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INTRODUCTION:

Anemia is a major problem, frequently resulting from iron deficiency (1). Guidelines recommend the administration of intravenous (IV) iron, leaving blood transfusions for critical patients due to the potential impact in length of stay (LOS) and mortality (2,3). We aimed to characterize IV iron sucrose utilization and health resource utilization in anemic patients.

METHODS:

This is a retrospective ongoing cohort study. Patient records from a general Portuguese Hospital with an administration of iron sucrose in 2014–2015 were reviewed. Adult anemic patients with at least one hemoglobin (Hb) evaluation before and after the administration of IV iron were included. Endpoints assessed were: Hb level (baseline, 4 and 8 weeks after), anemia correction rate at weeks 4 and 8, blood transfusions, length of stay (LOS), rate of readmissions (<30 days) and inpatient mortality. Statistical analysis included non-parametric and chi-square tests to assess differences between groups and a logistic regression model, using a 5 percent significance level.

RESULTS:

Data was collected for 401 patients (63.1 percent female; mean age Standard Deviation, SD: 62.6 (21.7) years) and 431 IV iron sucrose administration episodes. Mean cumulative iron dose was 679.5 mg. Baseline Hb level was 84.5 g/l and increased to 94.3 g/l (week 4) and to 103.0 g/l (week 8). Blood transfusions were performed in 53.8 percent of the episodes. Overall 157 (36.4 percent) episodes had a >20 g/l increase in Hb level. Blood transfusions were associated with a higher proportion of Hb level increase >20 g/l (44.0 percent versus 27.9 percent, p<.001). The overall mean LOS was 15.3 days, although episodes with transfusions had a significantly longer duration (17.5 days versus 12.7 days; p<.001). Overall readmission rate was 25.8 percent, with a higher proportion in episodes with blood transfusions

(29.3 percent versus 21.6 percent). A total of 36 patients (9.0 percent) died at the hospital before discharge. Transfusions performed during or after IV iron administration increased 3.1 times the risk of in-hospital death (95 percent Confidence Interval, CI: 1.3-7.0; p = .008), after adjusting for age and sex.

CONCLUSIONS:

We observed a high rate of blood transfusions in this cohort treated with intravenous iron sucrose for anemia. Transfusions were associated with substantial burden of resource consumption and in-hospital mortality.

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PP048 Quality Of Health Care Through Integration: Experience Of Cochlear Implantation

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INTRODUCTION:

The State Program for Health Development of the Republic of Kazakhstan (RK) "Densaulyk" for 2016–2019 initiated the modernization of primary health care with the introduction of family practice in order to ensure the availability, completeness and quality of health services on the basis of an integrated healthcare system focused on the needs of the population. The aim of this study was to determine the effectiveness of the cochlear implantation (CI) programs.

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METHODS:

A literature search was conducted for all clinical trials, randomized controlled trials, and reviews in the PubMed, Cochrane, and Center for Reviews and Dissemination databases. Two reviewers independently evaluated all publications for selection. The analysis included the cost-effectiveness and benefit from the CI program.

RESULTS:

We analyzed the effectiveness of the services for CI in the RK and other countries (1). In our analysis, we identified that there is no research on Quality-adjusted Life Years (QALYs) and Cost-Utility Analysis (CUA) in RK. We found that, in general, the cost of CI and pre-surgical procedures are comparable with other countries. The length of stay in Kazakhstan was much higher (an average of 8 days) compared with other countries (3 days). Also in RK, there were significantly lower prices per hospital day and cost of various consultations. Postoperative costs of other countries consisted of one-third to two-thirds of the total costs for preoperative and implantation stages (2, 3). There was a little information on the effectiveness of rehabilitation programs in RK.

CONCLUSIONS:

Economic research like QALYs and CUA are new directions in the healthcare system in the RK. Lack of integration between primary care, rehabilitation and other services leads to difficulties in assessing the effectiveness of CI programs (for example, in our case, there was the restriction of assessment in only postoperative costs).

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PP049 Exploring The Utility Of A Validated Quality Appraisal Tool

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INTRODUCTION:

The Health Technology Assessment (HTA) researchers at the Institute of Health Economics, in collaboration with researchers from two HTA agencies in Australia and Spain, developed, piloted, and validated a 20-criteria quality appraisal checklist specific for case series studies (before-after single arm studies with no control group) (1,2). Since its publication in 2012, the use of the checklist has spread globally through the HTA community and to researchers in other areas. This presentation will briefly introduce the tool, summarize user experiences, outline potential challenges, and provide practical solutions for using or adapting the checklist to various HTA topics.

METHODS:

Feedback from fifteen researchers was collected informally by email and/or formally by questionnaire. The questions included focused on the relevance, clarity, and usefulness of the checklist and its instructions, as well as potential revisions and/or addition of other criteria.

RESULTS:

While some of the checklist's criteria apply to all studies of a particular type, others are specific to the research question and/or the technology under investigation; discussion on the modification and/or adaptation of the

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