# Fruitful marriage between OR and Healthcare

Meeting each other's needs

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### One healthcare partner...

- Hospital Porter
- Scientific officer
- Dental surgeon
- Doctor
- Surgeon

- Educator
- Team Coach
- Clinical Systems
   Engineer
- Quality improvement
- MBA OM interest

# 'Marriage' conundrum

OR professionals have skills, tools, models, to apply to solve healthcare problems; they pine for a partner to work with and use their skills to plan, research, suggest improvements and show impact

Healthcare professionals have too many problems and questions to solve quickly; they yearn for someone to help, challenge thinking, take their data, analyse it and offer possible solutions

#### Question

How do we broker introductions to meet the different needs of OR academics and healthcare managers and clinicians?

Who takes the lead, academics or practitioners?

# Courtship & marriage

- Attraction
- Flirting
- Chase
- Courtship
- Engagement
- Marriage
- Learning to co-exist
- Maturation

- Searching for partner
- Flirting with OR
- Co-create initial project(s)
- Agree trial partnership
- Formal agreements
- Honorary contracts, grants, reputation, research portfolio
- Understand different needs

# Emotional needs in marriage

#### Male



#### **Female**



- Sexual fulfilment
- Recreational companionship
- Physical attractiveness
- Domestic support
- Admiration

- Affection
- Intimate conversation
- Honesty & openness
- Financial support
- Family commitment

Source: His Needs Her Needs. Willard F. Harley (1986)

# "Become aware of each other's emotional [professional] needs and learn to meet them."





Academics have different needs to practitioners



#### Professional needs?

#### **OR**



#### **Healthcare**



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#### Professional needs

#### OR

- Relationship of trust with clinical champion
- Healthcare translation
- Role clarity
- Access to meetings, data
- Structure, time to work
- Outcome & impact
- 2Prublications

#### **Healthcare**

- Trust OP professional
  - Suspend disbelief
  - Move from UI to CI, accept expertise
  - Honest analysis, advice
- OR translation
- Solve my problem now at no cost! No time to wait
- Changes
- Publications

	Competence	Incompetence
Conscious	CC Knows how to approach OR Requires effort	CI Awareness of benefit and ignorance of how to use OR Values new skill 2
	Drives with conscious effort 3	Novice stalls repeatedly
Un- conscious	UC Skilled OR practitioner Second nature	UI Unaware of existence or relevance of OR May deny or sceptical about benefit
23/11/2016	Can drive, eat, phone and not remember the journey	Novice driver, thinks it's easy to change gear and steer

# Our relationship journey

- Quality Improvement...hip fracture project
- PenCHORD bed modelling, Mike Allen
- 7 day working, Andi Smart, Mike Williams
- Trauma modelling Nav Mustafee
- Innovation research, John Bessant
- Proposal:



# "Marriage" formalisation of OR - Healthcare relationship

- · Honorary contracts, grant applications
- "Impact" network events for researchers and healthcare decision makers
- "Researchers in residence" evaluating new care model
- PhD & Masters studentships
- Presentations & publications

#### What we tried and failed at?

- 7 day working (but developed relationships)
- A&E pathway modelling, not used yet (but new interest)
- Failed to win money for app development with real time ED & Urgent Care Centre data (but website version developed, with less functionality)

#### What's worked?

- PenCHORD bed model
- Trauma model developed, scenarios tested
- Business Intelligence & Analytics real time data in ED & Urgent Care Centres on Trust website
- Commissioning of 'system dynamics' model of health & care of beds, GP resource, etc.
- Commissioning of acute pathways redesign

#### What's the vision?

- Integrated care modelling for TSDFT
- Application of 5 year forward view Sustainability & Transformation Plan for Devon with system dynamics modelling
- More PhD studentships and researchers
- Strong Operations Research partnership in local health & care community

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# Questions, comments?

