakers participated in the event: Professor Amiram Gafni, Ph.D from the Centre for Health Economics and Policy Analysis - Ontario Canada and Professor Philip Musgrove from the United States.

Professors Maria Novaes, Amiram Gafni, and Philip Musgrove at the 9th International Symposium on Health Economics.

- Quality of Life Course - University of York with 24-hours class and participation of a researcher in June 2010.
- Health Technology Assessment Course with emphasis on economic assessment delivered at UFG/Institute of Tropical Pathology and Public Health. Participation of 20 students from the graduate program in Tropical Medicine, Public Health, and Health Sciences of UFG, managers of the Municipal Health Departments of Goiânia, and Goiás State Health Department. Occurred between the 21st and 24th of June, 2010.
- School for Advanced Studies - CAPES announcement, attended by 107 people including teachers, researchers, and graduate program students. It was held in July, 2010

The School for Advanced Studies in Health Technology Assessment held an intensive seminar between June 28 and July 2 with classes taught by four international professors (David Banta, France; Joseph Mathew, India; Anushua Sinha USA; and Ursula Rochau, Austria) with lectures and discussion workshops on topics such as systematic review, cost-effectiveness modeling studies, Markov model, a global perspective of Health Technology Assessment in Health Care, ethics, among others. The academic program developed is described in Appendix 2.

5.1.) Master's and Doctor's Degree Programs – Degrees completed:

Master's degree

Student: ETHEL MARIS SCHRODER TORELLY

Title: Cost-effectiveness and potentially adverse events of infusion pumps to deliver medication

Institution: GP in Epidemiology, Master's Program in Health Technology Management (HTM), UFRGS, 2009

Advisor: Carísi Anne Polanczyk

Student: CLAUNARA SCHILLING MENDONÇA

Title: The use of ambulatory care sensitive hospitalizations to evaluate the Family Health Strategy – the case of Belo Horizonte/MG, Brazil

Institution: GP in Epidemiology, Master's Program in HTM, UFRGS, 2009

Advisor: Erno Harzheim

Student: ANA PAULA COUTINHO

Title: Economic assessment of the implementation of a protected environment ward for patients undergoing bone marrow transplantation.

Institution: GP in Epidemiology, Master's Program in HTM, UFRGS, 2010

Advisor: Ricardo de Souza Kuchenbecker

Student: TANIRA ANDREATTA TORELLY PINTO

Title: Screening, risk stratification and the creation of a vascular unit to optimize the treatment of patients with cardiovascular disease in an emergency department.

Institution: GP in Epidemiology, Master's Program in HTM, UFRGS, 2010

Advisor: Ricardo Kuchenbecker

Student: ESTEFANIA INEZ WITTKÉ

Date: 13/04/2009

Title: Association between different parameters of blood pressure variability according to ambulatory blood pressure monitoring and the ankle-brachial index

Institution: GP in Cardiology, UFRGS

. Advisor: Miguel Gus

Student: ANDREA ELISABET WENDLAND

Date: 28/04/2009

Title: Effect of preanalytical variables on the levels of myeloperoxidase.

Institution: GP in Cardiology, UFRGS

Advisor: Carisi Anne Polanczyk

Student: LEANDRO QUINTANA BECKER

Date: 01/12/2009

Title: Assessment of endothelial function using brachial artery ultrasound in septic shock

Institution: GP in Cardiology, UFRGS

. Advisor: Luis Eduardo Paim Rohde

Student: EDUARDO MIGUEL KÜHR

Date: 02/12/2009

Title: Cost-effectiveness of physical exercise for patients with heart failure.

Institution: GP in Cardiology, UFRGS

. Advisor: Carisi Anne Polanczyk

Student: EUGÊNIO PEDROSO LISBOA

Title: "VITAIS: a new tool to analyze information systems to store data about mortality and live births.

Institution: GP in Epidemiology, UFRGS, 2010

. Advisor: Bruce Bartholow Duncan

Student: MAICON FALAVIGNA

Title: Systematic review: Antibiotics in the treatment of hepatic encephalopathy

Institution: GP in Epidemiology, UFRGS, 2010

Advisor: Bruce Bartholow Duncan

Student: MARCELO WATANABE

Title: Strategies for the prophylaxis of cardiovascular events in noncardiac surgeries: A systematic review of randomized clinical trials.

Institution: GP in Epidemiology, UFRGS, 2010

Advisor: Bruce Bartholow Duncan

Student: ARIANE COESTER

Title: Intensive glucose control in severe head trauma

Institution: GP in Epidemiology, UFRGS

Advisor: Maria Inês Schmidt

Student: VANESSA ZEN

Title: General and abdominal obesity and severity of coronary artery disease.

Institution: GP in Epidemiology, UFRGS

Advisor: Sandra Cristina Pereira Costa Fuchs

Student: DANIEL MAFFASIOLI GONÇALVES

Title: Prevalence of mental disorders and sociodemographic factors in a population seen by a Health Family Strategy team in the city of Santa Cruz do Sul, RS, Brazil.

Institution: GP in Epidemiology, UFRGS

Advisor: Suzi Alves Camey

Student: ROBERTA ARINELLI FERNANDES.

Title: Proximal femur fractures in the elderly: disease costs in a public hospital in Rio de Janeiro, Brazil. 2010.

Institution: GP in Clinical Medicine, UERJ

Advisor: Denizar Vianna Araujo.

Student: VILMA SUELY LOPES CAMPOS.

Title: Generic chemotherapeutic drugs and their participation in the Brazilian market.

Institution: GP in Clinical Medicine, UERJ

Advisor: Denizar Vianna Araujo. 2009

Student: ALINE MARIA REZENDE BELEIGOLI

Title/Year: Plasma brain natriuretic peptide levels and their association with morbid obesity and comorbidities.

Institution: Universidade Federal de Minas Gerais, 2010

Advisor: Antonio Luiz Pinho Ribeiro

Student: MARIA BEATRIZ MOREIRA ALKMIM

Title/Year: Factors associated with the use of a telemedicine system in primary health care in remote towns in Minas Gerais, Brazil. 2010

Institution: Universidade Federal de Minas Gerais

Advisor: Antonio Luiz Pinho Ribeiro

Student: MARCO PAULO TOMAZ BARBOSA

Title/Year: Progression of patients with or without Chagas disease after receiving implantable cardioverter-defibrillators: comparative study. 2010.

Institution: Universidade Federal de Minas Gerais

Advisor: Antonio Luiz Pinho Ribeiro

Student: POLYANA MONTEIRO D'ALBUQUERQUE

Title/Year: Risk factors associated with arterial stiffness in patients with HIV/AIDS and in a non-infected population in the state of Pernambuco, Brazil. A case control study. 2010

Institution: Universidade Federal de Pernambuco

Advisor: Ricardo Ximenes

Student: ROXANA NINAMANGO CÁRDENAS

Title/Year: Analysis of TB geographic distribution in Brasília, DF, Brazil. 2003-2007. 2010.

Institution: Universidade de Brasília

Advisor: Edgar Merchan Hamann

Student: EDSON JOSÉ MONTEIRO BELLO

Title/Year: Predictors of virological failure in patients treated with high activity antiretroviral therapy (HAART) in Brasília, DF, from 2002 to 2008. 2010

Institution: Universidade de Brasília

Advisor: Edgar Merchan Hamann

Student: ALEXSANDRO COSME DIAS

Title/Year: Evaluation of Hansen's disease treatment in primary health care. 2009

Institution: Universidade de Brasília

Advisor: Edgar Merchan Hamann

Student: MARIA ALICE BARBOSA FORTUNATO

Title/Year: Morbidity and mortality due to external causes in Brasília and neighboring areas, 2002-2007. 2009

Institution: Universidade de Brasília

Advisor: Edgar Merchan Hamann

Name: EDUARDO BLAY LEIDERMAN

Title/Year: Hospital marketing: characteristics of marketing actions in private hospitals in the city of São Paulo, 2009.

Institution: Centro Paulista de Economia da Saúde, Universidade do Estado de São Paulo

Advisor: Paola Zucchi

Name: Lutufyo Witson Mwamakamba

Title: Teenage pregnancy: Economic implications of neonatal care of preterm and low weight newborns in São Paulo, Brazil, 2010.

Institution: Centro Paulista de Economia da Saúde, Universidade do Estado de São Paulo

Advisor: Paola Zucchi

Doctorate Degrees

Student: LUCIANE NASCIMENTO CRUZ

Title: Quality of life and utility measures in a population sample of Porto Alegre, Brazil.

Institution: GP in Epidemiology, UFRGS, 2010

Advisor: Carisi Anne Polanczyk

Student: VIVIAN CRISTINE LUFT

Title: Obesity and diabetes: Contribution of inflammation and adipocytokines, and the potential importance of nutritional factors.

Institution: GP in Epidemiology, UFRGS, 2009

Advisor: Bruce Bartholow Duncan

Student: PAULO FERNANDO DOTTO BAU
Date: July 31, 2009
Title: Cardiovascular effects of acute alcohol ingestion
Institution: GP in Cardiology, UFRGS
Advisor: Flávio Danni Fuchs

Student: BEATRIZ GRAEFF SANTOS SELIGMAN
Date: November 30, 2009
Title: Effects of diet and exercise on endothelial function and cardiovascular risk of patients with metabolic syndrome. Randomized clinical trial.
Institution: GP in Cardiology, UFRGS
Advisors: Carisi Anne Polanczyk and Nadine Clausell

Student: ANDRÉIA SILVA GUSTAVO
Title: Epidemiology of physical activity and its association with obesity in a representative sample of the adult population in Porto Alegre, Brazil.
Institution: GP in Epidemiology, UFRGS
Advisor: Sandra C. Fuchs

Student: CARITAS MARQUEZ FRANCO
Completion date: 2009
Title: Risk factors and molecular epidemiology of resistant *Streptococcus pneumoniae* in the nasopharynx of children attending daycare centers in Goiania, Brazil.
Institution: Universidade de Goiania
Advisor: Ana Lucia Andrade

Student: JULIANA LAMARO-CARDOSO
Completion date: 2009
Title: Molecular epidemiology and risks associated with nasal carriage of *Staphylococcus aureus* in children attending daycare centers in Goiania, Brazil.
Institution: Universidade de Goiania
Advisor: Ana Lucia Andrade

Student: MARIA APARECIDA DA SILVA VIEIRA
Completion date: 2010
Title: Epidemiological and molecular study of nasal carriage of *Staphylococcus aureus* and methicillin-resistant *Staphylococcus aureus* in a pediatric emergency department and in neonatal intensive care units in Goiania, Brazil.
Institution: Universidade de Goiania
Advisor: Ana Lucia Andrade

Student: NAZARETH ELIAS DA SILVA NASCIMENTO.
Completion date: 2009
Title: Economic impact of dengue in the city of Goiania, 2005.
Institution: Universidade de Goiania
Advisor: Celina Maria Turchi Martelli

Student: PATRÍCIA COELHO DE SOÁREZ

Title/Year: Use of decision-making models in varicella vaccination programs. 2009

Institution: São Paulo School of Medicine

Advisor: Hillegonda Maria Dutlhi Novaes

Student: JOICE VALENTIM

Title/Year: Cost estimation methods in the economic assessment of vaccination programs. 2009

Institution: São Paulo School of Medicine

Advisor: Hillegonda Maria Dutlhi Novaes

Student: MÁRCIA MARIA OLIVEIRA LIMA

Title/Year: Functional capacity in Chagas cardiomyopathy: determinant factors and effects of aerobic physical exercise. 2010

Institution: Universidade Federal de Minas Gerais

Advisor: Antonio Luiz Pinho Ribeiro

Name: LINDA DÉLIA CARVALHO DE OLIVEIRA PEDROSA

Title/Year: Congenital syphilis: Risk factors of pregnant women in maternity wards in Maceió and its metropolitan area and evaluation of the diagnostic criteria used in Brazil.

Institution: Universidade Federal de Pernambuco

Advisor: Ricardo Ximenes

Student: SONIA REGINA RIBEIRO DE FIGUEIREDO LEITE

Title/Year: Comparison of two treatments of bacterial vaginosis in the Hospital Escola in Recife, Brazil. 2009.

Institution: Universidade Federal de Pernambuco

Advisor: Ricardo Ximenes

Scholarship and fellowship holders

In addition to other scholarship and fellowship holders, the IATS counts on the participation of students that receive CNPq and CAPES scholarship to work as technicians or to complete their Master's, Doctor's and Junior Postdoctoral Programs in the Brazilian Institutes of Science and Technology.

Scholarship	Source	Institution	Holder
Andrea Di Vanna Portela	Industrial Technological Development - DTI 3	Hcor	CNPq
Camila Pepe Ribeiro de Souza	Master's Degree	UERJ	Capes
Erivelton Tavares da Silva	Technical support - TS Higher Education	UFPE	CNPq
Fernanda d' Athayde Rodrigues	Master's Degree	UFRGS	Capes
Fernando H Wolff	Junior Postdoctoral Fellowship –	UFRGS	CNPq

	JPD		
Glaube Raquel Conceição Riegel	Master's Degree	UFRGS	Capes
João Borges Peres Junior	Industrial Technological Development – DTI 3	UFG	CNPq
Juliana Juk	Industrial Technological Development – DTI 2	UFRGS	CNPq
Juliane Fernandes Monks	Master's Degree	UFRGS	Capes
Laura Andrade Lagôa Nóbrega	Industrial Technological Development – DTI 3	UNIFESP	CNPq
Luaine Roberta Nascimento Santos	Technical support - TS Higher Education	UFG	CNPq
Luciana Bahia	Junior Postdoctoral Fellowship – JPD	UERJ	CNPq
Michelle Trindade	Master's Degree	UERJ	Capes
Noemia Teixeira de Siqueira Filha	Industrial Technological Development – DTI 3	UPE	CNPq
Patricia Soarez	Junior Postdoctoral Fellowship – JPD	USP	CNPq
Roberta Arinelli Fernandes	Master's Degree	UERJ	Capes
Sandra de Oliveira Saporì Avelar	Industrial Technological Development (DTI 3	UFMG	CNPq

6) Knowledge transfer to society

To contribute in the construction of a national center for services in Technology Assessment according to society's needs, both for assistance provided by the Brazilian Unified Health System and the private health maintenance organizations, IATS has developed material for health managers. The institute researchers prepare reviews of HTA papers published recently and write critical analyses in language that is less technical and scientific to facilitate comprehension of the large body of information about health technology that is currently available.

Reviews with notes are published in the IATS site and will be soon distributed by means of a newsletter currently under development. All the reviews already published can be found in <http://iats.com.br/noticiasATS.php>

In addition to these actions, about fifteen senior IATS researchers are members of the ad hoc board of consultants at REBRATS, the Brazilian Network for Health Technology Assessment.

These consultants prepare opinion statements about the quality and applicability of HTA studies and reference terms already completed and entered in a database (<http://portal2.saude.gov.br/rebrats>). Consultant opinions recommend, or not, the publication of the studies under analysis in the REBRATS online journal (under construction), which will work as a database for healthcare managers.

Perspectives and Future Actions

In addition to the continuity of the research projects under development in IATS, new projects submitted by participating researchers and their students are part of the institute activities.

The integration between the studies and the information users, that is, health care managers, will soon be further promoted by the creation of a newsletter to publish the annotated reviews already produced by the IATS scholarship holders and which are currently only published on line.

In the area of education, the Institute plans to expand the activities to prepare medical researchers to assess health technologies in complementary courses and HTA courses in the graduate programs, and to offer a new online graduate course for health care professionals, whose web environment is currently under development.

APPENDIX I. Minutes of the Executive Committee Meetings

INCT Launch for Health Technology Assessment May 14 and 15, 2006 Porto Alegre, RS Work Meeting Minutes

Day May/14/2009 - INCT Opening Ceremony for Health Technology Assessment with the presence of the President of the Clinical Hospital of Porto Alegre, Prof. Amarilio Vieira de Macedo Neto, Technical Director of the State Secretariat of Science and Technology, Julio César Ferst, Secretary of Science, Technology and Strategic Inputs of the Ministry of Health, Prof. Reinaldo Guimarães, director of the Department of Science and Technology of the Ministry of Health, Prof. Luis Eugenio Portela Fernandes, Prof. Wrana Panizzi, vice president of CNPq, and of Prof. Rui Vicente Oppermann, Vice Provost of UFRGS. The meeting was attended by 10 national researchers and IATS members and 24 researchers from local institutions.

After the opening ceremony, Prof. Reinaldo Guimarães delivered a speech about the Policies of the Ministry of Health for Research and Development.

May 14, 2009 – Afternoon session

Researchers from IATS met to discuss the Institute's activities and action plan for the next two years. Prof. Flavio Fuchs and Prof. Carisi A. Polanczyk coordinated the program which involved a presentation from each member and their institution. A detailed description of the IATS project was made and sent to CNPq highlighting the three activity groups: research, teaching, and relationship with society.

A proposal was presented to create a website with a company that has been already contracted (Stampa Design) for the process of consulting rates and products according to CNPq standards.

The domain registered is WWW.IATS.COM.BR

The site's objective will be to disseminate the Institute's actions, integrate researchers and other employees, as well as serve as a platform for managing research projects and other IATS activities. It was agreed that Prof. Denizar Vianna will be the site editor and Prof. Paulo Picon, co-editor.

The researchers were divided into workshops aimed to review the projects planned and prepare work proposals for IATS.

Research Group

Sandra Fuchs, Carisi Anne Polanczyk, Ana Lúcia Andrade, Celina Maria Turchi Martelli, Denizar Araújo, Maria Novaes, Otávio Berwanger, Patricia Lessa, Erno Harzheim, Fernando Wolff, Mariana Vargas Furtado and Rodrigo Ribeiro.

Teaching Group

Bruce B Duncan, Luciane Cruz, Giacomo Balbinotto, Edgar Merchan-Hamann, Luciana Bahia, Nilton Rezende, Ajácio Brandão, Rosane Schlatter, Fernando Gusmão and Suzy Camey

Group for transferring to society

Flávio Fuchs, Paulo Picon, Leila Moreira, Ricardo Ximenes and Otávio Bittencourt.

Day 15/05/2009

The following research activities planned for IATS were presented:

RESEARCH LINES	RESEARCHER(S) RESPONSIBLE FOR THIS LINE	Researchers
HTA in cardiovascular diseases, diabetes and hypertension.		
Cost-effectiveness of hypertension treatment strategies: incremental effect of home blood pressure monitoring (HBPM) versus pharmacological care and conventional treatment	Sandra Costa Fuchs	Leila Beltrami Moreira, Miguel Gus, Flávio Danni Fuchs, Hilton de Castro Chaves Jr, Mario Wiehe
Obstructive sleep apnea-hypopnea syndrome – investigation strategies and control mechanisms	Flávio Danni Fuchs and Denis Martinez	Leila Beltrami Moreira, Miguel Gus, Sandra Costa Fuchs, Sandro C Gonçalves
PREVER – Prehypertension management trial	Flávio Danni Fuchs and Sandra Fuchs	Leila Beltrami Moreira, Miguel Gus, Sandra Costa Fuchs, Fernando Menezes Campello de Souza
Cost of hypertension in Brazil	Paola Zucchi and Marcos Ferraz	(Confirm)
Studies about the quality of medical and hospital services and cost-effectiveness for the Brazilian Unified Health System.	Fernando Campello	Fernando Menezes Campello de Souza and team
Screening diabetes and/or high risk to develop diabetes	Maria Inês Schmidt and Bruce Duncan	Carisi Polanczyk, Cristiana Toscano
Assessment of the HIPERDIA database	Maria Inês Schmidt	Bruce Duncan, Wanderson de Oliveira, Lenildo de Moura, Antony Stevens, Rosa Maria Sampaio
Effectiveness and cost-effectiveness of the management of gestational diabetes	Maria Inês Schmidt	Eliana Wendland, Bruce B. Duncan
Economic impact and reassessment of the cost-effectiveness of covered	Carisi A Polanczyk, Denizar Vianna and Otávio Berwanger	Marco Wainstein, Steffan Stela, Rodrigo Ribeiro, Antonio Ribeiro

stents in the management of coronary artery disease.		
Immediate care in AMI – primary angioplasty, thrombolytic therapy, adjuvant therapies, transfers (systematic review, cost-effectiveness and economic impact)	Carisi A Polanczyk	Mariana Vargas Furtado, Otávio Berwanger, Denizar Vianna, Antonio Ribeiro, Flávio Fuchs
Effectiveness and cost-effectiveness of techniques to close intracardiac shunts (IAS and IVS)	Otávio Berwanger	
Cost-effectiveness of the left ventricular resynchronization therapy in heart failure	Nadine Clausell and Luis Eduardo Rohde	Antonio Ribeiro, Carisi A Polanczyk, Denizar Vianna, Suzi Camey
Cost-effectiveness of statin and hypolipemic drugs in the prevention of cardiovascular disease.	Carisi A Polanczyk, Bruce Duncan	Emilio Moriguchi, Francisco Fonseca, Jose Vieira, Rodrigo Ribeiro, Andry Costa
Cost-effectiveness of statin and hypolipemic drugs in the prevention of cardiovascular disease.	Denizar Vianna, Otávio Berwanger	
HTA in infectious diseases		
Viral hepatitis in HIV-infected subjects	Celina Martelli and Sandra Costa Fuchs	Ricardo Arraes de Alencar Ximenes, Leila Maria Moreira Beltrão Pereira, Edgar Merchan Hamann, Nêmora Barcellos, Ajácio Brandão
Studies about the costs of chronic hepatitis B for the Brazilian Unified Health System.	Marcos Ferraz and Paola Zucchi	(Confirm)
Screening for congenital toxoplasmosis	Ricardo Kuchenbecker	Marilia Dalva Turchi, Helena P Santos and Otávio Bittencourt
Screening for MRSA and multiresistant bacteria in hospitals	Ricardo Kuchenbecker and Ana Lúcia Andrade	Afonso Barth and Helena Santos
MRSA screening in ICU and neonatal wards	Ana Lúcia Andrade	

Cost-effectiveness and cost-usefulness of hepatitis C treatment in HIV-infected patients	Fernando Wolf	Nêmora T. Barcellos, Ajacio B. Melo Brandão, Celina Martelli, Leila B. Moreira, Flávio D. Fuchs, Sandra Costa Fuchs, Suzi Camey
Vaccination		
Studies about the cost-effectiveness of hepatitis A vaccination	Celina Martelli	Ricardo Arraes de Alencar Ximenes, Leila Maria Moreira Beltrão Pereira
Analysis of vaccination against poliomyelitis: Sabin versus Salk	Maria Novaes and Cristiana Toscano	Ana Marli C. Sartori, Patrícia C Soárez, Ana Lucia Andrade
Vaccination against influenza: Review of the vaccination schedules currently used	Maria Novaes and Cristiana Toscano	Ana Marli C. Sartori, Patrícia C Soárez, Ana Lucia Andrade
Special immunobiological agents reference center (CRIE): impact assessment	Maria Novaes	Ana Marli C. Sartori, Patrícia C Soárez, Cristiana Toscano, Paulo Picon
Cost-effectiveness of HPV vaccination and implications to cervical cancer screening	Rosa Legood, Mary Bozetti and Maria Novaes	Tazio Vani, Lidia R Medeiros
HTA in Primary Health Care (PHC)		
Quality of care in primary health care	Erno Harzheim and Airton Stein	Bruce Duncan, Eno Castro
Telemedicine and telehealth in primary health care	Erno Harzheim	Bruce Duncan and Airton Stein
Cost-effectiveness study of the Minas Telecardio in primary health care	Antonio Ribeiro	Carlos Farina, Nilton Rezende, Carisi Polanczyk
Cost reduction of telespirometry (centralized interpretation)	Erno Harzheim	Bruce Duncan and Airton Stein
Study of exceptional drugs		
Phase IV studies (drug	Paulo Dornelles Picon	Guilherme Sander, Andry

control): studies about the use of public interest medications: Interferon for hepatitis		Costa, Leila B Moreira
Randomized clinical trials of public interest: - Erythropoietin - Botulinum toxin First Brazilian cohort of patients that obtain medications due to judicial order	Paulo Dornelles Picon Paulo Dornelles Picon	Guilherme Sander, Andry Costa Ida Schwartz, Guilherme Sander, Andry Costa
HTA Methods		
Meta-analysis and systematic reviews	Otávio Berwanger	Bruce Duncan, Lidia R Medeiros, Mary Bozzetti, Ricardo Kuchenbecker, Carlos Farina Santos, Nilton Rezende
Quality of life and health technology assessment	Carisi A Polanczyk and Marcos Ferraz	Luciane N Cruz, John Brazier, Marcelo Fleck, Suzi Camey, Paola Zucchi, Marcos Ferraz, Jose R Goldim
Economic analysis in health care	Carisi A Polanczyk, Denizar Vianna, Marcos Ferraz	Giácomo Balbinotto, Paola Zuchi, Rodrigo Ribeiro, Bruce Duncan, Carlos Farina Santos, Nilton Rezende, Marcelo Horácio de Sá Pereira
Oncology		
Cost-effectiveness of trastuzumab in the management of breast cancer	Denizar Vianna	
Digital versus conventional mammography in breast cancer screening	Carisi Anne Polanczyk	Fabiano Hanz, Eliane Wendland, Bruce Duncan

These projects have been entered in the institute site and SHOULD be approved by the researcher in charge

The following points were also highlighted:

- The importance of subprojects and other productions based on the research line associated with HTA; authors should consider publication in local Brazilian

journals, preferably in the Health Ministry IATS newsletter and the recently launched Brazilian Journal of Health Economics.

- Standardize the references to the IBRATS in publications, as shown below:

Reference

Type of association with study	Description in Portuguese	Description in English
Financial support – authors should be associated with HTA and member of the team of the Brazilian Institute of Science and Technology for Health Technology Assessment (IATS) – CNPq/Brazil.	Instituto Nacional de Ciência e Tecnologia para Avaliação de Tecnologias em Saúde (IATS) – CNPq/Brasil	National Institute of Science and Technology for Health Technology Assessment (IATS) – CNPq/Brazil
Financial support	Este estudo recebeu apoio financeiro do Instituto Nacional de Ciência e Tecnologia para Avaliação de Tecnologias em Saúde (IATS) – CNPq/Brasil	This study was supported with grants from the Brazilian Institute of Science and Technology for Health Technology Assessment (HTA) – CNPq/Brazil.
Authorship of IBRATS members , but the study is not directly associated with HTA:	Prof. Xxx é pesquisador do Instituto Nacional de Ciência e Tecnologia para Avaliação de Tecnologias em Saúde (IATS) – CNPq/Brasil	Prof. Prof. Xx is a member of the National Institute of Science and Technology for Health Technology Assessment (IATS) – CNPq/Brazil

- Information portal
- All projects should be registered in the IATS site for follow-up. The site will have a restricted access area to follow-up projects, set expenses in order, among other functions.

Teaching Group

The event counted on the participation of Prof. Jorge Guimarães, president of CAPES, talking about promoting higher education and integrating INCTs to this policy. Proved to be partner to the demands raised by researchers as an extension of the collection of

CAPES periodicals in the area of ATS as well as concession of scholarships dedicated to the Institute (agreement established in the INCTs project).

The objective of the teaching group was to discuss the training of human resources as one of the important activities of IATS for training researchers and disseminating knowledge in the HTA area. Proposals have emerged within the following structure:

a) Graduate Programs (GP) related to HTA:

- What is being done:
 - Epidemiology GP UFRGS: lines of research of effectiveness in health subjects of meta-analysis and cost-effectiveness
 - Cardiology GP UFRGS: technology assessment in ischemic heart disease and systemic hypertension
 - Economy GP UFRGS: Creation of an optional subject of Health Technology Assessment. Prerequisite: subject in Epidemiology
 - State University of Rio de Janeiro Department of Clinical Medicine - Center for Health Economics
- Proposals/discussion:
 - Integration between the GPs already included in HTA
 - Exchange of students, teachers, and materials
 - Portal with materials
 - Creation of subjects and lines of research in other GPs
 - Inter-institutional GP
 - Encouraging doctor degree - sandwich program - money underutilized

b) Professional Master's degree in HTA

- What is being done:
 - Epidemiology GP UFRGS: 25 students in 2 years
 - UNIFESP (Dr. Marcos Ferraz, Dr. Paola Zucchi)
- Proposals/discussion:
 - Evaluate mechanisms for other groups of MP in existing GP to enter (Porto Alegre and São Paulo)
 - Evaluate conditions to create other groups in other GP (e.g. UFGO, UFMG).

c) Short and Long term Courses in HTA

- What is being done:
 - Short-term course in Health Economics - UERJ (Dr. Luciana Bahia)
 - Short-term course in Health Technology Assessment - UFRGS (Prof. Giacomo Balbinotto)
- Proposals/discussion:
 - Short term course to promote HTA and attract interested researchers (2-3 courses around Brazil)
 - Qualification courses for training managers to evaluate and incorporate technologies and professionals who can implement and promote HTA in the health of the population.

d) Post-doctorate in the HTA area

- What is being done:
 - Plan for Postdoctoral Studies in PPG Epidemiology at UFRGS
- Proposals/discussion:
 - Promote postdoctoral programs as a way to attract short term HTA researchers in order to form a faculty for future programs in HTA.

e) Perspectives

- Create the course of HTA for undergraduates.
- Partnerships between different studies allow exchange of students (e.g. Faculty of Economy at UFRGS and other colleges, UFCSPA and UFRGS).
- Plan the visit of visiting professors from abroad.
- Create higher learning courses with the visiting researchers.

On the afternoon of May 15th a meeting was held between different segments and IATS partners. Also present were representatives of the press and those with judiciary power, judges, state and federal prosecutors, and the State Attorney General. Each representative presented their demand in the health area and potential integration with IATS and areas for collaboration.

Other referrals:

1) Presentation of the governance structure of IATS:

Managing committee consisting of the coordinator and researcher representatives **Consultive Committee** comprising representatives of SUS (Brazilian Public Health System) decision-making structures in the three spheres of government including the Brazilian Ministry of Health, ANVISA, National Council of State Health Secretaries, National Council of Municipal Health Secretaries, and Brazilian National Health Agency Department of **Executive Administration - Headquarters**, responsible for strategic planning support, infrastructure and support to the operation of the institute and its governance structures; **HTA Centers**, centers for research activities in each institution (e.g. HTA Center of UFRGS, HTA Center of UFMG, etc); a **General Assembly** of the researchers involved, the chief deliberative body, which must hold meetings at least once a year and will be in charge of the agenda, approval of projects, monitoring and assessment of the institute; an **Internal Regulation** that establishes the principles, values and objectives of the institute, the terms of reference of their respective governance structures, ethical aspects, and also aspects regarding the operation itself.

1.1. Appointment of the following people to the Managing committee.

Flávio Fuchs, Carisi A Polanczyk, Sandra Fuchs, Leila B Moreira, Bruce B Duncan, Denizar Vianna, Maria Novaes, Celina Martelli, Antonio Ribeiro

1.2. Referral for appointing Consultive Committee with international members: John Brazier, Thomas H Lee, Paul Whelton. - To be reviewed.

1.3. About the Internal Regulation –

A work group was put together to prepare a proposal: Ajácio Brandão, Otávio Bittencourt, Giacomo Balbinotto, Edgar Merchan, and Juliana Juk

1.4. HTA Centers The need to review the relationship of the group of researchers from each participating institution was raised and defined as:

- 2.1. Researchers
- 2.2. Graduate students (master, doctoral, and postdoctoral degree)
- 2.3. Undergraduates
- 2.4. Other technical collaborators

2. Presentation of the budget and budget memory requested. It was agreed that the Managing committee will meet to evaluate the use of funds.

The activities finished on the afternoon of May15, 2009.

**Managing committee Meeting - INCT for Health Technology Assessment
July 10, 2009
Porto Alegre, RS**

Work meeting minutes

7/10/2009 – The managing committee met with the following professors being present: Flavio Fuchs, Carisi Polanczyk, Sandra Fuchs, Leila Moreira, Bruce Duncan, Paulo Picon, Ana Marli Sartori (representing USP - Maria Novaes), Ricardo Ximenes (representing UFPE - Celina Marteli) Denizar Vianna, and participating by video conference, Antonio Pinho Ribeiro at UFMG.

After the opening ceremony, Prof. Carisi relayed the information about activities undertaken since the institute's launch meeting in May of this year.

Website - reinforced the information to launch the site, its insertion (link) on the home page of CNPq and HCPA, and the importance of each Institute member to indicate locations for placement of the new links on the pages of their universities, graduate program groups, etc., as a means of disseminating IATS.

It was reported that a restricted area is in the process of being added where researchers will be able to exchange materials in a forum, publish files, and register their projects.

Prof. Fuchs showed that when doing a search on *Google* using the abbreviation "IATS," the institute already shows as the 4th option on the page.

Support from UFRGS - the participants were informed that the pro-rector of the University was visited to seek their support. The pro-rector committed himself to provide administrative personnel, accounting assistance, and IT support to assist in the institute's activities.

Prof. Antonio Ribeiro said that he sent a request for physical space and support for activities at the head office to his institution (MG).

He recommended that each institution forward requests in this same purpose to their centers.

At this point there was talk of CNPq's announcement for NATS. Clinical Hospital of Porto Alegre and Minas Gerais reported that they submitted a proposal. They asked that the other partners inform if they also had submitted proposals.

Publication - It was informed that the article submitted by a student of Prof. Carisi, Rodrigo Ribeiro was published with citation of IATS. Partnership with a communication channel - It was informed by Prof. Sandra Fuchs that space was requested on behalf of IATS in the column of the weekly "Life and Health" column published in the newspaper *Zero Hora*, which belongs to the RBS Group - Rede Globo's representative in RS.

It was then requested again that researchers from other states to seek similar partnerships keeping in mind that the institute is a national role. The objective of this action is to promote research for the lay public so that IATS can be identified as a reference in reliable information by positioning themselves in relation to articles that are carried by the media.

Prof. Sandra suggested that researchers comment on the site of the IATS about material published in magazines such as VEJA and Época. To do so, Prof Carisi will prepare a table of rotation among the researchers for production of articles.

Training of researchers - The information was updated that there were 8 registrations in the course of meta analysis (EAD) where study groups were formed with a total of 22 students from UFRGS, UFGO, UFPE, USP, and UFMG. The participants will have to prepare articles for the dissemination of content.

Afterward a hypothesis was discussed to hold classes for Advanced Studies for senior researchers and leaders in IATS. This event should occur in an immersion meeting with professor(s) of excellence in March 2010. Prof. Sandra will survey the suggestions of location and costs, and will receive suggestions of topics and potential professionals to be invited to carry out this activity.

It was suggested to make available to universities linked to IATS a pilot project for studies in economic analysis using the methodology of distance education with a total of 20 class hours.

The universities that are interested should make themselves known and be responsible for setting up classes and checking with their university if they validate this teaching method.

It was suggested in the case of short-term courses that the researchers responsible for IATS form study groups to share their knowledge. Each center, however, should require the need to train their staff so that the service is evaluated.

Call for new member - Discussed the possibility of inviting Dr. Alvaro Atala, director of the Centro Cochrane, to join the institute. After a few considerations the participants agreed that this action would be a little precocious at this stage and it was decided to first invite him to attend a Grand Round event at HCPA and later to a meeting of IATS as a way of approximation and evaluating his interest in joining the institute.

CAPES and CNPq Scholarships - it was informed that the amount allocated by CAPES was lower than expected, totaling 147,000, which translates into four Master Degree scholarships already indicated (two UERJ, two UFRGS) and one awaiting an indication.

It was discussed if the post-doctorate scholarships that had been requested from CAPES will to be indicated to CNPq in funding already approved the IATS project. The remaining scholarships will be indicated by each institution in accordance with the criteria: one indication per center, researchers have a line of research in ATS, contribute with IATS activities, and not be a public employee.

The table below lists scholarships available for indication to CNPq and CAPES.

Modality	Monthly	Number of	Duration (months)
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	Amount	Scholarships	
Technical Support - TS University	483.01	2	28
Industrial Technological Development - DTI 3	1,045.89	7	24
Industrial Technological Development - DTI 3	1,045.89	1	25
CAPES Master's Degree	1,200.00	1	23

Video requested by CNPq - Correspondence sent by CNPq to INCTs requests the production of an educational video to be used in grade schools and high school on the subjects dealt with by the institute. It should not be a video that talks about the institute, but about the topics it develops.

The contracting of a video production company was approved for preparing the material. The topics suggested to be addressed were vaccine, cardiovascular, and basic lists of medications.

The researcher should be responsible for the topic and develop the content. The video will be 10 minutes long and must be sent to CNPq by the end of August.

Use of resources - There was a rendering of accounts of the institute, which to date expenditures totaled R\$ 40,000.00. Prof. Fuchs commented on the difficulty being faced in the execution of expenditures since CNPq has implemented the use of a Visa credit card, which limits the use of withdrawals (up R\$ 1,000/day), as well as prevents the payment of invoices/bills and making transfers. Purchases have to be done in stores that accept payment by credit card and it was informed to those present of the difficulty in paying some daily expenses because we had bills of high values related to contracts made at the launch meeting of the institute.

Capital reserve - It was informed that the project foresees using resources under an account named "capital reserve". Its use will be approved by the managing committee through requests that circulate by e-mail among the participants and if the amounts are small they can be approved directly by the coordination.

Inclusion of researchers into the CNPq base - The importance was stressed of the projects being updated by the researchers and the research teams responsible for each research project. This information is on the site of IATS and in the CNPq database and this data is used to validate the purchase of equipment, approve scholarships, make payments of daily expenses, plane tickets, and other expenses, enabling the rendering of accounts in accordance with CNPq standards. Each researcher shall have up to August 3 to send updated data to Juliana Juk (jjuk@hcpa.ufrgs.br)

By-Laws - The material developed by IATS members Otavio Bittencourt, Edgar Hamann, Ajaccio, and Juliana Brandão Juk was presented. It was decided to present the document to expert legal advice. This consultation will be carried out by Prof. Flavio Fuchs in order to determine the best way to elaborate the by-laws set up the

legal entity. A comparative analysis will be made with the by-laws of the already existing REBRATS.

New members - It was decided that no new members would be added to IATS at the moment, unless included into the groups already formed and incorporated into the institute.

The activities finished in the afternoon of the same day.

Managing committee Meeting - INCT for Health Technology Assessment
October 19, 2009
Porto Alegre, RS
Work meeting minutes

October 19, 2009 – The managing committee met with the following professors being present: Flávio Fuchs, Carisi Polanczyk, Sandra Fuchs, Leila Moreira, and Denizar Vianna. Participating through video conferencing were Antonio Pinho Ribeiro at UFMG and through Skype Dr. Maria Novaes. Due to technical difficulties we were not able to include through Skype Professor Ricardo Ximenes, representing Dr. Celina Marteli. After the opening, professor Carisi gave information about activities carried out since the last committee meeting in July of this year.

Site - It was informed that the restricted area for researchers is ready and that the access passwords will be passed on. The need was stressed for each researcher to review their projects and teams so that he/she can be registered on the site. A comment was made of the occurrence of a researcher inserted into a project that he is not taking part and has expressed himself otherwise, even to CNPq, giving incorrect information.

An area was created for articles published by researchers from IATS about HTA in 2009. Researchers who have not yet sent their jobs should do so as soon as possible. Forward the article in PDF or the link of the magazine that was published to Juliana.

Prof. Denizar brought suggestions to improve the use of this tool. The purpose of the site should be that it is a showcase for the institute's projects and researchers as well as a communication channel for sharing information among centers.

A second focus should be on the publishing of information for the health manager. To do this, the language should be differentiated and attractive.

It was agreed that the IATS scholarship holders should prepare, under the coordination of their advisors, biweekly article with a summary and comments of a publication on ATS. This summary will be posted on the IATS site. This activity falls under the responsibility of Prof. Denizar.

LIFE Section - Zero Hora newspaper - The importance of preparing articles was stressed in order to not to lose this partnership. Our first article is already late. Prof. Fuchs stressed the importance of the material being written with a focus on the lay public by using less scientific terms and having the community as the focus.

Judiciary - It was informed that an event was held at HCPA on October 16 with the participation of various judiciary representatives where IATS gave a quick presentation of the institute. This event was coordinated by Professor Paulo Picon.

Prof. Fuchs informed that there is a request from Minister Gilmar Mendes that the STF organizes itself along with representatives from the medical field so that the reference centers are recognized in this activity of support to the judiciary as a means of guiding judges.

The suggestion of the committee is that Prof. Paulo Picon prepares a document describing the scenario and the recommendation from the Department of Justice with an action plan proposal by the institute.

Professor Maria Novaes reminded everyone about the international seminar on access to medication in RJ on November 6 and 7. Denizar will participate or send a representative marking the presence of IATS.

Prof. Antonio Ribeiro said that in the state of MG there was also a meeting with the Court of Justice to enter into an agreement in the support of decisions. He also stated that he does not think this agreement will come about due to the lack of a professional and high demand from the judiciary.

School for Advanced Studies - Costs and suggestions of names for participation were raised.

The following decisions were made after studying the Announcement and financing items:

- Hold event in April 2010 in Porto Alegre/Viamão - Hotel Villa Ventura, four days long.
- Have the participation of graduate students during the morning.
- Have workshops with senior researchers in the afternoon.
- Pay for the transportation of students in Porto Alegre by IATS.
- Pay for the transportation of students from other cities by PROAP.
- Forward invitation letter to: David Banta, Paul Elton, John Brazier, Mathias Egger, Lenoux Pascale, Susie Gold, and Uwe Siebert with the expectation of having at least 3 or 4 confirmations.

Teaching activities It was reported that Prof. Carisi will be participating at the meeting at Centro Paulista de Economia da Saúde (Center for Health Economics of São Paulo). The CPES coordination requested to fully assume the teaching activities of IATS. The IATS managing committee decided, however, that this partnership should be partial. The competence of this entity is recognized, but the committee members agreed that the activities of IATS should not be centralized in a single institution or city. It was agreed that the partnership would be in promoting the courses and in the participation of faculty researchers from IATS and in an MBA course from CPES in 2010. It was also suggested that there be a limitation of openings in this course for professionals from industry in order to make the participation more heterogeneous.

Prof. Fuchs suggested that a professional with expertise in distance learning be found so that these activities are also available using this method, replicating the knowledge to a greater number of students.

Prof. Maria Novaes stressed that classes must be prepared in advance for this format (EAD).

Adaptation of the infrastructure of the centers - The availability of resources was stressed and it was confirmed that adjustments would be made on the premises of UERJ, UFG, USP, and UFP.

At the end of the event, Prof. Sandra Fuschs asked about the possibility of taking a course on using TreeAge with an Argentina entity recognized by all. The request was deliberated and is under negotiation. This should take place later this year in Porto Alegre. Other centers interested in participating should manifest themselves.

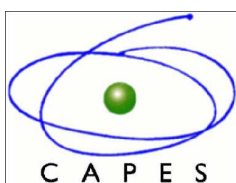
The activities were closed at the end of the morning on the same day.

ANEXO 2. Programa Escola de Altos Estudos

Advanced Studies in Health Technology Assessment

by

Health Technology Assessment Institute – IATS



**From June 28 to July 2, 2010
Porto Alegre, RS, Brasil**

**Universidade Federal de Goiás
Universidade Federal de Minas Gerais
Universidade Federal do Rio Grande do Sul
Universidade Federal de São Paulo
Universidade de Brasília
Universidade Estadual do Rio de Janeiro
Universidade de Pernambuco
Universidade de São Paulo
Hospital do Coração – HCOR**

THE IATS

The **Institute for Health Technology Assessment (IATS)** aims to support the development of health care strategies on governmental and non-governmental levels in Brazil. The Institute is organized by Professors and research professionals from nine Brazilian Universities, in collaboration with international investigators. The mission of the Institute is to conduct, foster and disseminate Health Technology Assessment (HTA) in Brazil, with the aim of aiding the decision-making process in the incorporation or exclusion of health technologies and the efficient use of available resources. The Institute is also involved in planning strategies to reduce inequality and to increase quality of care. Our main a priori areas of interest are cardiovascular disease, infections and vaccine-preventable diseases, vaccines, and primary care assistance. One of the purposes of this Institute is to qualify researchers to undertake health technology assessment studies in a high level of expertise.

OBJECTIVES

The Advanced Studies in HTA is an intensive course promoted by IATS seeking to inform and promote understanding and advanced discussion in key areas of health technology assessment and related research topics, such as systematic review, health economics, ethics, education and decision-making policies.

- To senior investigators members of IATS
- Graduate students of affiliated University
- Employees of the Brazilian National Health Care System (SUS)

COURSE SCHEDULE AND LOCAL

Course starts	June 28 th , 2010
Regular course hours	From 8:30 am to 12:30 am
Regular workshop hours	From 14 pm to 18 pm
Course ends	July 2 nd , 2010 – 16:30pm

Vila Ventura Hotel, Viamão, RS

www.vilaventura.com.br

INVITED SPEAKERS

- Professor Anushua Sinha – UMDNJ–School of Public Health, University of Medicine and Dentistry of New Jersey, United States of America
- Professor Ursula Rochau – Physician, Institute of Public Health, Medical Decision Making and Health Technology Assessment, Austria
- Professor H. David Banta – International Consultant, Professor Emeritus of Health Economics (Health Technology Assessment) at the University of Maastricht, Maastricht, the Netherlands.
- Professor Joseph Mathew – Associate Professor, member of South Asian Cochrane Network (SACN) and Health Technology Assessment International (HTAi), India.
- Profa. Leonor M Pacheco Santos – Associate Professor, Public Health Department, Universidade de Brasília, and Director of Science and Technology Department of Ministry of Health, Brazil.

- Professor Otávio Berwanger – Director of Research and Education Committee, Hospital do Coração (HCor), São Paulo, Brazil.
- Professor Marcos Sousa - Professor of Medicine, cardiologist from Serviço de Cardiologia do HC-UFMG
- Professor Guilherme Polanczyk – Professor of Medicine, child psychiatry from Universidade de São Paulo – USP – INCT for Child and Adolescent Mental Health.

Outline of course schedule

28th June

Health Economics

Speakers: Anushua Sinha and Ursula Rochau

29th June

Health economics

Speakers: Ursula Rochau and Anushua Sinha

30th June

Systematic Meta-analysis and Meta-analysis

Speakers: Otávio Berwanger, Marcos Sousa, Guilherme Polanczyk

1st, July

Health Technology Assessment

Speakers: David Banta and Joseph Mathew

2nd, July

Health Technology Assessment

Speakers: David Banta and Joseph Mathew

Morning Course Course

	DAY 1 - June, 28	DAY 2 – June, 29	DAY 3 – June, 30	DAY 4 – July, 01	DAY 5 – July, 02
	Health Economics and decision science	Health Economics and decision science	Clinical Research and systematic review	Health Technology Assessment and Health Policy	Health Technology Assessment and Health Policy
Speakers	Anushua Sinha and Ursula Rochau		Otávio Berwanger/ Marcos R Sousa/ Guilherme Polanczyk	David Banta, Joseph Mathew and Leonor Pacheco	
8:30 am	Modeling in cost cost-effectiveness studies - Review of rationale for models & deterministic models (AS)	Short repetition Day 1 and Questions & Answers (AS, UR) Probabilistic modeling I - Micro	Mixed treatment comparisons – combining direct and indirect comparisons and network meta-analysis	A global perspective on Health Technology Assessment (DB) HTA and models around the word:	Building Institutional and Technical Capacity for HTA in Developing Countries and Transitional Economies (DB)

	- Overview of Markov models (AS)	simulation, discrete event simulation (1 st order Monte Carlo) (UR)	(OB) Control of random error in meta meta-analysis – The Optimal Information Size and trial sequential analysis methods (OB) Meta Meta-regression and adjusted for heterogeneity – focus on the influence of study quality on the metaanalysis results (OB)	International experience	SIGNET Experience in India (JM)
10 am - Break					
10:15 am	Advanced modeling - Markov model: a basecase analysis (AS) - Methodological Techniques and Advanced concepts in Markov models (UR) • Rates & probabilities • Sensitivity analyses • Half-cycle correction • Building time dependency into Markov models (tunnel states) • Discounting • Decision-analytic software - Standards in health economic analysis (UR)	Probabilistic modeling II - 2nd order Monte Carlo (AS) - Parameters and distributions (AS) Interpreting results and statistics - Review CE plane - Review efficiency frontier – scatter plots, acceptability curves, confidence intervals, subgroups (AS)	Systematic reviews and meta-analyses of diagnostic test accuracy studies (MRS) Methods for meta-analysis of observational studies ; (GP)	Roundtable: How to incorporate different standards into decision making process (JM) HTA in Brazil to date: a health care policy perspective (LP) Discussion with researchers and policy makers	Health Policy: who to link HTA science into practice (JM) How to determine major values: effectiveness, cost-effectiveness and budget impact. For: - Pharmaceuticals - public health interventions - surgical procedures and devices

LUNCH TIME – 12:30 to 14:00

DAY 1 - June, 28	DAY 2 – June, 29	DAY 3 – June, 30	DAY 4 – July, 01	DAY 5 – July, 02
Workshops – Research Seminars 14 pm to 18 pm				
HTA studies in immune-preventable	HTA in Cardiovascular diseases	HTA studies in primary care	Primary clinical HTA studies –	Health Policy and education in

diseases			examples from Brazil	HTA
Moderators:				
Ana Lucia Andrade, Maria Novaes, Leila Moreira, Ricardo Ximenes, Helena Santos	Sandra C Fuchs, Carisi A Polanczyk, Luis Eduardo Rohde, Denizar Vianna, Paola Zucchi	Erno Harzheim, Ricardo Kuchenbecker, Marcos Resende, Airtton Stein, Otávio Berwanger	Flávio Fuchs, Otávio Berwanger, Nadine Clausell, Leonor Pacheco	Paulo Picon, Jose R Goldim, Ricardo Ximenes, Sandra C Fuchs, Ricardo Kuchenbecker, Marcos Ferraz
Research projects (15 minutes presentation presentation: 30 minutes discussion)				
<p>HPV and women's health Ana Marli Sartori, Cristiana Toscano</p> <p>C-E Hepatitis A vaccine Maria Novaes, Ricardo Ximenes</p> <p>C-E pneumococcal vaccine Ana Lucia Andrade, Cristiana Toscano</p>	<p>Cerebrovascular disease – CE model Denizar Vianna, Luciana Bahia</p> <p>Cardiovascular modes – statins or resync Carisi A Polanczyk, Rodrigo Ribeiro, Eduardo Bertoldi</p> <p>HIV studies Ricardo Kuchenbeker Helena Santos</p>	<p>Evaluating primary care Primary Care Assessment Tool in Brazil Erno Harzheim</p> <p>Health service research on cardiovascular stents Carlos Amaral, Silvana Kelles</p> <p>Digital versus conventional mammography for breast cancer screening</p>	<p>Brazilian Stem cell Project Nadine Clausell</p> <p>Clinical trials of some health care priorities Paulo Picon</p> <p>Large scale randomized trial in Brazil: PREVER experience Flávio Fuchs</p>	<p>HTA science and healthcare policy</p> <p>Roundtable and discussion</p>
Coffee - break (16:00 – 16:30)				
Hands-on time (16:30 – 18:00)				
Bring your data and doubts to discuss Modeling in Treeage	Results and interpretation	Systematic review - run and interpret outputs	Ethics – Jose R Goldim, Ricardo Ximenes	

