

## GREEN GROUP (Analysts and modellers) – ISSUES AND BARRIERS

We brainstormed a bit and then each person wrote one or more post-its which we then discussed and roughly tried to group.

1. *Lack of trust (in models and modellers)*. External consulting firms can be preferred for 'difficult decisions' – i.e. where the Trust/CCG management know there will be an unpleasant or unpopular solution and want to pass the blame for the decision on to an external body. There is a fear of not succeeding - stick to tried and test methods even when we know they don't work, and an over-reliance on what has been done before even if it hasn't worked. Fragmentation and isolation of modelling groups, no support network for in-house modellers.
2. *Budget pressures (no money!)* Modelling can be seen as a luxury in times of austerity when something has to go: choice between modelling and front-line care??
3. *No time to model (always fire-fighting)*. Modelling is a long-term investment. 'Feeling we are changing engine mid-flight'; general lack of long-term planning in NHS organizations. Modelling takes too long. Analysts and modellers need more time to do a good job than NHS orgs are prepared to give. Timeliness – short-term decisions always required quickly.
4. *Lack of in-house capability*. Lack of trained people at all levels: Analysts are too focused on daily business and reporting. There is a lack of knowledge of what OR can do, and lack of technical ability of analysts and operational managers to use and develop data in to models. The split of mind-sets between data and narrative (quant and qual). In general, a lack of skills/training opportunities for analysts, and a poor supply chain of trained modellers. Lack of numerate skills across other NHS staff.
5. *Conflicting objectives between NHS and academia*. Academics (or MSc student projects) can be perceived as consulting "on the cheap". A lack of 'sales ability' in academia (we are not consultants or software developers). Academic career pathway can be unclear (tension between research papers and case studies). Defining research questions are by-passed too often.
6. *Modelling and OR approaches not seen as valuable by senior management*. Lack of senior champions, and poor visibility of modelling generally in senior NHS management. Lack of engagement: problem definition and analysis are foreign concepts to many healthcare decisions makers. Modelling is seen as a 'technique' not a solution. Need to change mind-sets about the value of modelling and simulation
7. *Too dependent on personal relationships*. Few modellers take the time to build relationships with healthcare and vice versa: knowledge transfer is too dependent on individual relationships. Academic modellers are unknown to many healthcare professionals.
8. *Lack of data* Good enough data vs poor (or no) data