future studies are to design a prospective study, include persistence and adherence measures in the study design, and to assess patient outcomes with additional measures such as patient outcomes based on a patient-centric approach and adverse effects.

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AB1224

IS THERE A NEED TO OPTIMIZE REFERRAL DIAGNOSIS TO A RHEUMATOLOGY DEPARTMENT?:

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Background: The initial visitation of patient suffering from rheumatic disease related symptoms often occurs in absence of a rheumatologist.

Objectives: This study evaluated the following questions: I. Which medical specialists referral patients to a rheumatology department? II. To quantify the accordance of the presumptive diagnosis and the final diagnosis of a rheumatologist.

Methods: 1151 patients (355 men and 796 women) were admitted to a hospital for rheumatological diagnostic. The referral medical specialists were identified. Kappa-Analysis was performed to evaluate the presumptive diagnosis and the final diagnosis by the rheumatologists.

Results: 73.0% of the referrals were performed by general practitioner. The other referrals were: 7.7% rheumatologist, 4.8% specialist in internal medicine (excluding rheumatology), 4.3% orthopaedic surgeon, 1.0% orthopedic surgeon and 9.2% other specialists.

The highest accordance of the presumptive diagnosis and the final diagnosis was $\kappa=0.534$ for rheumatologists and $\kappa=0.400$ for specialist in internal medicine (excluding rheumatology). Lower kappa values were evaluated for general practitioner ($\kappa=0.345$), orthopaedic surgeon ($\kappa=0.310$) and other specialists ($\kappa=0.252$).

Conclusion: The referrals were frequently realized by general practitioners. In this context the presumptive diagnosis of a general practitioner presents a low accordance with the final diagnosis. In this context, general practitioners should achieve a detailed education in the assessment of rheumatic-related symptoms to optimize the dedicated referral to rheumatological departments.

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AB1225

POSSIBLE EARLY DETECTION OF ADVERSE EVENTS USING REMOTE SYSTEMATIC WEEKLY ELECTRONIC MDHAQ

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Background: Adverse events of medications are reported to account for 5% of hospital admissions in the USA, including 10% in the elderly. Warnings from doctors and pharmacies concerning adverse events are given at initiation of new medications, but adverse events occur between visits and reporting depends primarily on communication between a patient and a health professional, which may be variable. Therefore, recognition and reporting of adverse events remain relatively haphazard. Several reports present strategies for systematic monitoring for adverse events, primarily involving telephone contacts from nurses to patients. A far less expensive systematic approach based on patient self-report using a remote electronic multidimensional health assessment questionnaire

Date	19 Jan 2018	25 Jan 2018	11 May 2018	2 Aug 2018	15-29 Aug 2018	24 Sep 2018	26 Sep 2018	4 Oct 2018	9 Oct 2018	9 Nov 2018	25 Nov 2018	28 Dec 2018
Site of MDHAQ	Clinic	Clinic	Clinic	Clinic	None	Home	Home	Home	Home	Home	Home	Home
RAPID3 (0-30)*	14.0	10.2	5.7	3.5	?	19.5	10.2	6.7	6.5	4.8	6.0	4.2
Fatigue VAS (0-10)	6	4.5	2.0	2.0		9.0	4.5	4.0	3.5	1.0	1.0	1.0
Medications												
Prednisone mg/day	B 40	↓20	↓7	↓6	D/C 0	R 10	5	5	5	5	5	5
Methotrexate mg/w			B 10	20	D/C 0	0	0	0	0	R 10	10	10
pirfenidone					B3-9/d	9/d	D/C	0	0	3/D	D/C	0
#Symptoms (0-60)	10	5	6	6		15	15	13	13	6	8	6
Weight loss	+	+				+	+	+	+			
Feeling sickly	+											
Unusual fatigue	+					+	+	+	+	+	+	
Bruising/bleeding	+			+							+	
Other skin problem				+								
Loss of appetite						+	+	+	+	+	+	
Other eye problems			+									
Stuffy nose	+		+	+		+	+	+	+	+	+	+
Dry mouth	+	+	+			+	+	+	+	+	+	+
Problems with smell/taste				+		+	+	+	+			
Cough	+	+	+	+		+	+	+	+	+	+	+
Dyspnea	+	+	+	+		+	+	+	+	+	+	+
Heartburn/gas	+					+	+	+	+			
Dizziness	+											
Muscle weakness		+				+	+	+	+		+	+
Swelling of hands						+	+	+	+			
Swell-other joints						+	+	+	+			
Joint pain						+	+	+	+			+
Back pain						+	+					
Anxiety			+									
Sleep problems						+	+					

(MDHAQ) 60-symptom checklist may recognize most adverse events of medications.

Objectives: To document recognition of adverse events using a remote weekly electronic MDHAQ completed by patients at home, as a cost-effective approach to reduce their morbidity, costs, and mortality

Methods: The MDHAQ includes 0-10 scales for physical function, pain, and patient global assessment, compiled into a 0-30 RAPID3, fatigue and painful joint count, to assess treatment efficacy. The MDHAQ also includes a 60-symptom checklist to recognize comorbidities, review of systems, and symptom reduction; this checklist also recognizes adverse events associated with medications. Weekly remote completion of an electronic MDHAQ at home can monitor both efficacy and adverse events.

Results: A flowsheet from a patient with pulmonary fibrosis monitored over 2018 illustrates remote electronic MDHAQ use. At a first visit of 19 Jan, a routine clinic-based MDHAQ indicated RAPID3 of 14/30, fatigue 6/10, and 10 symptoms (Flowsheet). Treatment with low-dose methotrexate and prednisone led to clinical improvement from 19 Jan to 2 Aug, RAPID3 to 3.5, fatigue 2, and 6 symptoms. On 15 Aug, a pulmonologist discontinued prednisone and methotrexate and prescribed pirfenidone, an anti-fibrosis agent. A telephone call from the patient on 24 Sep indicated distress. A home-completed remote MDHAQ indicated RAPID3 19.5, fatigue 9, 15 symptoms - 7 not reported on 2 Aug were among 16 adverse events listed for pirfenidone. Discontinuation of pirfenidone and resumption of prednisone and methotrexate led to improvement of RAPID3 to 4.2, fatigue to 1.0, and resolution of pirfenidone-specific symptoms by 24 Dec, documented with weekly remote electronic MDHAQ (Flowsheet). A brief retreat of pirfenidone indicated an increase of RAPID3 to 6.0, which was discontinued in a timely manner.

78-year-old man monitored over 2018—all data from self-report on MDHAQ – pirfenidone highlighted (many entries deleted for space considerations)

Conclusion: Weekly remote electronic MDHAQ monitoring of a high-risk medication for treatment response and adverse events may provide a cost-effective approach to reduce the morbidity and mortality of adverse events, involving about 10 minutes/weekly or 2 hours of patient time over 12 weeks.

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AB1226

ONE YEAR'S RESULTS OF A PROTOCOLIZED HIGH RESOLUTION RHEUMATOLOGY CLINIC

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Background: Mechanical musculoskeletal pathologies put high demands on the Public Health Service, as they affect a significant percentage of the population, and cause both temporary and permanent disabilities.

The specialised High Resolution Rheumatology Clinic (CAR in Spanish) at our centre started up in October 2017, and focuses on the diagnosis and treatment of pathologies which are fundamentally of a mechanical ethology. The centre covers a population of approximately 328,868 inhabitants (Alava 2018 census).

The aim of our study, carried out at the unit over one year, is to determine the patients' epidemiological features.

Objectives: • To provide the Primary Care Centres with a "fast-track" and immediate care system in order to guide, diagnose, and treat patients who have worsening acute or chronic mechanical afflictions to the musculoskeletal system.

- Diagnosis confirmation, request for non-accessible tests, adaptation of treatments mainly for the primary care doctor.
- To speed up and reduce waiting lists, for both inflammatory rheumatic pathologies and mechanical rheumatic pathologies, by establishing new referral guidelines.
- To draw up protocols in agreement with primary care doctors and related specialists.
- To act as a support for other medical services.

Methods: The main services available are those offered mainly to primary care level. There are 3 clinics a week, attending to approximately 30 new patients per week. 1330 patients are included in the study, seen at the High Resolution Rheumatology Clinic (CAR) over 12 consecutive months (November 2017 – 2018), with non-complex regional pathologies and/or soft tissue rheumatism, which are able to be resolved with one or two visits.

Results: 1330 patients were seen, with an average age of 58 ±15.6 years, 64.64% female and 35.36% male, mainly for musculoskeletal ailments. In order of frequency, the visits were for shoulder (25.79%), hip (16.10%), axial skeleton (15.13%), ankle/foot (13.06%), wrist/hand (12.08%), knee (11.21%), and elbow (6.63%).

61.95% of the patients were discharged after the first visit, and one year later, this figure rose to 90.15% of all the patients discharged; only 2.78% made a return visit after being discharged. 22.26% were referred to other services, mainly Traumatology and Orthopaedics (10.53%); Rehabilitation and Physiotherapy (8.72%); and the Pain Management Unit (1.65%). The 3.68% were referred to the usual Rheumatology department. For 52.33% of the patients seen, there was no need to request more than one diagnostic tests, even though 12.41% visited for reasons other than the main one. Moreover, 63.08% received some kind of infiltration injection. The negative point was that 7.89% of the referrals had been made from Primary Care to several specialists at the same time; and 7.98% were consultations regarding traumatic injuries.

Conclusion: Systematising a clinic for mechanical musculoskeletal pathologies which have a high chance of being resolved in the short term, means that the quality of the care given, the waiting times, and the demand on the health service can be improved. Developing these can have important repercussions on waiting lists for other related services, and even for the Rheumatology service itself, allowing more serious cases to be seen earlier. Creating multi-disciplinary units should be encouraged, in order to improve care quality and prevent the various medical services involved from all carrying out fragmented courses of action. New guidelines could be considered, to optimise the care and management of new resources and/or links to other services, as the most prevalent pathologies can be identified.

Most of the patients seen represent the economically active part of the population; there are therefore, repercussions as far as sick leave, disability leave, etc. is concerned.

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AB1227

PREFERRED REFERRAL PROTOCOL FOR RECENT ONSET ARTHRITIS IN ADULTS FROM PRIMARY CARE TO RHEUMATOLOGY

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Background: The time of rheumatoid arthritis (RA) evolution until treatment begins is key to controlling the disease. Many studies have shown that a prolonged duration of symptoms at the onset of treatment is associated with a more severe course of RA. The time from symptoms onset to first DMARD prescription is >12 weeks in Spain, because of diagnostic delay due to either patient-related factors (delay in consultation), Primary Care Physician (PCP) (delay in citation/referral) or rheumatologist (delay in citation).

Objectives: To evaluate the usefulness of teleconsulting as a preferred referral tool from PCP to Rheumatology for early detection, diagnosis and treatment of inflammatory joint disease in adults, in the health area of a tertiary hospital.

Methods: A preferential referral circuit was established between the PCP and the Rheumatology Service of a tertiary hospital, defining the referral criteria as "patient suspected of recent onset arthritis (ROA)": arthritis or inflammatory arthralgia in >1 peripheral joint for >2 weeks with neither traumatic cause nor previous diagnosis of rheumatic disease. PCP performed first assessment, the request for initial tests (blood test including acute phase reactants, rheumatoid factor ± ANA, elemental urine and hands radiography) as well as the referral to Rheumatology with "ROA suspicion" motive. These consultation requests were cited from the Rheumatology Service within <15 days of receipt.

Before the protocol was established, its functioning was communicated as a face-to-face clinical session: by 2 rheumatologists in a Health Centre (HC) and by 1 PCP in the rest of the HC in the area. A poster was