The use of multi-criteria decision methods in health care

Does method used influence outcome?

INTRODUCTION
• Use of mcdm methods in stroke population to obtain treatment preferences
• No experience with cognitively impaired group
• Existing literature refers to cognitive burden of mcdm methods and influence of method on importance of attributes
• Aim: Pilot test of 5 mcdm methods in stroke population

METHODS & MATERIALS
• 16 stroke subjects with mild to moderate cognitive impairment (MMSE 25+)
• 12 healthy controls
• 5 methods
  o Kepner-Tregoe Analysis (KTA)
  o Simple multi-attribute rating technique (SMART)
  o Simple multi-attribute rating technique with swing weights (SWING)
  o Analytical Hierarchical Process (AHP)
  o Conjoint Analysis (CA)
• 4 attributes with 3 levels each
• Subsample of subjects was tested twice

RESULTS

CONCLUSIONS
• On group level high correlation between importance of attributes
• Influence of method on decision on population level limited
• CA has conservative values compared to other methods
• High percentages of rank reversals on individual level
• CA has higher percentage of rank reversals compared to other methods
• Percentage of rank reversals lower in second session (-10-15%)
• Unknown impact on individual decision making?
• Which method to use?