were analyzed with univariate statistic. The impact on QoL was determined by McNemar test and repeated measures analysis of variance (rANOVA)

Results: The most affected dimensions of the EQ-5D were pain/discomfort and anxiety/depression, while the least affected was self-care. When comparing each dimension before and after the entry to the tight control program, a significant increase in the proportion of patients that perceive level 1 for each aspect evaluated was found. In addition, significant improvement was found in the global EQ-VAS (table 1)

Table 1 Percentage of the levels of EuroQol by dimension according to the diagnosis

		RA N=3812		SLE N=590		SpA N=605		Total N=5007		P- Value
		Initial (%)	Final (%)	Initial (%)	Final (%)	Initial (%)	Final (%)	Initial (%)	Final (%)	
Mobility	1	43	55,7	59,8	45,4	56,5	65,9	46,1	52,6	0,003
	2	54,9	42,1	38,8	52,8	41,5	32,4	53,4	46,4	
	3	2	2,2	1,4	1,8	2	1,7	0,5	1	
Self-care	1	61	69,1	76,9	62,7	70,1	79,2	59	67,4	0,001
	2	37,8	29,4	21,9	36,2	28,5	19,5	40,3	32,2	
	3	1,1	1,5	1,2	1,1	1,4	1,4	0,7	0,3	
Usual activities	1	48	55,8	61,4	49,7	56,8	68	48,6	52,2	0,001
	2	47,9	41,3	35,8	46,5	40,8	30	47,9	45,5	
	3	4,1	2,9	2,9	3,9	2,7	2	3,5	2,3	
Pain/discomfort	1	23,3	31,7	33,2	24	32	40,3	19,7	25,8	0,002
	2	53,3	54,4	50,7	53,4	54,1	48,6	56,9	57,2	
	3	23,4	13,9	16,1	22,5	14	11	23,5	17	
Anxiety/depression	1	56,5	65,6	53,9	56,1	65	66,1	56,5	60,7	0,001
	2	33,4	27,5	35,9	33,8	27,8	26,3	34,2	31,7	
	3	10,2	7	10,2	10,1	7,1	7,6	9,3	7,6	
Global VAS mean (SD)		68,8 (19,8)	70,4 (22,6)	72 (19,8)	68,8 (19,9)	70,5 (22,2)	75 (18,6)	65,7 (20,5)	65,9 (21)	0,001

Significant statistical differences were found for all the dimensions in each pathology (initial vs final) except:

¹ Self-care in SLE ($p=0,719$)

² Usual activities in SpA ($p=0,337$)

³ Anxiety/depression in SpA ($p=0,27$)

⁴ Global VAS in SpA ($p=0,889$)

Conclusions: The tight control multidisciplinary rheumatology program is an efficient strategy to improve the QoL and the health perception of patients with chronic autoimmune diseases which impacts on the functionality, performance of everyday activities and productivity

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5916

FRI0633

HOW DO WE IMPLEMENT THE EULAR RECOMMENDATION THAT RHEUMATOLOGISTS CAN SEE EARLY ARTHRITIS PATIENTS WITHIN SIX WEEKS AFTER SYMPTOM ONSET? A FIVE-YEAR COMPARATIVE STUDY OF AN EARLY ARTHRITIS RECOGNITION CLINIC.

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Background: Early treatment of inflammatory arthritis (IA) associates with improved outcomes. Therefore, the first recommendation in the 2016 update of the EULAR guidelines for management of early IA states that patients presenting with IA should be seen by a rheumatologist ≤ 6 weeks. Data on how to implement this recommendation are lacking. A screening clinic situated in between primary and secondary care, the Early Arthritis Recognition Clinic (EARC), has previously shown to increase early identification of rheumatoid arthritis patients. However, it is unknown if this effect is sustained when applied for several years and if this approach is of added value to identify patients within the 6-week limit set by EULAR.

Objectives: To study if an EARC approach can lead to sustained early identification of patients with IA (as compared to regular referral to our Early Arthritis Clinic (EAC)) and to determine the efficacy to identify patients ≤ 6 weeks after symptom onset.

Methods: To promote early recognition of IA, the EARC was initiated in September 2010 in the Netherlands. General practitioners (GPs) were instructed to refer to this screening clinic without a scheduled appointment if they were unsure about the presence of IA (instead of a 'wait-and-see' approach or performing additional tests). At the EARC, patients were seen for a 5-minute visit by an experienced rheumatologist who performed a full 66-joint examination for clinical synovitis. GPs can also refer directly to the EAC, where patients are seen < 2 weeks' time. Thus, GPs in our region can refer directly for a full visit in secondary care, or to a short visit to a screening clinic that is situated in between primary and secondary care. Patients identified with IA at the EARC or after (direct) referral to the EAC between September 2010 and December 2014 were compared for symptom duration at IA identification.

Results: Of the 1,151 patients visiting the EARC, 475 (41%) were diagnosed with IA. Firstly, proportions of patients with IA at the EARC were studied per year. These remained stable over time: 45% in 2010, 39% in 2011, 45% in 2012, 42% in 2013 and 36% in 2014. Clinical characteristics of these patients were similar over time. In the same period 675 referred patients were diagnosed with IA at the EAC; these were compared to the 475 IA patients that were identified via the EARC. Demographic characteristics were similar. However, median symptom duration of the IA patients in the EARC-group versus the EAC-group at identification of IA were 10.7 vs 17.0 weeks in 2010 ($p<0.0001$), 7.3 vs 13.7 weeks in 2011 ($p=0.0001$), 6.3 vs 9.8 weeks in 2012 ($p=0.056$), 5.6 vs 10.7 weeks in 2013 ($p=0.012$) and 5.7 vs 8.3 weeks in 2014 ($p=0.060$). Proportions of patients with IA seen by a rheumatologist ≤ 6 weeks in the EARC-group versus the EAC-group were: 34% vs 19% in 2010, 43% vs 20% in 2011, 43% vs 33% in 2012, 48% vs 30% in 2013 and 44% vs 33% in 2014.

Conclusions: A screening clinic in between primary and secondary care has sustainable benefit with regards to early identification of inflammatory arthritis and allows $>40\%$ of patients to be identified within the timelines as recommended by EULAR.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.4613

FRI0634

COST SAVINGS OF USING HLA-B*27 TAG SNP GENOTYPING TO DETERMINE HLA-B*27 STATUS IN A CANADIAN POPULATION

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Background: HLA-B*27 is a useful genetic marker for screening axSpA [1,2] to determine who can benefit from rheumatologic evaluation in a primary care setting [3]. Currently, entire HLA-B locus tests are the gold standard for determining HLA-B*27 status but they are expensive. With a sensitivity of 97.6%, the cheaper HLA-B*27 tag-SNP assay could offer a less expensive yet rigorous testing option. Specifically, the HLA-B*27 tag-SNP assay could be ordered as first-line screening test for patients with inflammatory axial pain by primary care doctors, with the HLA-B locus assay only requested by rheumatologists for patients with a negative tag-SNP test result but a strong clinical suspicion of HLA-B*27 positivity. Economic impact of this hybrid testing strategy is not yet established.

Objectives: To determine the cost savings of using the hybrid testing strategy instead of giving HLA-B locus assay to all patients with inflammatory axial pain.

Methods: We estimated the total cost of using the HLA-B*27 tagSNP assay for a sample of 510 patients who underwent the test between August 1, 2016 and July 31, 2017 in Newfoundland and Labrador, Canada. We compared this cost with the cost that would have been incurred if these same patients were instead tested with the HLA-B locus test.

Results: Total cost of testing 510 patients with HLA-B locus test was \$30,557 at an average cost of \$60 per test. Cost of testing these patients with HLA-B*27 tagSNP assay was \$1,673 (with average cost per test of \$3.28). Among those who tested negative on the HLA-B*27 tagSNP assay, 2.3% (~10 patients) would be falsely diagnosed negative. The HLA-B locus test would be ordered in half of these patients after medical history is reviewed by a rheumatologist. Hence, total costs of testing 510 patients with the HLA-B*27 tagSNP assay were \$1,963. Consequently, cost savings from using HLA-B*27 tagSNP assay instead of HLA-B locus tests were \$28,594 for this sample of 510 patients. This amounted to a 94% reduction in costs relative to the scenario where all patients are tested with HLA-B locus tests.

Conclusions: Screening for HLA-B*27 status among axSpA patients of Caucasian descent with HLA-B*27 tag-SNP testing with the gold standard HLA-B locus test only requested for those in whom such need is determined by rheumatologists can result in significant cost savings relative to giving HLA-B locus tests to all patients with inflammatory axial pain.

Acknowledgements: 1. Robinson PC, Brown MA. *Mol Immunol*. 2014;57:2–11.