

A Rheumatology Consultancy Program with General Practitioners in Catalonia, Spain

XAVIER SURÍS, DACIA CERDÀ, VERA ORTIZ-SANTAMARÍA, ANDRÉS PONCE, JOSÉ LUÍS SIMÓN, ELENA CALVO, MARIA JOSEP TORRAS, and GUILLERMO HOYO

ABSTRACT. *Objective.* To analyze the influence of a primary care rheumatology consultancy program on the number of referrals to the rheumatology unit (RU), the waiting times for new visits at the RU, and the satisfaction of the general practitioners (GPs) with respect to the RU.

Methods. From September 2003 to August 2004 a consultancy program was carried out by 4 consultant rheumatologists of the RU and 117 GPs, consisting of biweekly clinical sessions in which cases were commented upon prior to referral and local clinical guidelines on 10 musculoskeletal disorders were discussed. Referral rates to the RU, 5-item GP satisfaction questionnaires (patient accessibility to the RU, information obtained after the visit, GP accessibility to the RU, communication between levels, and resolution capacity of the RU), waiting times, and number of patients waiting for a visit were analyzed. These variables were compared before and after the intervention.

Results. New referrals to the RU significantly diminished during the intervention year (1141 vs 1652 in the previous year, 5.5% patients referred vs 8.1% previous year; $p < 0.0001$). GP satisfaction improved significantly for all items ($p < 0.0001$). The waiting time for first non-urgent visit diminished from 7 months to 1 month ($p < 0.01$) during the intervention year, and the number of patients on the waiting list was reduced from 790 to 51 ($p < 0.05$).

Conclusion. A consultancy program between rheumatologists of a RU and GPs of the same area showed improvement in GP satisfaction and reduced the number of referrals to the RU and the waiting times for new non-urgent visits. (First Release May 1 2007; J Rheumatol 2007;34:1328–31)

Key Indexing Terms:

CONSULTANCY
WAITING TIMES

MUSCULOSKELETAL
PRIMARY CARE

RHEUMATOLOGY
GENERAL PRACTITIONERS

Musculoskeletal disorders (MSD) cause half of the absenteeism for sick leave in Spain. In an epidemiological study (EPISER), the authors found that 22.6% of the population over the age of 20 years complained of chronic rheumatic disease¹. About one-third of the population in Spain and 24% of that in Canada have visited at least one physician for MSD in the past year^{1,2}. MSD constitute about 15% of the case load of general practitioners (GPs) in the UK³.

In a context of increasing demand for healthcare by patients with MSD, professionals from our public health funding agency (Catalan Health Service, *Catsalut*), the local pri-

mary care service (SAP Granollers-Mollet), and the hospital rheumatology unit (Fundació Hospital/Asil de Granollers) designed a program to improve communication between primary and secondary care services and increase the resolution capacity of the GPs in MSD and save referrals to the rheumatology unit, thereby reducing the waiting time for new non-urgent visits.

MATERIALS AND METHODS

The setting of the program was the region of Vallès Oriental, Catalonia, Spain, with a population of over 360,000. It is served by 15 healthcare areas, with 117 GPs. The general hospital of Granollers is the referral center for 10 healthcare areas. The rheumatology unit has 4 rheumatologists and is the rheumatology referral unit in this area.

The program consisted of 1-hour biweekly sessions conducted by a rheumatologist with the GPs in each healthcare area. From September 2003 to August 2004, 120 sessions were scheduled, with a break during the Christmas and summer holidays. The 4 rheumatologists participated in the sessions and all the GPs were invited to join the program.

In the consultancy sessions, new cases with MSD were discussed to determine joint approaches to case management. During the sessions, local clinical guidelines on 10 common MSD were revised and discussed. Guidelines were focused on counselling regarding diagnostic tools, treatment options, and referral criteria.

Outcome measures.

1. Activity of the consultancy program:

- Number of consultancy sessions
- Number of GPs attending each session
- Number of cases discussed and referrals of cases discussed

From the Rheumatology Unit, Department of Internal Medicine, Fundació Hospital/Asil de Granollers; Catalan Health Service (Catsalut) Centre Region; and Primary Care Service, SAP Granollers-Mollet del Vallès, Catalan Institute of Health, Catalonia, Spain.

X. Surís, MD; D. Cerdà, MD; V. Ortiz-Santamaria, MD; A. Ponce, MD, Rheumatology Unit, Department of Internal Medicine; J.L. Simón, MD, Medical Director, Fundació Hospital/Asil de Granollers; E. Calvo, Health Technician, Catalan Health Service (Catsalut), Centre Region; M.J. Torras, MD, Director, Primary Care Service, SAP Granollers-Mollet del Vallès, Catalan Institute of Health; G. Hoyo, MD, General Practitioner, Director, Sant Celoni Health Area, SAP Granollers-Mollet del Vallès, Catalan Institute of Health.

Address reprint requests to Dr. X. Surís Armangué, Rheumatology Unit, Department of Internal Medicine, Fundació Hospital/Asil de Granollers, c) Francesc Ribas SN, 08400 Granollers, Barcelona, Spain.

E-mail: xsuris@fhag.es.

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- Consultancy program resolution capacity; the percentage of the total cases discussed in the consultancy sessions that were finally not referred to the rheumatology unit.

2. Visits and referrals:

- Number of monthly referrals to the rheumatology unit from the 10 participating healthcare areas
- GP referral rates; the number of referrals to the rheumatology unit of all the GPs of the 10 healthcare areas divided by the total number of population seen by GPs during the period analyzed.

3. The mean waiting time for new non-urgent visits and the number of patients on the waiting list were evaluated every 4 months.

4. Satisfaction of GPs: A 5-item satisfaction questionnaire was given before (67/117 surveys returned, 57.2%) and 9 months after initiating the program (73/117 returned, 62.3%). Participating GPs were asked to score the accessibility of their patients to the rheumatology unit, the information received after the visit, the GP accessibility to the rheumatology unit, communication between the 2 levels, and the resolution capacity of the rheumatology unit on a scale from 0 (no satisfaction) to 10 (maximal satisfaction). The results of the first and second questionnaires were compared.

Statistical analysis. Statistical analysis was performed of the differences in the referral rates between the intervention year and the year before (chi-squared test). The T test for independent samples was used to analyze the comparative results of all variables in the satisfaction surveys. The waiting time to be seen at the rheumatology unit as well as the number of patients on the waiting list were analyzed in a regression model with 4 points-in-time measures (Pearson's correlation coefficient). Statistical analysis was undertaken with SPSS, version 12.0.

RESULTS

1. Activity of the program. The predicted number of 120 consultancy sessions was performed during the pilot-year. The average number of clinical cases discussed in each session

was 4.6. Of these, a mean of 1.43 cases in each session were referred to the rheumatology unit. Therefore, consultancy program resolution was 69%. A mean of 8 GPs were registered in each consultancy session. The mean number of GPs in each healthcare area was 11.7.

2. Visits and referrals. Figure 1 shows the monthly record of the number of referrals to the rheumatology unit from 1 year before the beginning to the end of the program. The number of monthly referrals to the rheumatology unit was lower in the intervention year, except in December, July, and August, when the program was not running at full capacity. At the end of the pilot-year the total number of GP referrals was 31% lower compared with the previous year (1141 vs 1652). The total number of new visits in the rheumatology unit increased slightly during the program (1972 vs 1906 in the previous year, 3.34% increase). The GP resolution capacity with respect to MSD improved significantly during the program. The referral rate to the rheumatology unit decreased significantly from 8.13 per 1000 (1652 out of 203,206) to 5.53 per 1000 (1141 out of 206,285), a difference of 2.59% (95% CI 2.09–3.10, $p < 0.0001$).

3. Waiting times and people on the waiting list. Analysis of data showed negative trends for both variables. The waiting time to be seen showed a negative trend over 4 time measures (Pearson $R = 0.993$, $p < 0.01$), dropping by a mean of 15 days per person/month (95% CI 119.7–9.2) over the whole period of study (Figure 2). Similar findings were observed for the number of people waiting to see a rheumatologist (Pearson $R = 0.958$, $p < 0.05$): this decreased by a rate of 61 persons per month (95% CI –113 to –5).

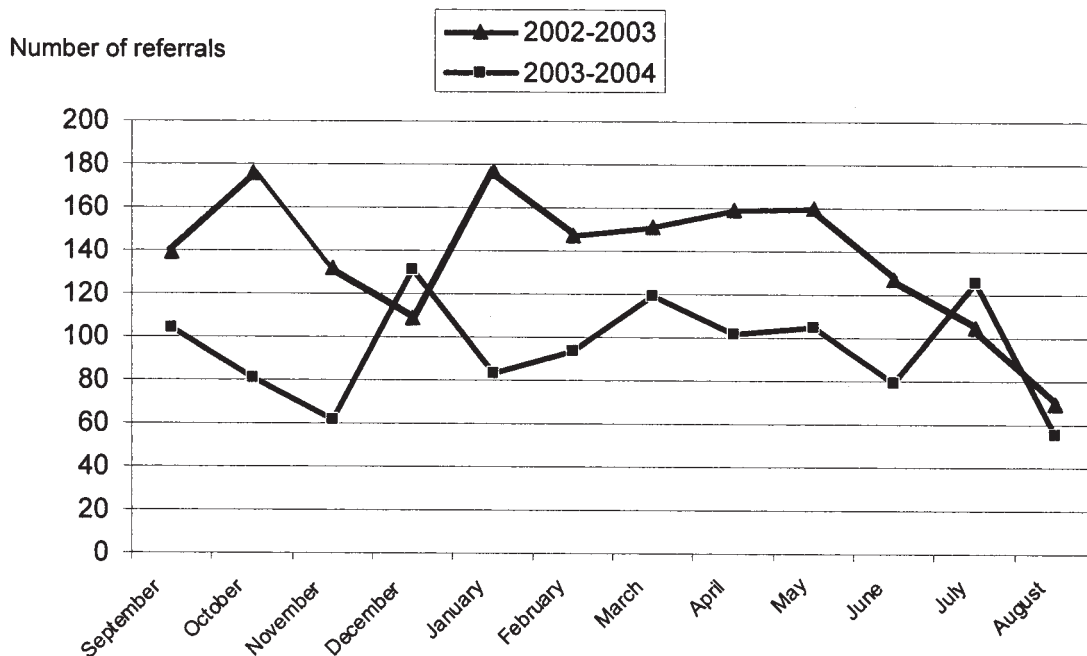


Figure 1. Monthly change in the number of referrals to the rheumatology unit during the pilot-year, compared with the preceding year.

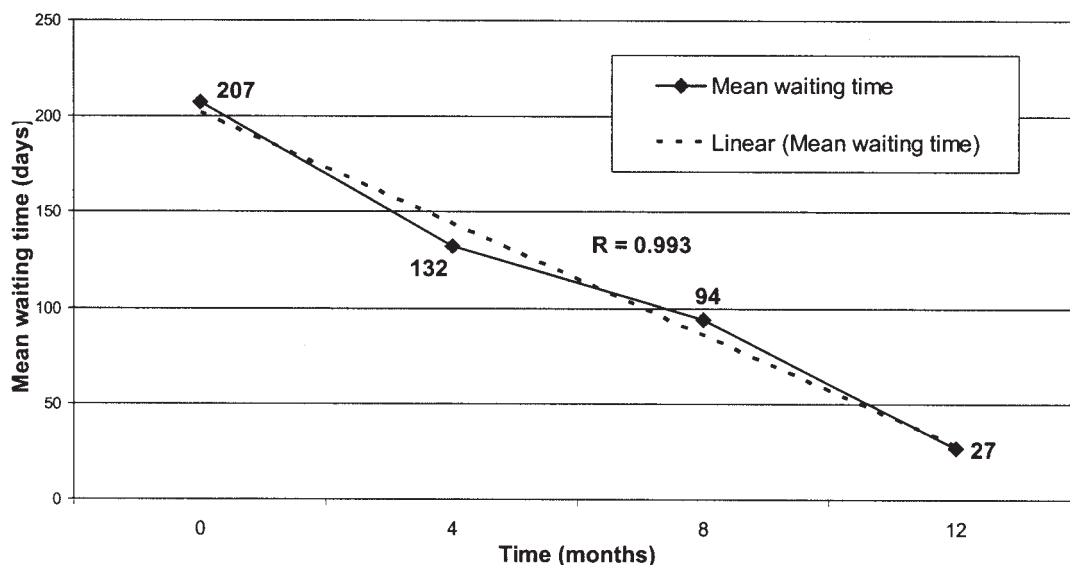


Figure 2. Change in wait times for new non-urgent visits throughout the pilot-year.

Table 1. Results of the GP satisfaction questionnaires. Scoring on a scale from 0 (no satisfaction) to 10 (maximal satisfaction).

Item	Year	Mean Score \pm SD	p	Difference	95% CI
Patient accessibility to the RU	2003	3.63 \pm 2.30	< 0.0001	3.89	3.15–4.64
	2004	7.52 \pm 2.15			
Resolution capacity of the RU	2003	6.03 \pm 2.34	< 0.0001	1.94	1.27–2.61
	2004	7.97 \pm 1.60			
Information received by the GP after the RU visit	2003	4.93 \pm 2.58	< 0.0001	2.24	1.39–3.09
	2004	7.17 \pm 2.50			
GP accessibility to the RU	2003	5.06 \pm 2.55	< 0.0001	3.10	2.33–3.86
	2004	8.15 \pm 1.94			
Communication between GPs and rheumatologists	2003	6.72 \pm 2.19	< 0.0001	1.64	1.00–2.29
	2004	8.36 \pm 1.63			

RU: rheumatology unit, GP: general practitioner.

4. Satisfaction of GPs. The mean scores obtained from questionnaires before and after implementation of the program are shown in Table 1. The 5 items evaluated by the GPs showed a significant improvement ($p < 0.0001$). The best result in terms of change from baseline to final mean score corresponded to patient accessibility to the rheumatology unit.

DISCUSSION

Outpatient rheumatology departments are often overworked due to the increase in the demand for healthcare by patients with MSD. Several different strategies have been tested to alleviate this problem. The implementation of outreach clinics did not help to shorten the waiting times in England⁴. Further, several studies have demonstrated that longterm attendance in outreach clinics increases the public healthcare workload and

costs^{5,6}. Nevertheless, a combined initiative with educational initiatives and outreach visits was well evaluated in Spain⁷. Pre-appointment management may be an efficient strategy to improve access to care of rheumatic disease⁸. On the other hand, Schulpen, *et al* have reported the results of a failed initiative to accelerate the referral of patients back to their GPs in a joint consultation model⁹. Tele-health may be an acceptable alternative to traditional consultation for MSD in geographically isolated areas¹⁰. Finally, an advanced access model improved the access and satisfaction measures and also reduced the healthcare costs, but increased overall referrals in a study performed in the United States¹¹.

Primary care is the most important level in terms of the percentage of patients with MSD who seek medical attention². GPs are usually self-sufficient in taking care of gout, back

pain, osteoarthritis, and sports injuries³, and personal instruction conducted by rheumatologists has been shown to be useful in improving the management of MSD by GPs¹².

The problem of the magnitude of the burden of MSD in primary care and the limitations of access to rheumatologists is shared among the developed countries, and has been a subject of concern in recent editorials^{13,14}. We have obtained very positive results in terms of the number of referrals, waiting times for non-urgent visits, and GP satisfaction in the first year of our consultancy program.

It should be emphasized that these are the results of a pilot program. We cannot predict the development of outcome measures in the future, but we believe that continuing communication and support will enhance the professional capacity of GPs in the management of MSD in the long term.

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