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#### AB1095 EARLY DIAGNOSIS AND TREATMENT OF CHRONIC DISEASES: NATIONAL REVIEW AND GUIDELINES - RA AS AN EXAMPLE

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**Background:** Managing the increasing burden of chronic diseases is a major public health problem. Are early diagnosis and management a key point for their optimal care and outcome?

**Objectives:** Assessing early diagnosis and management of chronic diseases was the aim of a study carried out by the High Council for Public Health (HCSP), independent national body gathering experts nominated by the Minister of Health, to provide health authorities with expertise on development of national public health goals, assess their achievement and contribute to their monitoring

**Methods:** A multidisciplinary working party run within the HCSP a review of scientific data supporting early intervention benefits, as well as frequency, impact and mechanisms of delayed management on individuals and society, in order to produce national guidelines. A huge amount of data were analyzed: argued contributions from national Professional organizations and Patient associations, literature analysis, audition of national agencies representatives.

**Results:** Early stages of chronic diseases are less studied than later ones. Nevertheless, there is a strong evidence that delayed diagnosis and management are frequent and often adversely affect patients and society. The frequency, length and burden of delayed care were analyzed, varying with each disease, availability of efficient treatments and guidelines, socio-economic context. Optimal time for adequate management from symptom onset was reviewed, as well as medico-economic studies

Rheumatologic disorders appeared as models, notably Rheumatoid Arthritis (well-established window of opportunity, international guidelines for early diagnosis and management, including T2T and patient active implication). Evidence for early treatment benefit was also found for spondyloarthritis, osteoporosis, obstructive sleep apnea syndrome, chronic obstructive pulmonary disease, renal insufficiency, autism spectrum disorders, bipolar disorders, ... Ethical considerations may arise; in Alzheimer's disease, a diagnosis source of marked anxiety, there is no effective pharmacological treatment- but non pharmacological treatments are quite helpful for patients and family and therefore recommended by health authorities.

Obviously, the benefit of early intervention must be strongly assessed. When this benefit is proven, too many patients are facing delays, often long, with adverse consequences and increased burden for society. The mechanisms of such delayed management are multiple and often intricate; we analyzed the barriers to optimal care linked with professionals, patients, family, health system and society, in order to identify the ways to optimize the outcomes and therefore improve the global health status of the population.

Finally the HCSP established a set of guidelines, in 3 axis

- disseminate widely the available knowledge among professionals, patients, the general public, taking into account the social poor perception of chronic diseases
- implement effectively change in practice toward early treatment, when appropriate: timely coordination between professionals and patient, fair diagnosis announcement, early patient implication, fight against social health inequalities
- develop research on early stages of chronic diseases, diagnosis, management and outcomes.

**Conclusions:** From a national public health perspective, early diagnosis and management, in the chronic diseases where their benefit is proven, should be better known and effectively implemented.

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#### AB1096 TIMED UP AND GO TEST (TUG) FOR SARCOPENIA SCREENING

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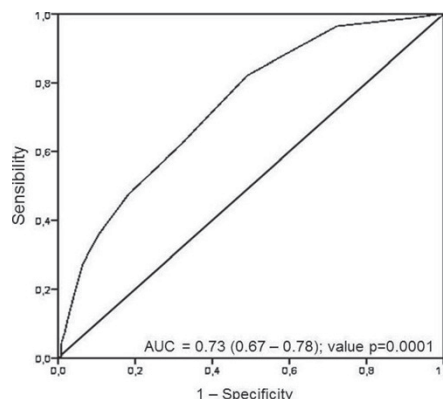
**Background:** Sarcopenia is a multifactorial syndrome characterized by a decrease of muscle mass and force together with functional performance impairment. Sarcopenia has been described as an independent predictor factor of health adverse outcomes such as falls, decreased quality of life, enhanced risk of death and higher treatment costs. However, there are just a few screening tools of low cost and easy applicability to detect sarcopenia. In this context, a standard

mobility assessment such as the TUG test has recently been described as a predictor of sarcopenia.

**Objectives:** To evaluate the performance of *timed up and go test* (TUG) as a screening toll for sarcopenia in the elderly.

**Methods:** This is a cross-sectional home study with 211 elderly participants of the South Region of Brazil. Sarcopenia diagnosis criteria was based on the European Working Group on Sarcopenia in Older People (EWGSOP). Individuals that presented low muscle mass (women:  $\leq 6.37\text{kg/m}^2$  and men:  $\leq 8.90\text{kg/m}^2$ ) added to decreased handgrip strength (women:  $< 20\text{kgf}$  and men:  $< 30\text{kgf}$ ) and/or walking speed ( $\leq 0.8\text{m/s}$ ) were considered sarcopenic. TUG test quantifies functional mobility through the task of getting up from a chair, walking 3m and come back to sit on the chair.

**Results:** Based on EGWSOP criteria for sarcopenia, 17.1% (n=36) received the sarcopenia diagnosis. A ROC curve was constructed to evaluate the discriminatory power of TUG (AUC: 0.73 [IC 0.67 – 0.78; p=0.0001]). TUG test presented high sensibility (88.9%) and negative predictive values (93.2%), with a cutoff point of 7.5 seconds (figure 1).



**Conclusions:** Detecting the beginning of sarcopenia could allow for early interventions and slow the syndrome process, preventing further hospitalizations and economic burden. In this context, TUG is an easy, fast and low-cost test with high sensibility for sarcopenia detection that could be used as screening toll for this syndrome.

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#### AB1097 PATIENTS' EXPERIENCES OF REMOTE MONITORING OF RHEUMATOID ARTHRITIS USING A SMARTPHONE APP

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**Background:** The care of patients with Rheumatoid Arthritis (RA) is guided by monitoring changes in disease activity. However, whilst a number of patient-related outcome measures (PROMS) exist<sup>1</sup>, they are not collected on an on-going basis. Consequently, there are few objective measurements of disease activity, between clinic visits, to inform treatment decisions. In response to this, the REMORA study (REmote MONitoring of Rheumatoid Arthritis) is developing a smartphone app, to capture data on disease activity and integrate it directly into the electronic patient record. The project explores whether on-going collection of electronic patient-reported outcomes (ePROS) between clinic visits can enhance clinical care, support patient self-management, and provide a sustainable source of data for research.

**Objectives:** To describe patients' experiences of remote monitoring of their disease activity, and the perceived value in relation to clinical consultations and self-management.

**Methods:** A diverse sample of 20 patients with RA entered data into the app over

a three month period in response to daily, weekly and monthly question sets (table 1). An optional diary component was included, but not integrated into the EPR. The ePROS had been determined during earlier interviews with rheumatology patients, practitioners and researchers.

Qualitative interviews were conducted with patients at the end of the three month period. Interviews explored patients' views on the components of the app, and perceived implications for self-management and clinical care. Interviews were transcribed and analysed thematically.

**Results:** Qualitative analysis of the data identified a number of themes including: the benefits and limitations of using scales to reflect changes in symptoms experienced, the value of the diary for providing contextual information and an "outlet" for feelings, and the impact the data made to their clinical consultation and self-management.

Overall, the collection of longitudinal data was seen as useful by patients. Successful integration with the EPR allowed data to be displayed graphically during clinical consultations. Reviewing remote monitoring data detected changes which may otherwise have been missed such as flares in disease, or gradual improvements in response to new treatments. Data therefore facilitated "a shared conversation" and decision making around treatment plans.

Additionally, being able to self-reflect on data recorded enabled patients to identify triggers and alleviators in relation to their disease activity and take steps to self-manage their RA; for example, by recognising when they needed to rest as opposed to "just carrying on" when their symptoms were more severe.

Table 1. ePROS

Daily	Pain, difficulty with physical activities, fatigue, sleep difficulties, physical wellbeing, emotional wellbeing, coping
Weekly	Morning stiffness Number of tender & swollen joints Global assessment of wellbeing Employment status Impact on number of hours worked Experienced a flare Description of flare
Monthly	Health Assessment Questionnaire (HAQ) impact of disease on daily activities.

**Conclusions:** The app was well received by patients and feedback suggests that the ePROS recorded can capture changes in disease activity in a manner that is meaningful to patients and facilitates both clinical consultations and self-management.

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### AB1098 TEMPORARY WORK DISABILITY CAUSED BY MUSCULOSKELETAL DISEASES AT THE HOSPITAL CLÍNICO UNIVERSITARIO DE VALLADOLID: 6 MONTHS EXPERIENCE

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**Background:** Musculoskeletal diseases are the leading cause of disability in the world and have a high impact on direct (health) and indirect (labor) costs. Labor casualties in Spain, when temporary, are known as temporary work disability (TWD). Since 2013, follow-up of patients with TWD (when the origin of the disease is a musculoskeletal condition) is being carried out in a monographic consultation within the external consultations of the Rheumatology Service of the Hospital Clínico Universitario de Valladolid.

**Objectives:** To describe the experience of the last 6 months in the consultation of temporary musculoskeletal incapacities (TWDMSDs) of the Hospital Clínico Universitario de Valladolid.

**Methods:** The TWDMSDs consultation is operational 2 days a week. The referral system is direct from Medical Inspection via email (1st part confirmatory work leave). The patients come from 7 Health Centers (population 82,000 people). The agenda is configured daily according to the emails sent, contacting the patients by telephone, excluding those with trauma, surgeries, pregnancies, non-localized, rejection or discharge. The assessment of the patients in consultation, according to usual clinical practice. A medical report is issued (medical history, physical examination, completed or requested tests, recommendations and treatment). The data are collected in SPSS, proceeding to its subsequent analysis.

**Results:** During the last six months of follow-up, 354 emails have been received. A total of 106 patients were evaluated, with the following characteristics: 54.3% women and 45.7% men, mean age 43.4 years, 95% performed physical work. Axial pathology was observed in 67.8% of cases and peripheral in 32.2%. The patients evaluated with some rheumatic pathology reached 96%. The average delay from the start of the work leave to the email was 12.2 days, and from the start of the work leave to the first consultation of 6.7 days (including weekends). 65.4% of the patients were discharged from the TWDMSDs agenda in the 1st consultation, without requiring interconsultations or requests for diagnostic tests, with an infiltration of 8% of the patients, arthrocentesis at 2%, ultrasound at 28%

and Exercise guidelines were given to 76% of patients. The mean number of consultations up to discharge was 1.3. The mean time from onset of discharge to discharge was 21.1 days and from the first consultation until discharge by Rheumatology was 6.6 days.

**Conclusions:** The TWDMSDs consultation makes possible the early detection of rheumatologic musculoskeletal pathology, allowing an early action that minimizes the number of requested tests and interconsults generated and achieves an early diagnosis and treatment of patients, with the consequent benefits that this entails. The patients evaluated in consultation are mainly of average age, with physical work, mechanical pathology, resolution of the problem that causes the TWD and reincorporation to the working life of early form. In the discharge report, recommendations are included to minimize future casualties (work refocus, orthotics, exercises, treatment regimens in the event of a recurrence of symptoms) and explain the importance of being actively involved in their pathology to prevent progression.

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### AB1099 COUNSELLING ON FAMILY PLANNING AND CONTRACEPTION, AND PREGNANCY OUTCOME IN WOMEN WITH RHEUMATIC DISEASES: A NATIONAL SURVEY OF 398 PATIENT-REPORTED QUESTIONNAIRES FROM 24 RHEUMATOLOGY CENTERS

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**Background:** Rheumatic diseases (RD) predominantly affect young women during reproductive age. Pregnancy, contraception and family planning (FP) are crucial for the quality of life of these patients.

**Objectives:** We aimed to investigate 'women's health' through a self-reported questionnaire. Answers from patients with connective tissue diseases (CTD) vs chronic arthritis (CA) were compared.

**Methods:** 24 centres distributed the questionnaire (65 multiple-choice and 12 open-answer questions) to women with RD (18–45years) regularly attending their outpatient clinics.

**Results:** Answers were collected from 249 CTD vs 149 CA patients. Their desire to have children was influenced by RD in 40% of cases: half of them reduced the number of children they wanted (Table 1). 39% CA vs 29% CTD were afraid of being mother because of disability.

24% CTD vs. 18% CA had at least one miscarriage; 21% CTD vs. 2% CA had more than one.

31% CTD and 34% CA were never asked about their desire to have children. 61% CTD vs 70% CA received counselling about contraception, given by a gynaecologist (G) (58% vs 64%), rheumatologist (R) (22% vs 14%) or both (7% vs 9%). 60% in both groups received a counselling before pregnancy: 34% vs 39% from R and G, 14% vs 22% by R. This positively changed family planning in 64% vs 59%. We created a Knowledge Index (based on the average of the normalized performed scores on 6 key questions for different sections): 55% CTD patients vs 44% CA had a medium-high score. A higher score directly correlated with the desire to become pregnant and with a multidisciplinary counselling.

The disease has reduced your desire to have children?		
	CTD	CA
NO	36/91 (40%)	22/54 (41%)
YES	52/91 (57%)	28/54 (52%)
No Answer	3/91 (3%)	4/54 (7%)
If yes, I reduced the number of children that I wanted, because I was afraid...		
...of not being able to take care of them because of the disease	26/91 (29%)	21/54 (39%)
...that the child could have the same disease	15/91 (17%)	8/54 (15%)
...that drugs or disease could harm the baby	26/91 (29%)	20/54 (37%)

**Table 1.** Reasons for reduced family size in patients who declared that their RD had influenced their desire of having children