

## PIH2

# COST-EFFECTIVENESS ANALYSIS OF MEDICINES FOR CONTROLLED OVARIAN STIMULATION IN THE TREATMENT OF INFERTILITY IN PATIENTS WITH AN SUBOPTIMAL OVARIAN RESPONSE IN THE RUSSIAN FEDERATION

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**Objectives:** to perform cost-effectiveness analysis of medicines for controlled ovarian stimulation (COS) in suboptimal ovarian response infertility treatment in the Russian Federation. **Methods:** we performed cost-effectiveness analysis for the three most common medicines for the treatment of infertility in patients with an suboptimal ovarian response in the Russian Federation: follitropin-alpha + lutropin-alpha («FL»), human menopausal gonadotrophin («M») and follitropin-alpha + human menopausal gonadotrophin («FM»). The clinical pregnancy rate per initiated cycle was used as an efficacy point. We used retrospective efficacy data from K. Buhler et al. 2012 trial, that provided head-to-head comparison of three medicines, mentioned above. The time horizon of our study was one cycle of COS. We considered only the direct costs of COS pharmacotherapy. Governmental procurement tender prices for the medicines were used. The exchange rate used USD 1 = 66 RUB. **Results:** the cost of therapy «FL» is USD 579, therapy «M» – USD 702, therapy «FM» – USD 792. The clinical pregnancy rate per initiated cycle for «FL» is 25.5%, «M» – 21.5%, «FM» – 21.7%. The cost of one case of pregnancy on therapy «FL» is USD 2270, on therapy «M» – USD 3265, on therapy «FM» – USD 3650. «Cost-effectiveness» analysis showed that the therapy «FL» is associated with the lowest value of «cost-effectiveness» ratio. **Conclusions:** «FL» is dominant option compare to «M» and «FM» from the perspective of cost-effectiveness analysis in the treatment of infertility in patients with an suboptimal ovarian response in the Russian Federation.



## PIH3

# BUDGET IMPACT ANALYSIS OF MEDICINES FOR CONTROLLED OVARIAN STIMULATION IN THE TREATMENT OF INFERTILITY IN PATIENTS WITH AN SUBOPTIMAL OVARIAN RESPONSE IN THE RUSSIAN FEDERATION

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**Objectives:** to perform «budget impact» analysis (BIA) of medicines for controlled ovarian stimulation (COS) in suboptimal ovarian response infertility treatment in the Russian Federation. **Methods:** we performed BIA for the three most common medicines for the treatment of infertility in patients with an suboptimal ovarian response in the Russian Federation: follitropin-alpha + lutropin-alpha («FL»), human menopausal gonadotrophin («M») and follitropin-alpha + human menopausal gonadotrophin («FM»). The number of patients with suboptimal ovarian response in the Russian Federation at 2018 was 809,017. Governmental procurement tender prices for the medicines were used. The «budget impact» analysis performed in two scenarios – a current and a new distribution of patients. Data on the current distribution provided by IMS Russia and amounted to 17.4%, 51.5 and 31.1% for «FL», «M» and «FM» therapies respectively. In the new scenario patient receiving «FL» increased to 51.5%, patients receiving «M» and «FM» therapy decreased to 34.45% and 14.05% respectively. The exchange rate used USD 1 = 66 RUB. **Results:** BIA showed, that the budget for medicines for COS for the given number of patients at the current distribution between treatment regimens, is estimated at USD 573 485 330. The increase in the proportion of patients receiving «FL» therapy from 17.4% to 51.5% and the decrease in the proportion of patients receiving «M» and «FM» therapy to 34.45% and 14.05% respectively will be associated with budget savings of USD 46 431 108, which is 8.81% of the current budget. **Conclusions:** BIA resulted, that the increase in the proportion of patients receiving FL from 17.4% to 51.5% will provide cost-saving of USD 46 431 108 compare to the current situation.



## PIH6

# APPROACH TO THE IMPACT OF COVERAGE IN LONG-TERM CONTRACEPTION IN THE ECONOMIC BURDEN OF UNPLANNED PREGNANCY FROM THE PERSPECTIVE OF ISAPRES IN CHILE

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**Objectives:** Unplanned pregnancy (UP) is a public health problem that impacts women, families and countries, with social, health and economic repercussions, even greater on risk subgroups such as the adolescent population (10 to 19 years). Contraception in Private System is still an out-of-pocket therapy, without coverage by private insurers ISAPRES. Our objective is to calculate the costs of UPs in ISAPRES and generate a coverage proposal for Long-term contraceptives (LARC), which do not have failure due to compliance of users. **Methods:** This research used the last data published by the Chilean Superintendence of Health (2017). It was considered UPs Cesarean and Vaginal deliveries for women between 10 and 19 years of age. The average cost of reimbursement was considered as a cost for ISAPRES, while the difference with the average cost billed was considered out-of-pocket expense for the user. **Results:** The study included 561 UPs for all private system, with an annual expense of US\$ 636,000 calculated only with average direct costs. 68% is financed by ISAPRES and the rest is out-of-pocket expense for the users. It is possible to save this amount generating a level of coverage in LARC. It was calculated the LARC total coverage multiplying the number of UPs with the average market price of Levonorgestrel Intrauterine System, the result is an annual investment of US\$ 79,881. This technology was selected considering that these systems don't have failure of compliance, unlike Short-term contraceptives that according to studies in Chile are responsible for almost 50% of the UP in the country. **Conclusions:** The study provides for first time an analysis of RWE on teen pregnancy costs to generate access to LARC systems. Also allows make decisions to get savings and redistribute to generate coverages for other health actions that could generate more value for affiliates in this system.

## PIH8

# MODEL TO APPROACH TO THE ECONOMIC BURDEN OF UNPLANNED PREGNANCY IN CHILE: THE IMPACT OF THE FAILURE OF COMPLIANCE OF THE CONTRACEPTIVE METHODS.

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**Objectives:** Unplanned pregnancy (UP) is a public health problem that impacts women, families and countries, with social, health and economic repercussions. At the present, there are publications that estimate the economic burden of UPs in other countries, however, there are no local data, thus models are needed to approximate the costs in Chile, using RGD-WinSIG for cost information. This is our first goal. The UPs proportion related to the failure of compliance in the population under fertility control in the Public Health System (PS) was also calculated as second objective. **Methods:** The proposed model considered direct costs of pregnancy and their annual outcomes obtained mostly by RGD-WinSIG indexed by the UPs percentage. This model could be reproducible in any country that has RGD-WinSIG. We used WHO data for calculate failure compliance. **Results:** The economic burden for our country is approximately USD 278 million per year. Around USD 129 million is the burden in PS by failure of compliance inherent on contraceptive methods, most of them short-acting. In the PS, the 47.7% of UPs are produced using short-term contraceptive methods: 1.7% for faults with perfect use and 46% for failures in compliance. This number contrasts with the 1.3% of UPs due to total failures of long acting reversible contraception (LARC): 1.0% failures with perfect use, mainly Cu IUD, and only 0.3% of UPs produced by compliance failure of all LARC. **Conclusions:** According our findings, in Chile will be necessary to give greater emphasis to LARC in public policies of family planning.



## PIH9

# IMPACTO ECONOMICO DE ANEMIA Y SU TENDENCIA AL 2030 EN EL SISTEMA DE SALUD PUBLICO DEL PERU

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**Objectives:** Estimar los costos, gasto público y la tendencia de anemia en el Sistema de Salud público del Perú. **Methods:** Se realizó una evaluación económica parcial de tipo costo de enfermedad (CE). La población de estudio fue una cohorte hipotética de pacientes afiliada al Seguro Público de Salud (Seguro Integral de Salud) en el Perú. Los costos se estimaron desde la perspectiva del financiador tomados para el año 2018. La definición de los esquemas de manejo clínico (procedimientos médicos y medicamentos para el diagnóstico, tratamiento y seguimiento de la enfermedad) provienen de las Condiciones Asegurables del Plan Esencial de Aseguramiento en Salud (PEAS). Cada esquema de manejo clínico se ha estimado con la metodología de costeo estándar. El costo total fue ajustado por factores de oferta, demanda y adherencia. Gasto público se obtuvo del Sistema

