

Societal costs of autoimmune MSD in Czech Republic

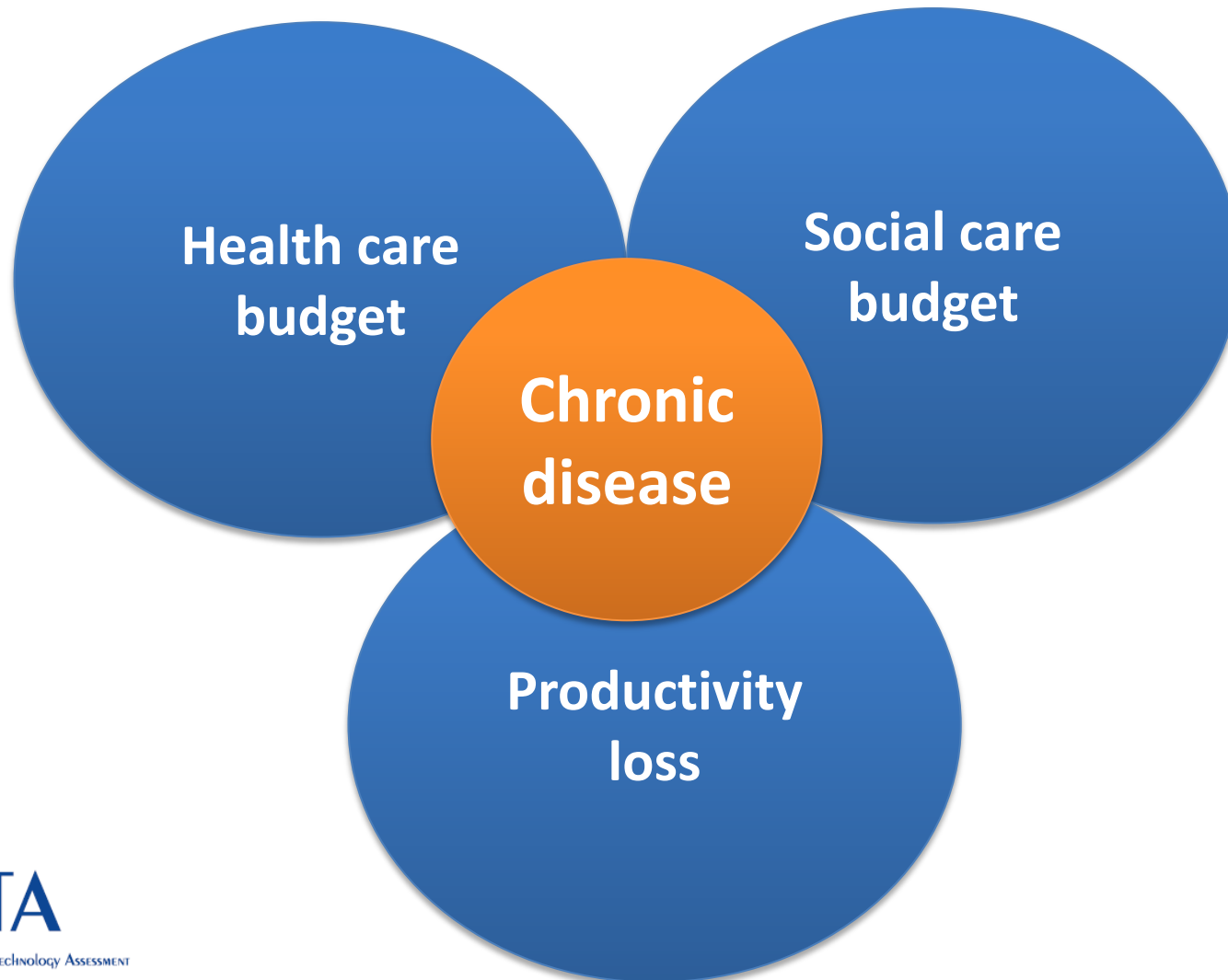
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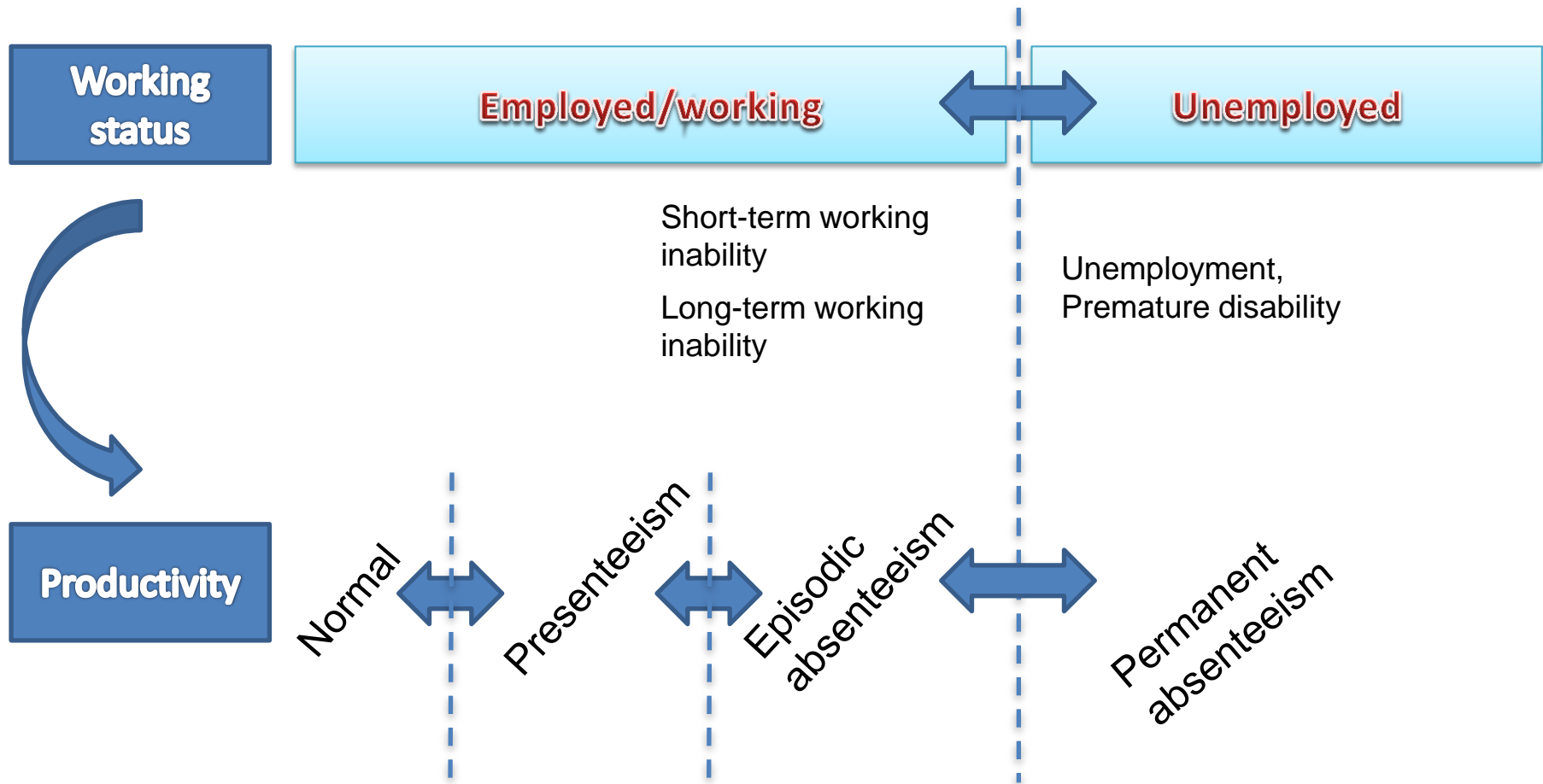


BUDGET SILO MENTALITY

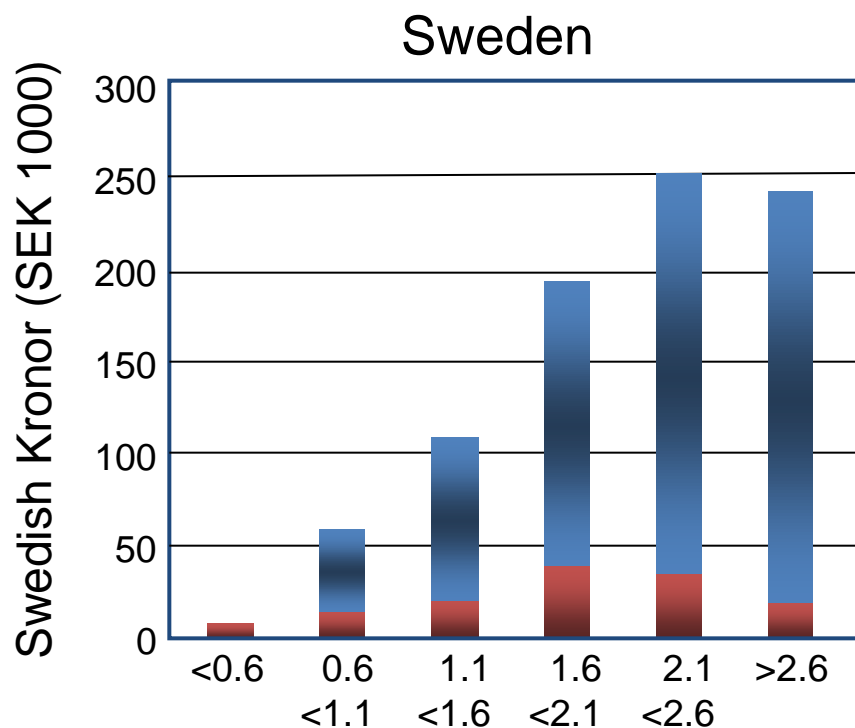
...MSD DOES NOT RESPECT THE BUDGET FRONTIERS



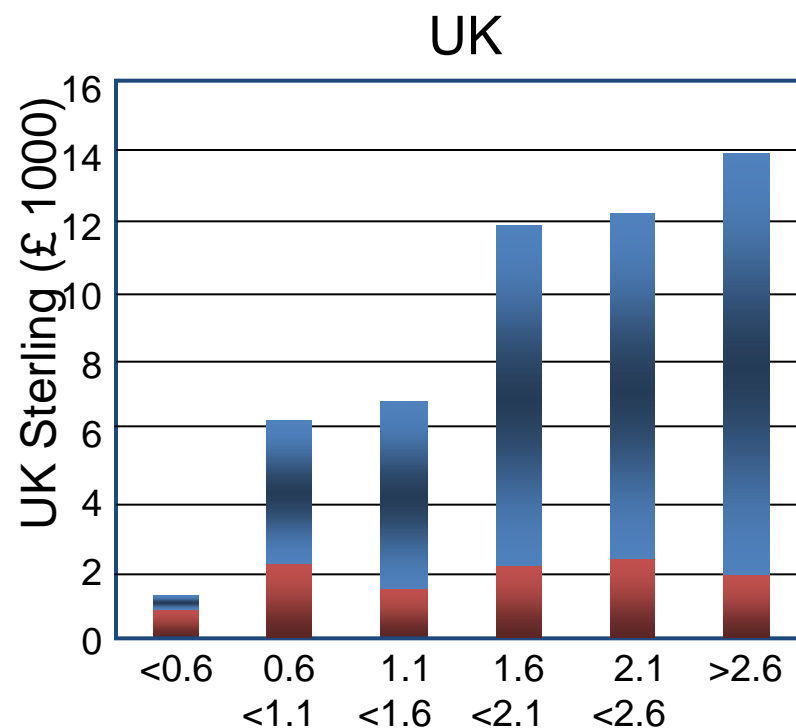
WORKING STATUS / PRODUCTIVITY



COST/DISEASE SEVERITY



£1 = SEK 15; €1 = SEK 9.3, £0.6

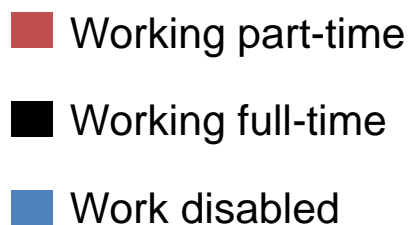


■ Direct costs ■ Indirect costs

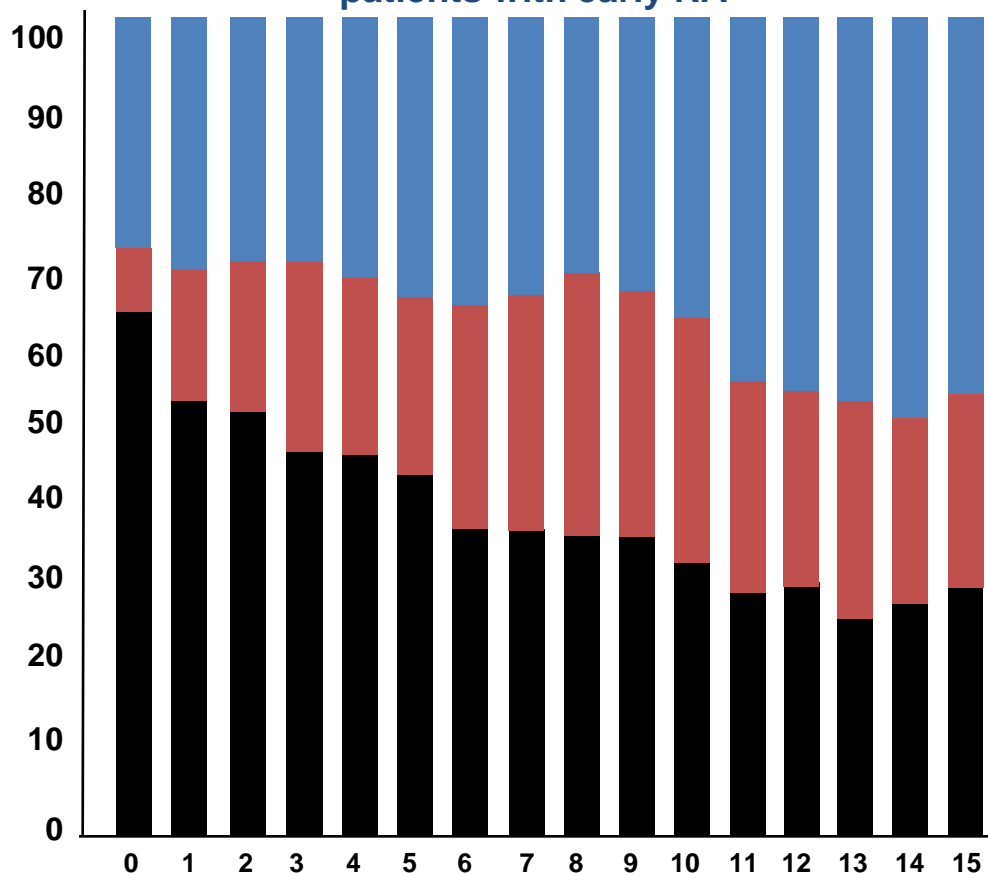
DISABILITY/DISEASE PROGRESSION

Working disability:

- ~20% in 1st year
- 32% to 50% after 10 years
- Up to 90% after 30 years

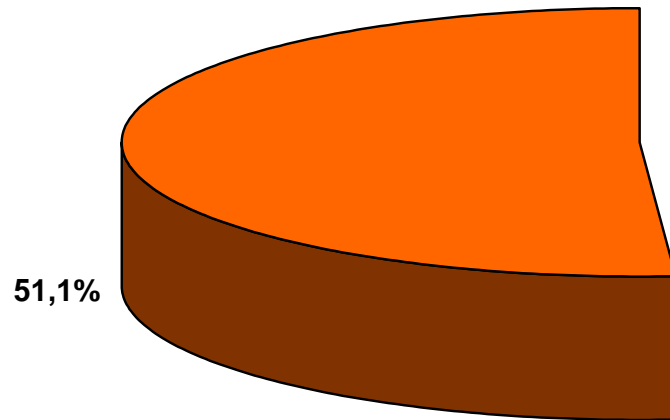


Development of work disability over 15 years in 148 patients with early RA

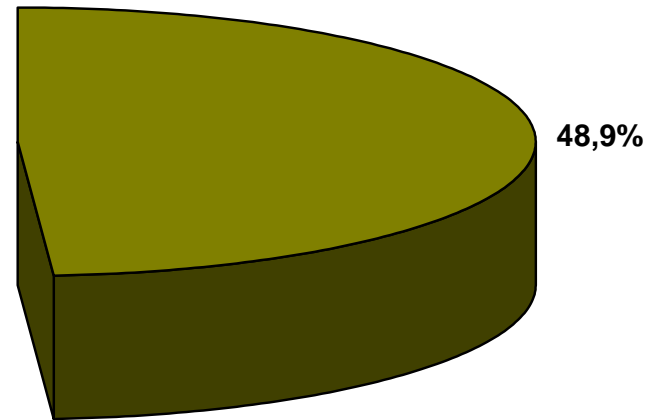


COST STRUCTURE OF ANKYLOSING SPONDYLITIS

INDIRECT



DIRECT



Celkové náklady na M. Bechtěrev/pacienta a rok: 72.020

- CELKEM PŘÍMÉ V Kč/pacienta a rok
- CELKEM NEPŘÍMÉ NÁKLADY V Kč/pac

AIMS OF THE PROJECT

- To assess and compare the impact of rheumatoid arthritis (RA), ankylosing spondylitis (AS) and psoriasis (Ps) on work productivity, to estimate productivity costs in the Czech Republic and to evaluate the effect of functional status and disease activity on productivity costs across these four rheumatic diseases.
- Needs:
 - As the costs from societal perspective were never calculated the indirect costs are invisible and not taking into account.
 - The benefit in preventing/postponing invalidity are not included into new technology assessment.
 - There was a need to educate key stakeholders about productivity loss/costs in chronic progressive conditions.

WORK PRODUCTIVITY AND PRODUCTIVITY COSTS OF PATIENTS WITH RHEUMATOID ARTHRITIS, ANKYLOSING SPONDYLITIS AND PSORIASIS IN THE CZECH REPUBLIC

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Figure 1. WPAI domains

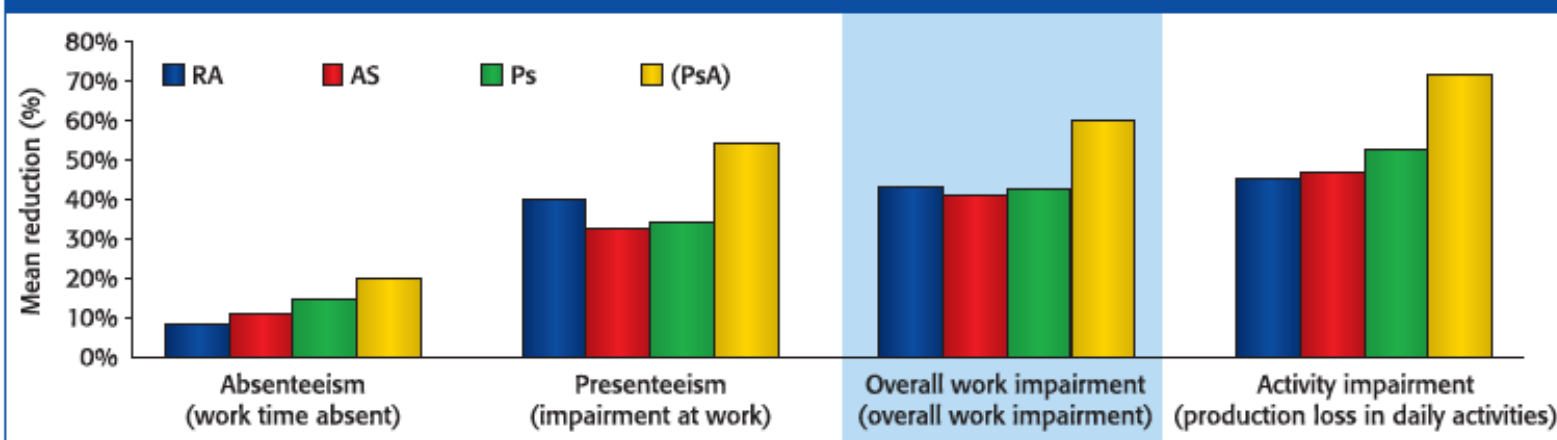
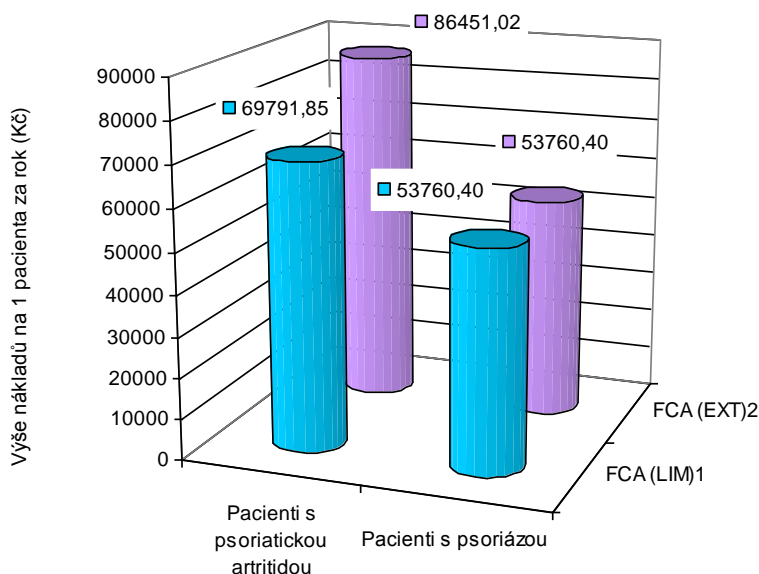


Table 2. Predictors of productivity loss and productivity cost, multivariate linear regression analyses

Parameter	RA			AS			Ps (PsA)		
	$\beta_{\text{overall WPAI}}$	$\beta_{\text{PC(FCA)}}$	P-value	$\beta_{\text{overall WPAI}}$	$\beta_{\text{PC(FCA)}}$	P-value	$\beta_{\text{overall WPAI}}$	$\beta_{\text{PC(FCA)}}$	P-value
HAQ ^{RA,AS} , BSA (0%) ^{Ps(PsA)}	23.9	21.2	< 0.001	20.1	17.9	< 0.001	222.0 (-236.0)	0.2 (-0.2)	0.433 (0.613)
DAS 28 ^{RA} , BASDAI ^{AS} , PASI ^{Ps(PsA)}	-141.0	-0.1	0.977	6.2	5.5	< 0.001	-195.0 (-681.0)	-0.2 (-0.6)	0.780 (0.636)

POPULATION FINANCIAL IMPACT

Náklady související se ztrátou produktivity u pacientů s psoriatickou artritidou a psoriázou, FCA



Psoriatická artritida/psoriáza

Working absence = 6,3 hours
per 1 week (absenteeism)

Working performance
decreased by 36%
(presenteeism)

**Total population financial
impact is cca 4 bilions
CZK/year**

CONCLUSIONS/APPLICATIONS

- **1st phase:**
 - to capture representative and scientifically valid results
 - to make societal cost of MSD visible in financial terms
- **2nd phase:**
 - attract the attentions of key stakeholders and translate the scientific results into political speech – sense of urgency
 - gain media coverage and patient's group support
- **3rd phase:**
 - to achieve the policy change
 - broke up the silo mentality (i.e. include societal perspective to health technology assessment – early diagnosis and intervention)