HPR Service developments, innovation and economics in healthcare

AB1473-HPR QUALITY OF REFERRAL LETTERS RECEIVED IN RHEUMATOLOGY

D Palma-Sánchez, A.D.C. Haro-Martínez, M.J. Moreno-Martínez, E. Peñas-González. *Rheumatology, Hospital Rafael Méndez, Lorca, Spain*

Background: The referral letter is an essential tool in the relationship between Primary Care and other specialties with Rheumatology. In our area, in 2010, a computer system called SELENE was introduced at hospital level and, in Primary Care, O.M.I. was set up more than 20 years ago

Objectives: To assess the quality of referral letters received in the Rheumatology Unit during the first four months of 2017

Methods: Retrospective and descriptive study, in which referral letters received in the Rheumatology Unit between January and April 2017 were analysed. The following variables were collected: medical specialty that sent the document, computerization of the document, reference to medical history, chronic treatments, current disease, physical examination, complementary tests, presumption diagnosis, treatment for the current process, and number of reasons for consultation per document. The quality of the document was assessed using the recommendations of Irazábal and Gutiérrez modified by Morera et al, which classified them as: good, acceptable and bad (table 1).

Abstract AB1473HPR – Table 1. Quality of referral letters.

Good: It includes medical history, familiar medical history, chronic treatment, current disease, complementary tests, presumption diagnosis, differential diagnosis and reason for consultation

Acceptable: It includes reason for consultation and enough information about current disease, although not all those included in the previous one

Bad: Unreadable, without enough information to assess the current disease or absence of information

In the descriptive statistical analysis of quantitative variables, the mean and standard deviation were used. Frequencies were used to analyse qualitative variables

Results: 1234 referral letters were included and 90.3% were computerised. The specialties that referred patients more frequently were: Primary Care (84.7%), Traumatology (3.4%), Neurology (1.9%) and Emergency (1.6%). 14.5% of the documents included more than one reason for consultation. The variables related to the fulfilment of quality criteria in the referral letters are shown in Table 2. Regarding the quality level, 4.1% of the documents were good, 95.2% acceptable and 0.6% bad.

Abstract AB1473HPR – Table 2. Quality criteria in the referral letters

Reference to medical history, n (%):	242 (21.7)
Reference to chronic treatment, n (%):	67 (6)
Reference to symptoms, n (%):	1050 (94.3)
Reference to physical examination, n (%):	170 (15.3)
Reference to complementary tests, n (%):	740 (66.4)
Reference to treatment for the current process, n (%):	373 (33.5)
Reference to presumption diagnosis, n (%):	712 (64.3)

Conclusions: The quality of the referral letters was mostly acceptable. Therefore, there is much room to improve, especially in the sections referencing medical history, chronic treatment, physical examination and treatment for the current process

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AB1474-HPR ARE CLINICAL PATHWAYS USEFUL IN CLINICAL PRACTICE?

D Palma-Sánchez, A.D.C. Haro-Martínez, M.J. Moreno-Martínez, E. Peñas-Martínez. *Rheumatology, Hospital Rafael Méndez, Lorca, Spain*

Background: The aim of clinical pathways is to improve the care of patients with chronic diseases, ensuring continuity of care through a better coordination and communication between Primary and Hospital Care. Even though clinical pathways have proved to be effective, their

publication and dissemination does not necessarily lead to the systematic use of them in clinical practice.

Objectives: To assess the fulfilment of clinical pathways in area III of Murcian Health Care System.

Methods: Retrospective and descriptive study in which the fulfilment of clinical pathways in musculoskeletal pathology was analysed in the Rheumatology Unit the first four months of 2017. The variables collected were: reason for consultation, waiting time for an appointment and fulfilment of clinical pathways in the following clinical processes: back pain, shoulder pain, knee pain and fibromyalgia.

In the descriptive statistical analysis of quantitative variables, the mean and standard deviation were used. Frequencies were used to analyse qualitative variables

Results: 1234 referral letters were received in Rheumatology during the first four months of 2017, 85.1% were mechanical pathology, 8.2% inflammatory pathology and 4.1% bone metabolism pathology. 628 were susceptible to follow the clinical pathways implemented in musculoskeletal pathology: 462 (73.56%) were back pain, 87 (13.85%) knee pain, 73 (11.62%) shoulder pain, and 6 (0.95%) fibromyalgia. The clinical pathways were fulfilled in 252 (40.12%) of the cases.

Abstract AB1474HPR – Table 1. Fulfilment of clinical pathways

Back pain, yes (%)	206 (44.6)
Shoulder pain, yes (%)	26 (35.6)
Knee pain, yes (%)	19 (21.1)
Fibromyalgia, yes (%)	1 (14.3)

Conclusions: The fulfilment of clinical pathways in musculoskeletal pathology in our health care area was carried out in less than half of the cases. Therefore, it is necessary to implement procedures to make easier their use in clinical practice

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AB1475-HPR COST EVOLUTION OF BIOLOGICAL AGENTS FOR THE TREATMENT OF SPONDYLOARTHRITIS IN A SPANISH TERTIARY HOSPITAL: INFLUENTIAL FACTORS IN PRICE DEVELOPMENT

M. Á. González Fernández¹, E. Villamañán Bueno¹, I. Jiménez Nácher¹, F. Moreno Ramos¹, A. Herrero Ambrosio¹, C. Plasencia Rodríguez², A. Balsa². ¹Pharmacy Department, ²Rheumatology Department, University Hospital La Paz, Madrid, Spain

Background: Spending on biological agents has risen dramatically in Spanish hospitals due to the drugs' high cost and the increased prevalence of spondyloarthritis.

Objectives: To calculate and compare the annual cost per patient with spondyloarthritis and for each biological drug according to clinical practice from 2009 to 2016 and to analyse the factors that influence consumer pricing, such as biological therapy optimisation (by monitoring drug and anti-drug antibody serum levels), the use of tumour necrosis factor inhibitor biosimilars, and drug discounts, refunds, and rebates.

Methods: We conducted a retrospective observational study that analysed patient demographic parameters, disease activity, and annual cost per patient and per drug and determined the economic factors that affected on consumer pricing.

Results: A total of 129, 215, and 224 patients were treated in 2009, 2013, and 2016, respectively; 77 (59.69%), 133 (61.86%) and 139 (62.05%), respectively, were men aged 46.04 (±12.57), 47.76 (±12.35) and 48.27 (±13.49) years, respectively. Nonstatistically significant differences were observed.

The annual cost per patient decreased during the study period (from €11.604 in 2009, €8.513 to €7.464 in 2016). There was an increase in the number of marketed biological drugs and in the total savings per drug, with discounts and bonus units in 2016 reaching 12%–18% for etanercept, adalimumab, certolizumab, and golimumab and up to 25% for the recently released secukinumab, while rebates for biosimilar infliximab reached 69% in 2016. Biological therapy optimisation reached 47.5% in 2016, which resulted in cost savings of 23.89%, in addition to the savings from refunds and rebates (11.06%) in 2016.

Conclusions: The resulting treatments after the rebates, invoice discounts, and optimizations were more cost-effective, leading to a significant decrease in the annual cost per patient and an overall reduction in expenditure for these drugs.

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AB1476-HPR EFFECTS OF WEARABLE TECHNOLOGY AS VIRTUAL REHABILITATION ON FUNCTIONAL OUTCOMES IN PATIENTS WITH ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

Q Aydogdu, Z. San. *Physiotherapy and Rehabilitation, Marmara University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Istanbul, Turkey*

Background: Virtual rehabilitation systems play an increasing role in rehabilitation. They provide an interactive environment and increased motivation for patients during the session.¹ In recent years, intervention methods based on virtual reality have been studied. However, existing studies are limited because most of them focused on the balance ability of the elderly or studied in stroke patients with same systems.² Thus, it is necessary to investigate the effects of virtual rehabilitation in patients with Anterior Cruciate Ligament (ACL) Reconstruction.

Objectives: The purpose of this study was to investigate the effects of a wearable technology as virtual rehabilitation which provides visual and auditory stimulus aimed for educating and controlling the joint on proprioception, postural stability and fear of re-injury in patients with ACL reconstruction.

Abstract AB1476-HPR – Figure 1

Methods: Nineteen patients (age=28.47±6.18 years, height=176.31±6.06 cm, weight=79.47±14.38 kg) with ACL reconstruction were participated in this study. In addition to conventional physiotherapy, a virtual rehabilitation treatment applied with visual and auditory stimulus three times in a week for 8 weeks. Knee proprioception, postural stability and fear of re-injury were measured with Biodex System Pro 4 Isokinetic Dynamometer, Pedalo Sensamove System, Tampa Kinesiophobia Score, respectively.

Results: There were statistically significant improvements in measures of proprioception (p=0.003), postural stability (p=0.001), and fear of re-injury (p=0.001) between pre- and post – treatment.

Conclusions: According to the results, wearable technology as virtual rehabilitation may be beneficial on proprioception, postural stability, and fear of re-injury to treat patients with anterior cruciate ligament reconstruction. We conclude that devices used as wearable technologies should be used as treatment modalities in clinical services because of providing feedback, easy to carry and interactive treatment.

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AB1477-HPR ADHERENCE TO RCOPHTH GUIDELINES IN MONITORING OF HYDROXYCHLOROQUINE BY RHEUMATOLOGISTS AT LNWH CMH

Q Adamjee, B. Colaco, P. Gulati, C. Cleland, D. Naumink. *London North West University Healthcare, NHS trust, London, UK*

Background: The Royal College of Ophthalmologists (RCOPHTH) published in 2017 revised recommendations regarding screening for hydroxychloroquine (HCQ) toxicity. Recent data reported the prevalence of retinopathy to be around 7.5% and depending on dose and duration can rise to 20%–50% after 20 years of therapy. Much higher than the 0.5% reported previously in the 2009 guidelines. Risk is increased in patients taking more than 5 mg/kg/day, and those with renal dysfunction, pre-existing retinopathy or also taking tamoxifen. Retinopathy appears as damage to the photoreceptors, followed by degeneration of the retinal pigment epithelium (RPE). This can produce visual loss and a "Bull's eye maculopathy".

Current guidelines state patients looking to take HCQ long term should have a baseline screening (10–2 Humphrey visual test) in a hospital eye department, and then be referred for annual screening after 5 years of therapy. Dosage should ideally be kept ≤5 mg/kg/day.

Previous guidelines recommend a maximum dose of ≤6.5 mg/kg/day, and baseline optometrist review. Referral to ophthalmologist only if a visual impairment or eye disease is detected at the baseline assessment or the patient notices reduced vision whilst on treatment. Long term HCQ patients, were advised to agree and individual screening arrangement with the local ophthalmologist.

Objectives: This single point of care audit was to assess real world practice at Central Middlesex Hospital against the new 2017 guidance as a gold standard.

Methods: HCQ questionnaires were collected from patients attending regular appointments over one month October–November and recorded:

1) date commenced HCQ, 2) est. total dose, 3) weight and 4) last retinal screen;

Hospital EPR database was used to confirm or assist documentation of therapy data.

Results: In one calendar month 152 of 414 patients were prescribed HCQ.

94/152 of the patients had been on HCQ for >5 years.

63/152 patients were high risk with doses of >5 mg/kg/day.

55/152 patients had either failed to attend a baseline screening, or had no record of having had a baseline screen.