

# Medically Unexplained Symptoms Commissioning Tool

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# Background

- Medically unexplained symptoms (MUS):

Physical symptoms that GPs cannot explain by physical pathology which distress or impair function of patient

- Some patients prefer term functional somatic symptoms (FSS) instead of MUS

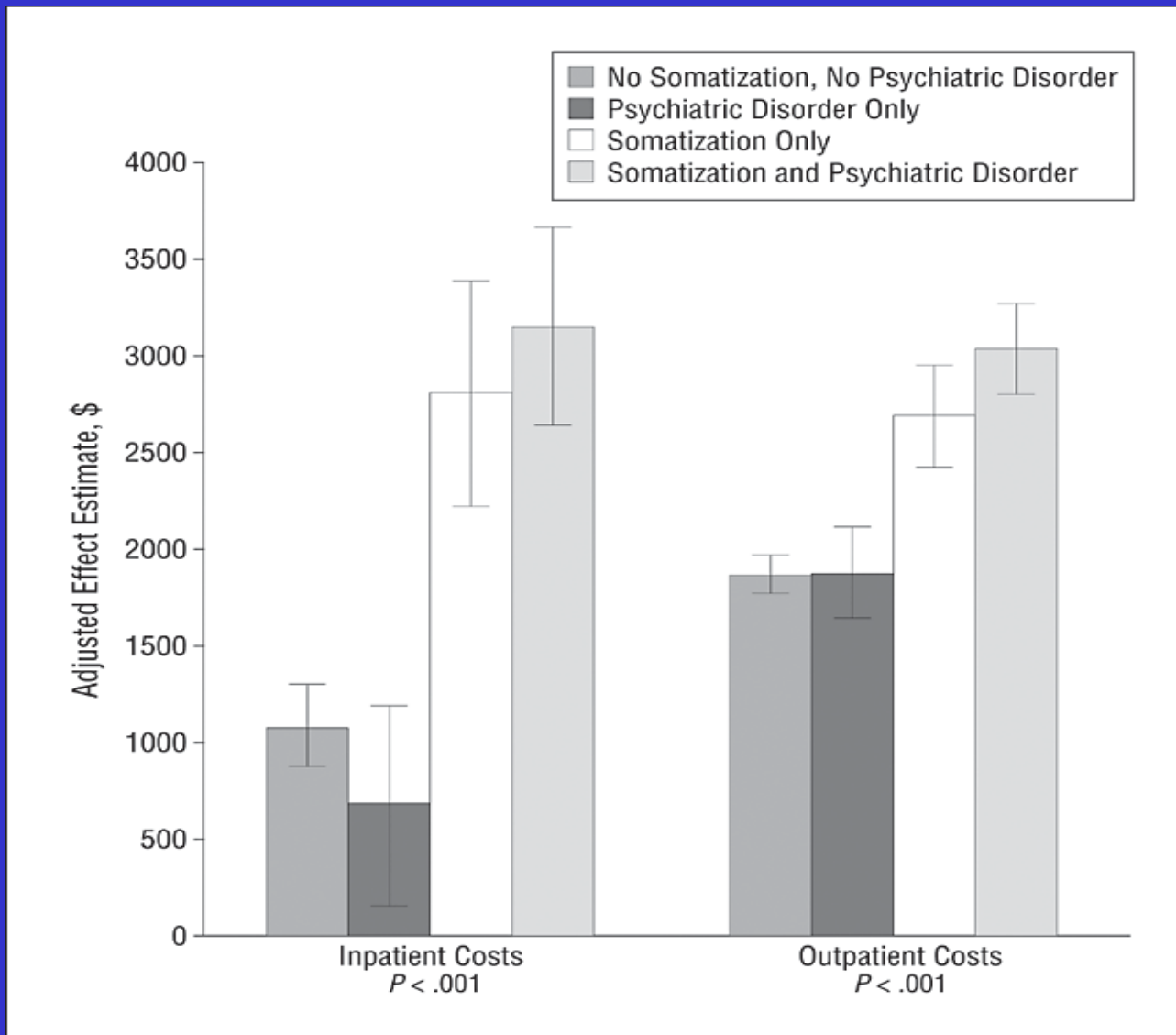
# Prevalence & disability

- MUS present in up to 19% GP consultations
- 2.6% patients frequently attend at GP & have MUS (>12 annual visits to GP).
- Also regular attendance at hospitals, high no. investigations & prescriptions
- WHO – 2x impaired in daily activity compared to chronic medical conditions e.g. asthma

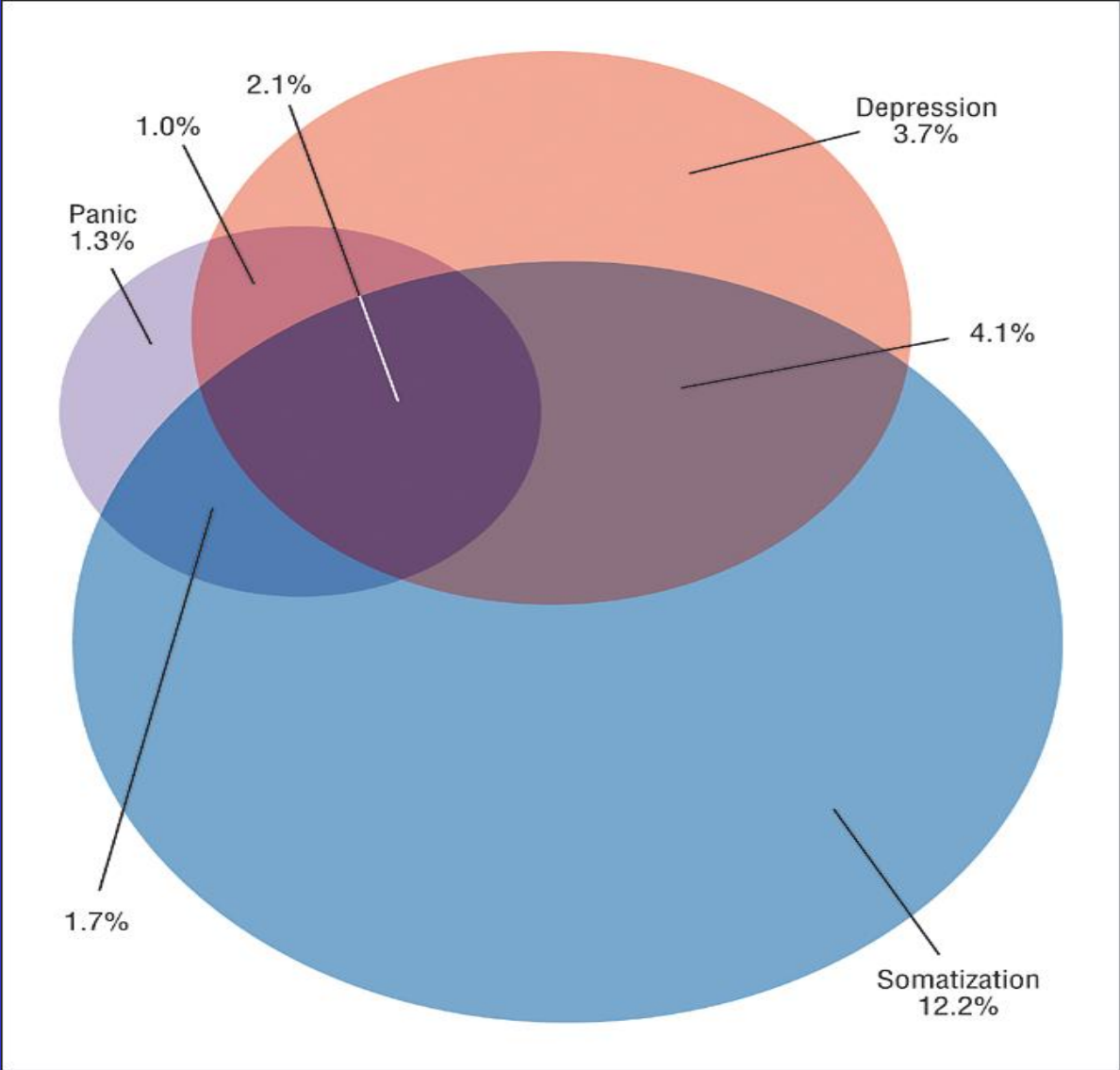
# Costs

- MUS cost US \$256 billion annually in terms of health costs (Barsky, 2005).
- MUS 2x hospital in-patient & out-patient care and 2x overall costs other patients.
- In a PCT of 600,000 population, MUS cost £20 million per year for PCT.
- Multiple MUS associated with 20% increased mortality (SMR) - cancer, accidents & suicides.

# The effects of somatization and psychiatric disorder on cost, reported as adjusted effect estimates (from linear regression) and standard errors



# Overlap of major depression, panic disorder, and somatization, reported as a percentage of the total sample (N = 1426)

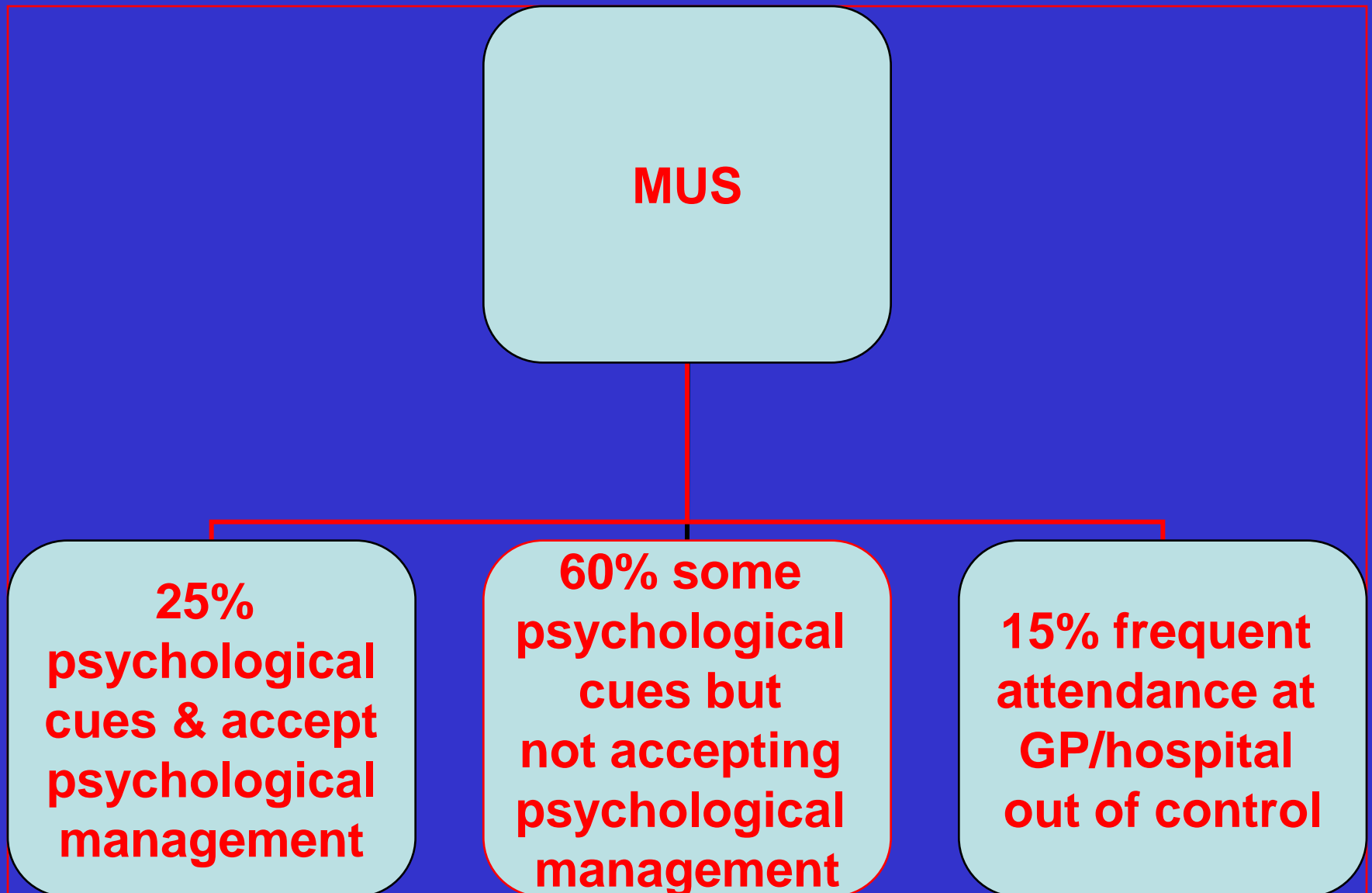


# Current GP management

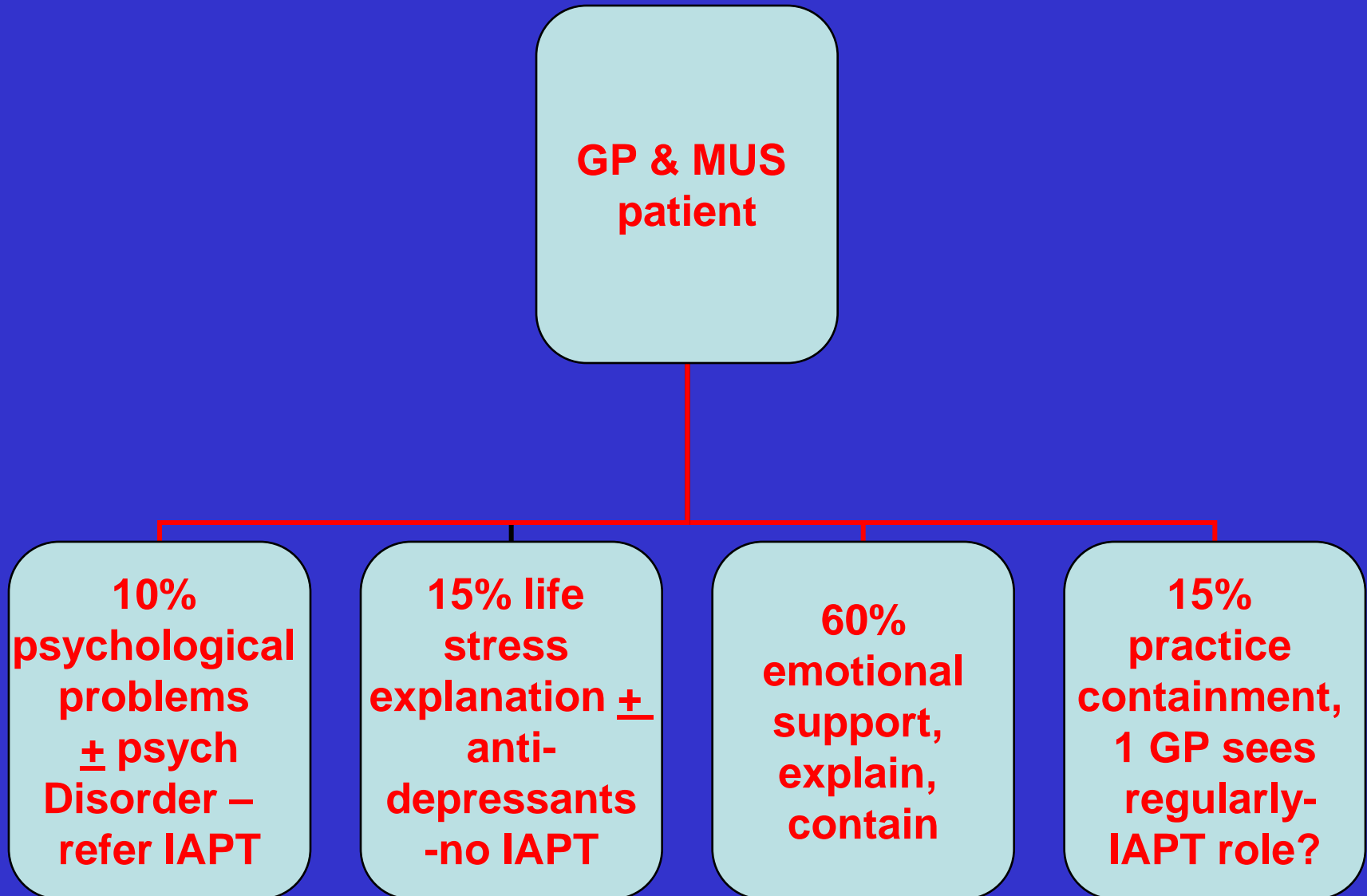
- **MUS patients seek (MRC studies):**
  - **emotional support\***,
  - **information to clarify problems & concerns**
  - **explanation for symptoms**
  - **help to manage problems.**
- **GPs seek to maintain relationship, not miss serious illness & containment**
- **Consultations often take form of contest**

<b>Variable</b>	<b>Duration in weeks</b>	<b>&lt;6 months</b>	<b>&gt;6 months</b>
<b>Body system</b>	Any	Any	Musculoskeletal, gastro-intestinal, nervous system, fatigue, ill-defined
<b>Number of symptoms</b>	Few	Few	Many
<b>Attendance, primary care</b>	Low	High	High
<b>Investigation</b>	Low	Low	High
<b>Contact with hospital</b>	Low	Low	High
<b>Depression/ anxiety disorder</b>	<10%	20-25%	60-70%
<b>Recurrence with stress</b>	Yes	Yes	No, worsens with stress

# Working classification of MUS problem



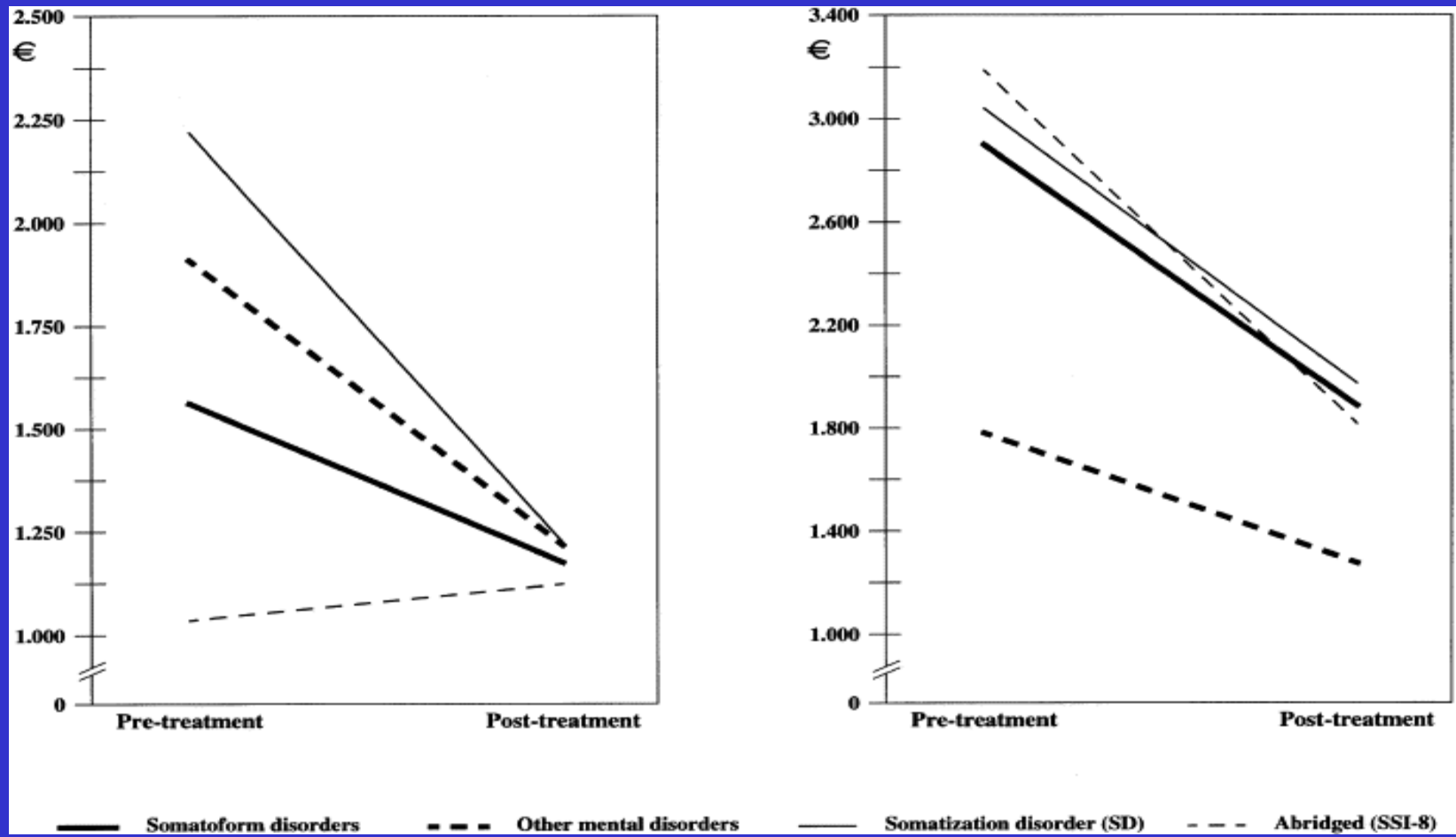
# Management supported by IAPT?



# Benefits for Commissioning

- Reduce unnecessary referral by GP
- If patients needs met, reduce patient self-referral to hospital services
- Reduce unnecessary investigation & prescription.
- MUS tool could be used to estimate likely resource use from IAPT & savings.

# Changes in outpatient (left) and inpatient (right) costs after targeted psychological treatment



## Targeted CBT saved 35% costs in high utilisers & 30% other MUS/ mental disorder over 2 years

Cost factors	SFD	Comparison group
Savings from outpatient treatments [€ (%)]	382 (-24.5)	681 (-35.7)
Savings from inpatient treatment [€ (%)]	1098 (-36.7)	497 (-27.9)
Savings from reduction of sick leave days [€ (%)]	6702 (-35.3)	5105 (-30.6)
Total savings (2 years) [€ (%)]	8182 (-34.8)	6283 (-30.9)
Mean costs of the inpatient treatment program (€)	7325	6525

# How would MUS Tool work?

- Tool would examine the presence or absence of patient conditions, investigations, numbers of contacts & prescriptions in last 2 years that indicate possible MUS.
- Electronic patient record for each patient in the practice will be screened, ideally using only system codes rather than the full record.

# Developing MUS Tool

- Systematic review of literature:
  - primary care & community surveys
  - 100 subjects or more
  - MUS or functional somatic syndromes e.g. irritable bowel syndrome, chronic fatigue, chronic widespread pain, tension headache etc.
- Also red flags for organic disease versus MUS.

# Results of systematic review

- 55 potential predictors of MUS:
  - psychiatric – current & past, treatment
  - risk factors for psychiatric e.g. abuse, stress
  - frequent attendance
  - prescriptions & investigations
  - no. somatic symptoms & physical illness
  - symptomatic presentations
  - obesity, diet, exercise & smoking
  - poor subjective health.
- 4 potential signs of organic disease v MUS

# Primary Data Collection Study

- 10 practices recruited in Nottingham area.
- GP records likelihood & degree of functional impairment/distress associated with MUS in consecutive patients attending index surgeries
- Patient electronic record checked for presence/absence of 55 indicators of MUS and 4 red flags in last 2 years – system codable & free text

# Results

- 471 patients screened: 336 using EMIS & 135 using other systems.
- Possible or probable MUS in 44 (9.4%) patients
  - 33 (6.8%) moderate/severe i.e functional impairment.
- Mean (sd) age = 55 (18) years, 59% female
- 90% power to detect variables of small to moderate effect (effect size  $\geq 0.05$ ) that predict MUS at 5% significance level

# 15 univariate associations with MUS

<b>System Codable</b>	<b>Free-text</b>
<b>Depression</b>	<b>Depression</b>
<b>Anxiety</b>	<b>Anxiety</b>
<b>Chronic fatigue</b>	<b>Chronic fatigue</b>
<b>Obesity</b>	<b>Obesity</b>
<b>Life stress</b>	<b>Life stress</b>
<b>Multiple pain</b>	<b>Health anxiety</b>
<b>Excessive sweating</b>	<b>Sleep problems</b>
<b>Past Depression</b>	<b>No exercise</b>
<b>Past Anxiety</b>	<b>Chronic illness</b>
<b>Antidepressant</b>	
<b>Opiates</b>	

# Future Directions

- Extend data collection- predict 970 patients, able to examine predictors of small effect (effect size 0.02)
- Multivariate model
- ROC curve analysis of multivariate model – sensitivity, specificity, positive predictive value
- Test validity of model derived in 470 patients so far seen in 2<sup>nd</sup> cohort of 500 patients that we hope to recruit
- Explore usefulness to practitioners & commissioners

# Conclusion

- There is scope for MUS tool for commissioning.
- Could it also have a useful clinical role if a programme produced a pop up saying patient has risk factors for MUS?
- May be useful alongside proposed IPT model for managing MUS
- These views are my own & not a policy of DoH.

# Management supported by IAPT?

