

# R2C2 Model as a Case Study

It all begins and ends with people....

# A large cast....2010 on

- Primary Investigator:
  - Joan Sargeant PhD, Dalhousie University
- Dalhousie University
  - Karen Mann PhD (deceased)
  - Andrew Warren MD FRCPC
  - Elaine Loney MA
  - Tanya MacLeod MA
  - Cindy Shearer MD FRCPC
  - Michelle Boudreau MA
- Hackensack Meridian School of Medicine at Seton Hall
  - Marygrace Zetkulich MD
- Harvard University
  - Subha Ramani MBBS PhD
- Maastricht University
  - Eric Driessen MD PhD
  - Karen Könings, PhD
  - Tim Dornan, MBBS PhD
  - Cees van der Vleuten PhD
- University of Calgary
  - Heather Armson MD CCFP
  - Jocelyn Lockyer PhD
  - Amanda Roze des Ordons MD MEd FRCPC
- University of Toronto
  - Ivan Silver MD MEd FRCPC
  - Sophie Soklaridis PhD
- Accreditation Council of Graduate Medical Education
  - Eric Holmboe MD
- American Board of Internal Medicine
  - Kate Ross MSc
  - Lorna Lynn MD
  - Ben Chesluk PhD
- College of Physicians and Surgeons of Ontario
  - Wendy Yen MA
- College of Physicians and Surgeons of Nova Scotia
  - Mary Power MA

# The people....

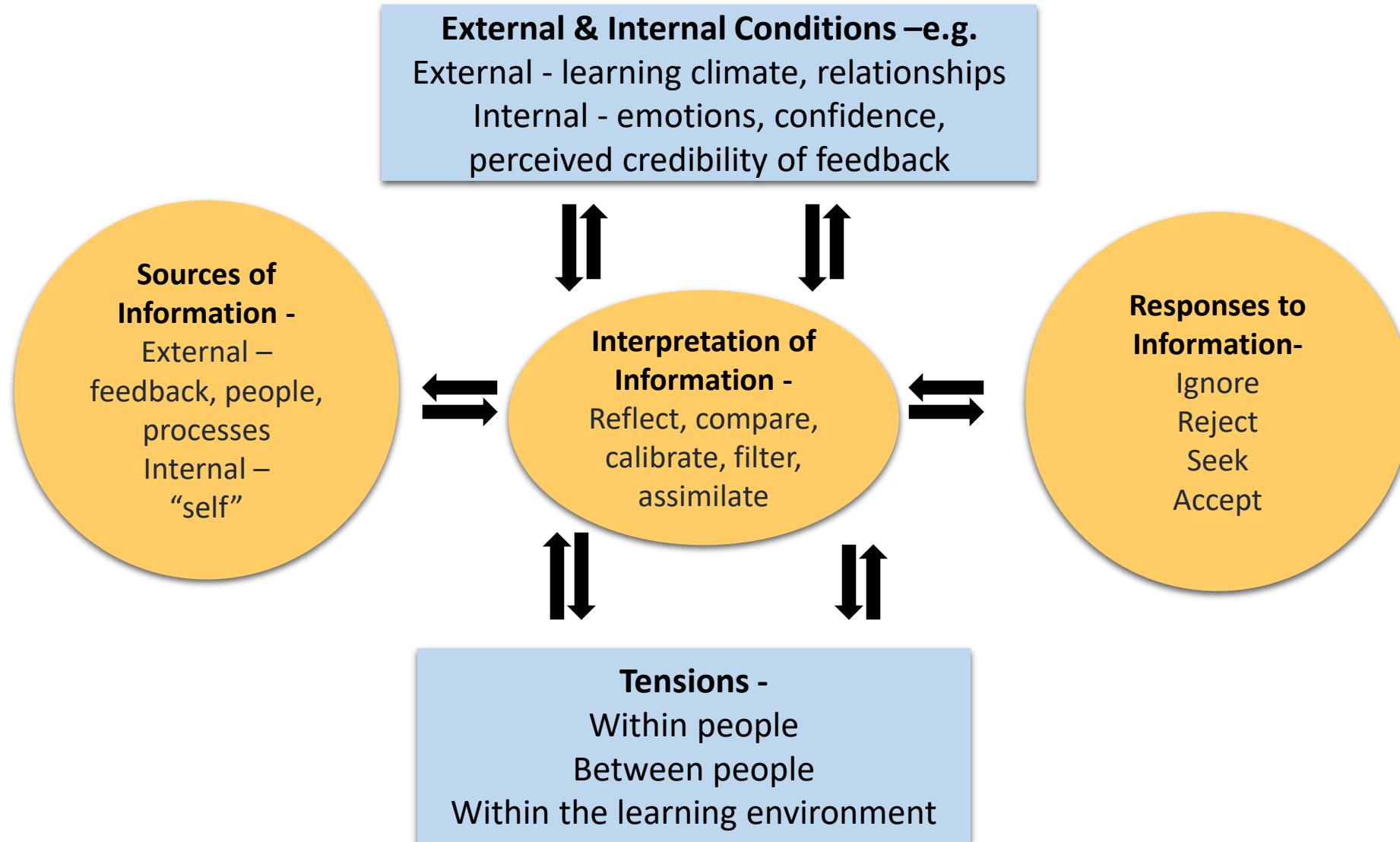
- Prior relationships and networks
- Position/support from home organization
- Personal interest
- Commitment to work
- Respect and trust for each other
- Organizational support
- Ability to move 'in' and 'out' of the project(s)

# Initial Research on how learners and physicians assess themselves

- Sargeant J, Armson H, Chesluk B, Dornan T, Eva K, Holmboe E, Lockyer J, Loney E, Mann K, van der Vleuten C. The processes and dimensions of informed self-assessment: a conceptual model. Acad Med. 2010 Jul;85(7):1212-20.

# Dimensions of informed self-assessment

(Sargeant, Armson, Chesluk, Dornan, Eva, Dornan T, Eva K, Holmboe E, Lockyer J, Loney E, Mann K, van der Vleuten C., Acad Med, 2010)



# Message: How do we ensure that MDs engage with and use the feedback?

- Sargeant J, Lockyer J, Mann K, Holmboe E, Silver I, Armson H, Driessen E, MacLeod T, Yen W, Ross K, Power M. Facilitated Reflective Performance Feedback: Developing an Evidence- and Theory-Based Model That Builds Relationship, Explores Reactions and Content, and Coaches for Performance Change (R2C2). *Acad Med.* 2015;90(12):1698-706.

# Expectations....

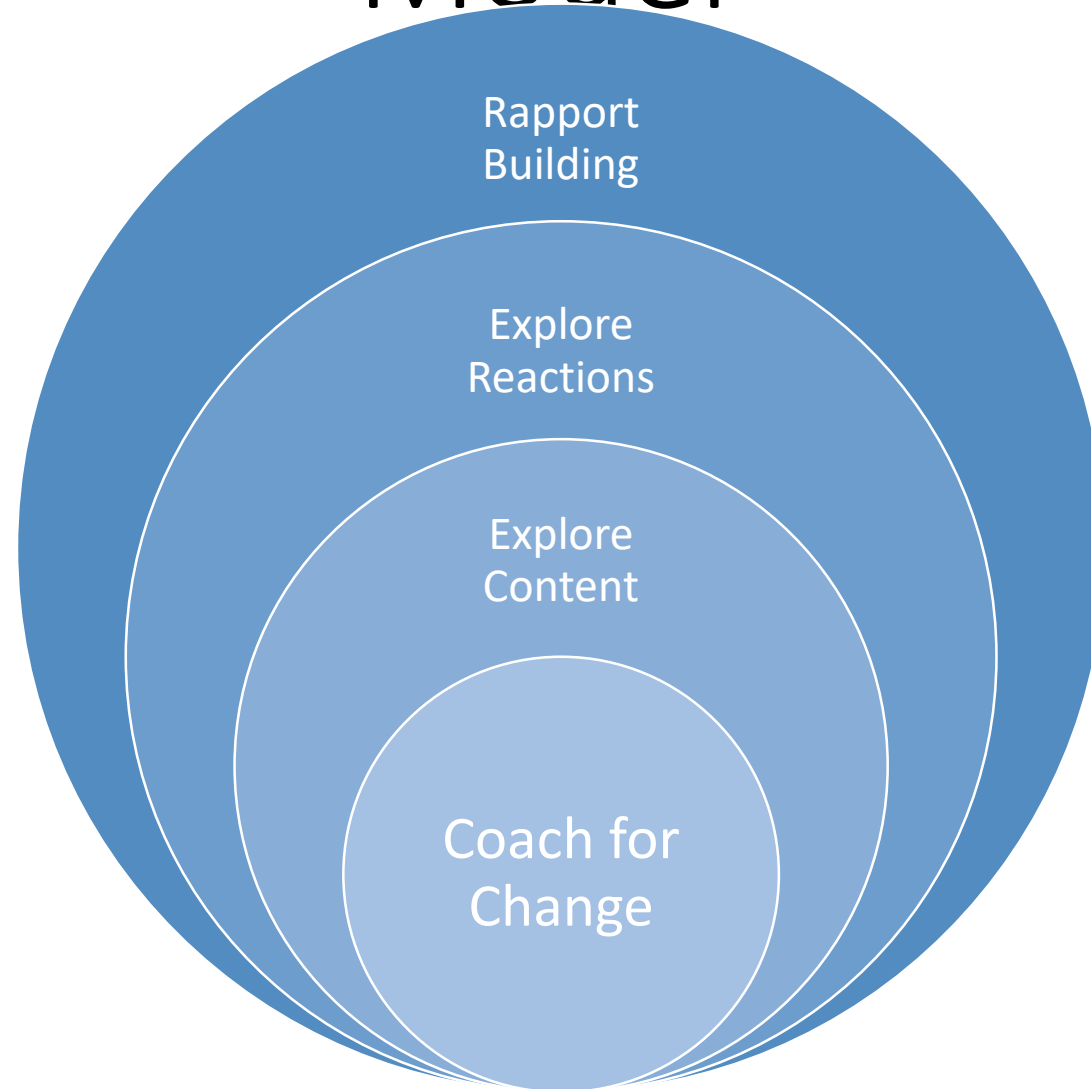
- Evidence and theory based
- Greehalgh and Rogers Models for Diffusion of Innovation
  - Relative advantage
  - Compatibility
  - Low complexity
  - Trialability
  - Observability
  - Potential for reinvention
- Acceptable cognitive load



# Origins....Research and theoretical base for R2C2

- Informed self-assessment
- Person-centered approaches - humanism, motivational approaches
- Cognitive domains influencing change
- Commitment to change
- Implementation science (role of the facilitator)
- Coaching

# 4 Stage Facilitated Feedback Model



So, it works for practicing MDs, can it work in Postgraduate Medical Education settings????

- Sargeant J, Lockyer JM, Mann K, Armson H, Warren A, Zetkusic M, Soklaridis S, Könings KD, Ross K, Silver I, Holmboe E, Shearer C, Boudreau M. The R2C2 Model in Residency Education: How Does It Foster Coaching and Promote Feedback Use? Acad Med. 2018; 93(7):1055-1063.
  - *The R2C2 model was reported to be effective in fostering a productive, reflective feedback conversation focused on resident development and in facilitating collaborative development of a change plan. Factors contributing to successful use were identified.*

# What is going on in the coaching phase that makes a difference?

- Armson H, Lockyer JM, Zetkolic M, Könings KD, Sargeant J. Identifying coaching skills to improve feedback use in postgraduate medical education. *Med Educ.* 2019;53(5):477-493.
  - *Effective coaching by supervisors requires a combination of specific process and content skills that are chosen depending on the needs of the individual resident. Mastering these skills helps residents engage and develop agency in their own professional development. These outcomes depend on faculty maintaining a balance between coaching and teaching, encouraging resident self-direction and ensuring progression to competence.*

If it works for resident progress meetings, would it be useful for 'in the moment' feedback?

- Phase I interviews with preceptors who have adapted it are complete, new tri-fold, and manuscript in progress.
- Phase II testing with dyads moving ahead to ethics review.

# People and a good idea...what else was important?

- Major Funding
  - Manning Fund, Society for Academic Continuing Medical Education (Physician study)
  - Stemmler Fund, National Board of Medical Examiners (Resident study)
- Smaller pots of funding
  - College of Physicians and Surgeons of Nova Scotia
  - Office of Health and Medical Education Scholarship, University of Calgary
- Partnerships & Supporters
  - College of Physicians and Surgeons of Nova Scotia, Ontario, Alberta, British Columbia
  - American Board of Internal Medicine
  - Medical Council of Canada
  - Universities: Dalhousie, Calgary, Toronto, Hackensack at Seton Hall, Maastricht, Queen's

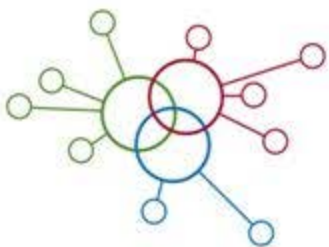
# Anything else?

- Dissemination
  - Peer review publications
  - Oral/poster presentations and workshops
    - International, national, and local
  - Citations
  - Adaptations of model by various medical and professional organizations, other disciplines, and in group/clinic quality improvement work
- Products
  - Tri-fold
  - MedEd portal
  - You-tube demonstrations
  - Website (in development)
  - Guidebook (in development)

# How do we ensure sustainability?

- ‘The challenge is not starting, but continuing after the initial enthusiasm has gone’
  - Ovretveit (2003) Making temporary quality improvement continuous: A review of the research relevant to the sustainability of quality improvement in healthcare
  - Taken from: [www.institute.nhs.uk/sustainability](http://www.institute.nhs.uk/sustainability)





*Institute for Innovation  
and Improvement*

# The NHS Sustainability Model



# In summary....

- Sustained leadership in Joan Sargeant
- Series of projects emerging from questions that arose in each study
- Incredible people, funding and organizational support
- Focused researchers who recognized criticality of dissemination through publication, presentations, materials, web presence and negotiation with other organizations