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Cost-Effectiveness of Drinking Less online

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Outline

- Background
- Aim
- Method
- Results
- Discussion

Background

Background

In every 10 mln population (aged 18-65 yrs):
- 820.000 DSM alcohol abuse and dependence cases per year [1]
- costing € 2.577.000.000 annually [2]
- very few (<5%) receive professional care [3]

[1] Nemesis studies; [2] KPMG (2001); [3] Andrews et al. (2004).

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Aim

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Aim

- General: to make available an online self-help intervention for problem drinkers which is accessible, effective and affordable.

- In this presentation: focus on the cost-effectiveness of Drinking Less online.

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Methods

Method

- To compare Drinking Less online (exp) with an online information brochure (cntr)

- Clinical endpoint: problem drinker status after 12 months

- Economic endpoint: costs as seen from the societal perspective over 12 months

Costing

The following types of costs are distinguished:

- Intervention costs (in both conditions)
- Direct medical costs (health service uptake)
- Direct non-medical costs (out-of-pocket)
- Indirect non-medical costs (production losses)

All costs detailed in the appendix

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Analysis

- Comparison of clinical and economic endpoints across both treatment arms on an ITT basis
- Calculation of the incremental cost-effectiveness ratio (ICER)
- Taking stochastic uncertainty into account by means of non-parametric bootstrapping (with 2,500 bootstrap replications)
- Graphs: ICER plane, ICER acceptability curve

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Results

Clinical outcomes: succes rates (%) and comparisons after 12 months

	CNTR (%)	EXP (%)	Comparison
ITT with MI	5.1	15.6	OR=3.4 RD=0.10 NNT=9.5
ITT with LOCF = ITT with RI	4.5	8.2	OR=1.9 RD=0.04 NNT=26.8

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Economic outcomes: mean per capita costs (in €) over 12 months

Costs	CNTRL €	EXP €	Difference €
Direct medical	125	85	-40
Direct non-medical	37	27	-10
Indirect non-medical	1191	1038	-154
Total	1364	1192	-171

ICER outcomes

5.4%   26.6%

8.7%   54.3%

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ICER outcomes

78% at € 30K

76% at € 20K

71% at € 10K

63% at € 0

Limit on ICER

Discussion

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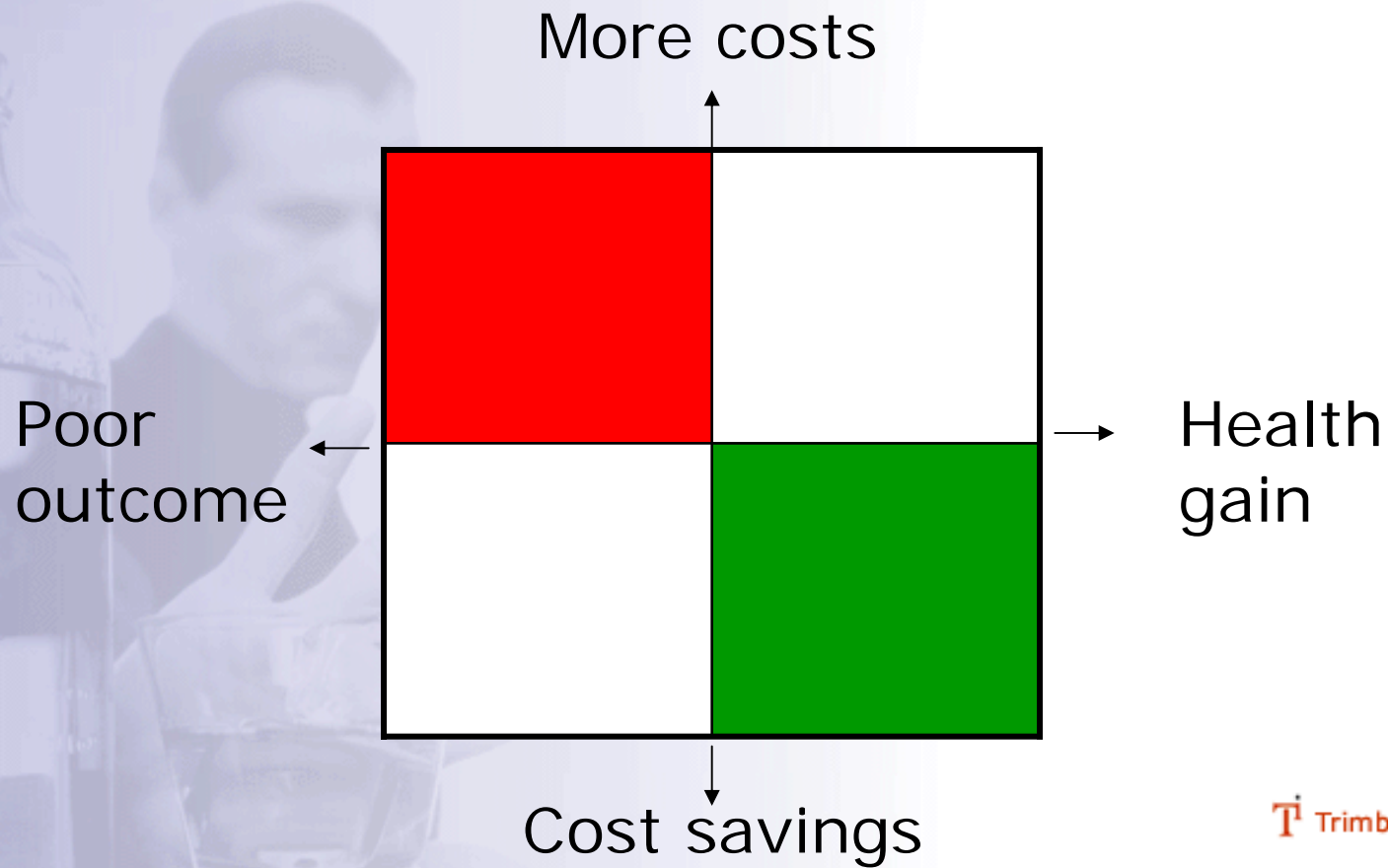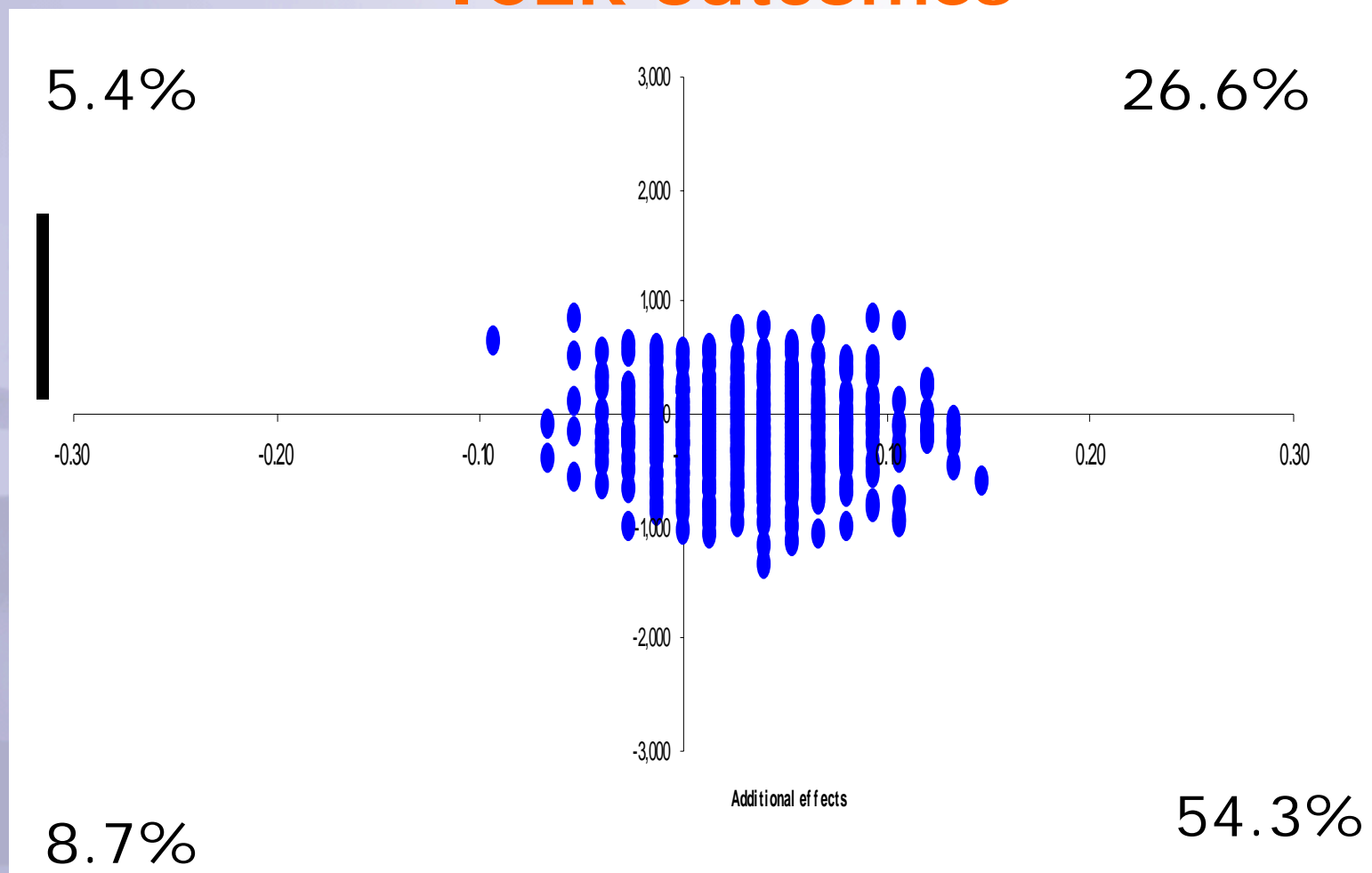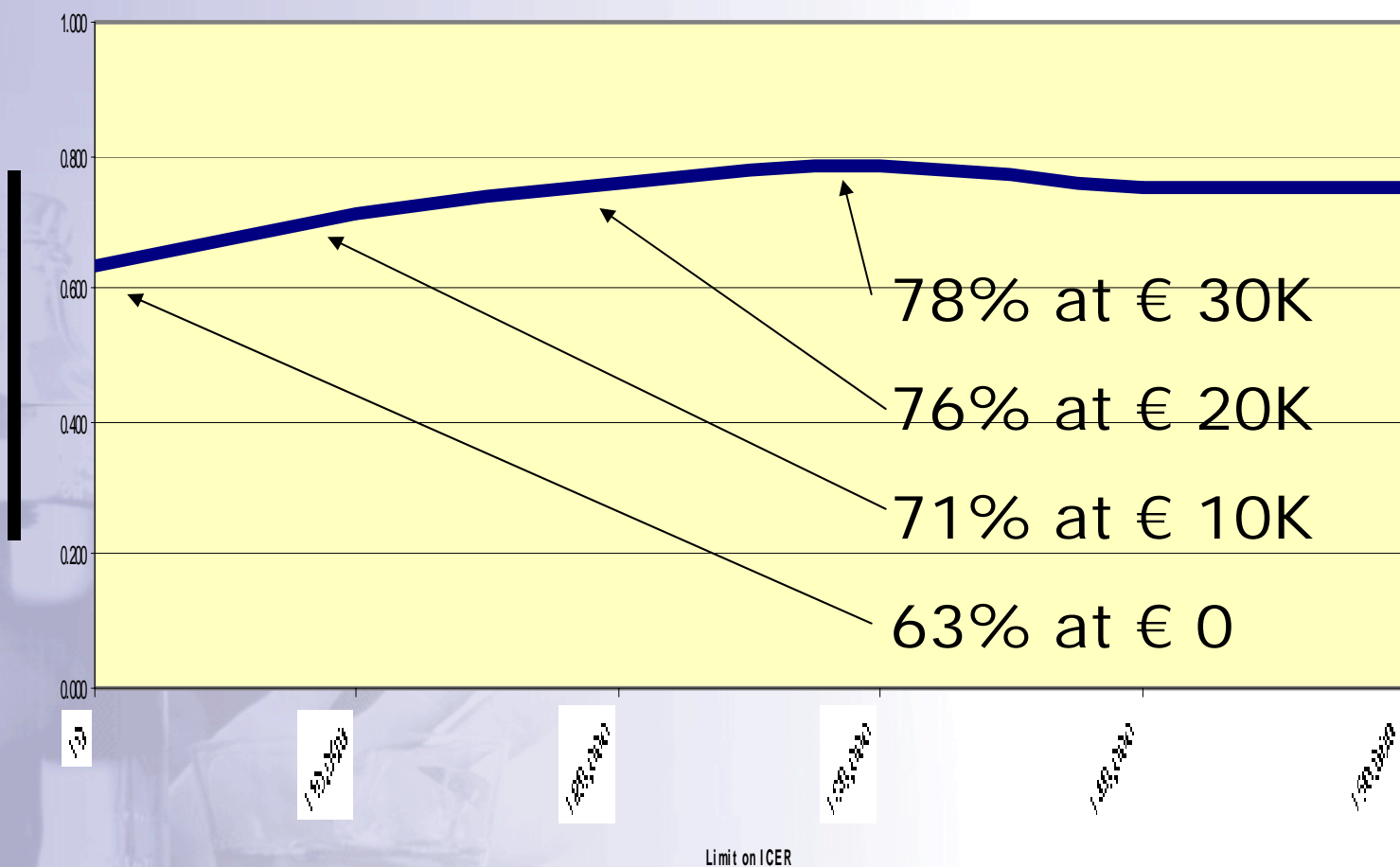
Discussion

Key-findings:

- The online self-help Drinking Less intervention has superior clinical outcomes after 12 months
- Investments in Drinking Less are (more than) balanced by cost offsets
- In terms of cost-effectiveness Drinking Less has a high probability of being more acceptable than the online Information Brochure at different ceilings of the willingness-to-pay

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Implications

- The cost-offsets are in the greater part generated through higher per capita productivity levels in the treatment group
- Hence, employers are pertinent stakeholders

- The savings also occur in the health services, while patients' out-of-pocket costs are also lower
- Hence, both healths service providers and patients benefit from the intervention

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For the future

- Sensitivity analyses to test the robustness of the outcomes
- Large scale role-out of the Drinking Less intervention
- Evaluating cost-effectiveness across a range of settings
- Estimation of population cost-effectiveness

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Appendix

Costing the interventions

Intervention costs are:
- Time costs of online visitors
- Costs of accessing the internet
- Costs of hosting

These costs occur in both conditions [1]

[1] Research & development costs excluded

Costing health service use

Direct medical costs are the unit costs of:

- General practitioner (consult)
- Hospitalisation (day)
- Out-patient visits to addiction clinics (session)
- Use of prescription drugs (daily dose)

etc, etc. [1]

[1] Cf. Oostenbrink et al, 2004

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Costing out-of-pocket costs

Direct non-medical costs are:

- Costs of travelling
- Parking costs
- Time costs

made by patients in the context of health service uptake [1]

[1] Cf. Oostenbrink et al, 2004

Costing production losses

Indirect non-medical costs are:
- Production losses due to work loss days
- Production losses due to work cutback days
- Production losses in the domestic realm [1]

[1] Cf. Oostenbrink et al, 2004