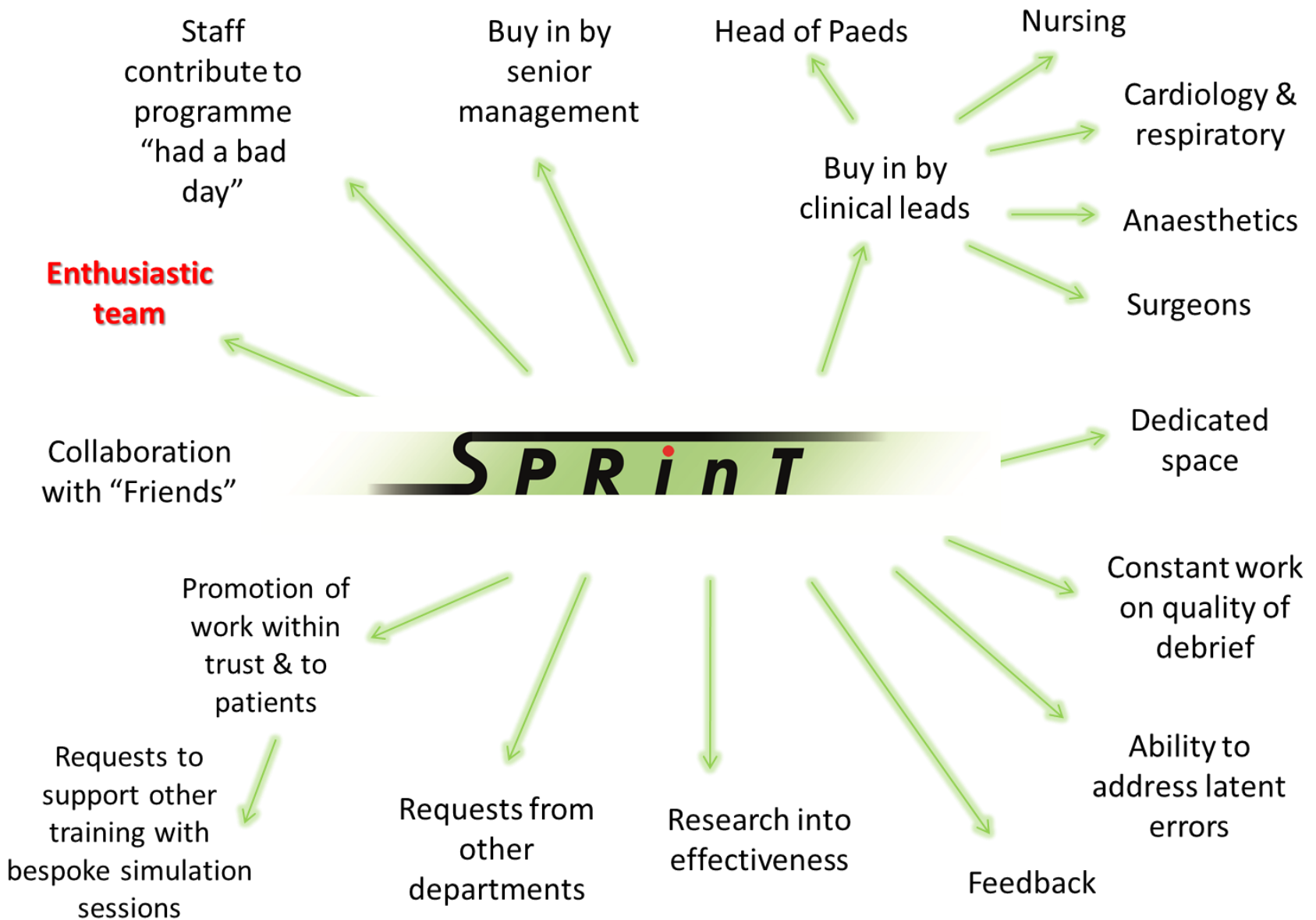


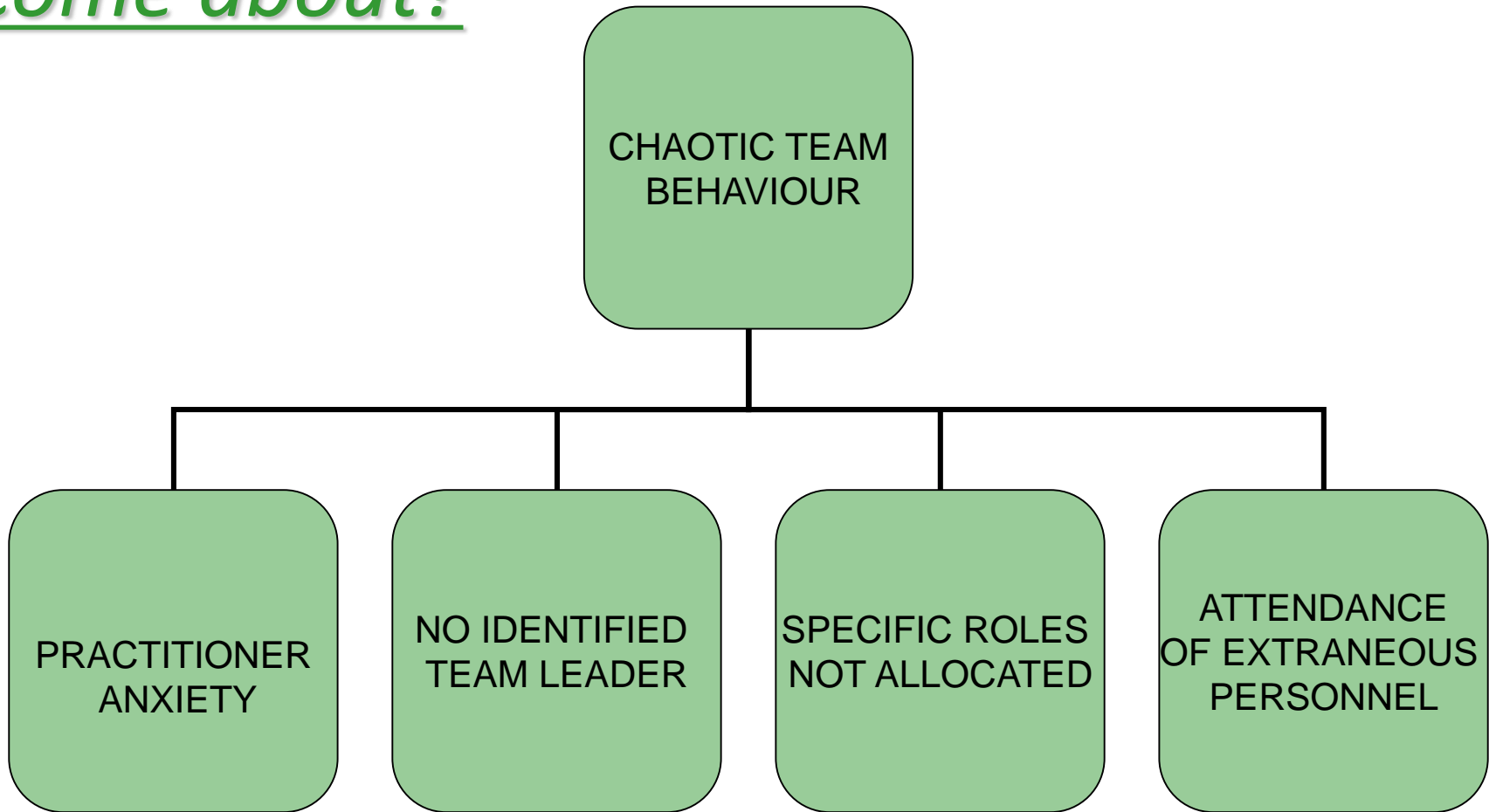


*Diary of
mistakes made in the development of
a successful
in-situ simulation programme*

*Margarita Burmester
Consultant Paediatric Intensivist
Director SPRinT programme
Royal Brompton Hospital, London*



Why did we come about?



Formation of a Resuscitation Team (Margarita, Meredith, 4 nurse educators)

- Improve team working skills for whole multidisciplinary team
- Improve confidence and performance
- Reduce anxiety
- *Improving performance in real life emergencies*

Phase 1 – just do it

2008

- 1. Developed vision*
- 2. Created guiding team*

Interprofessional

Own roles

Non-threatening

Improve patient safety

In-situ

Space

- Anywhere we could find on the day
- Equipment (basic) stored in our offices

Planned Set Up

- Created scenarios from actual events
- Twice monthly
- All nursing + medical staff
- MULTIDISCIPLINARY
- PICU/ Ward environment



What did we do?

- *NOT fully informed*
- *Basic equipment*
- Real time scenario
 - Real drugs (not morphine)
 - Real syringes
 - Real arrest call
 - Real roles
- Debriefing (talking through)



Phase 2 – give up

2009

Very exhausted small resuscitation team...

Identified that we needed

1. Recognition *Buy-in and communication (3,4)*
2. Dedicated **faculty**
3. More resources for realism

Getting Support – Senior Management

- Presented case to medical director
- Presented case to medical board
- Presented to head of nursing (above senior nursing staff) for support

branding....



SPrint™

Simulated interPRofessional Team Training

Excellence in patient care through safety

Getting Support - Marketing

- Main foyer display
- Presentation at Departmental Clinical Governance Day
- Notices and emails of system changes introduced by *SPRinT*
- Liaison with Hospital PR
 - Intranet screen displays of SPRinT
 - Publication in hospital monthly newsletter

Expansion of Faculty

- Dedicated 2 days per week nurse educator (band 6)
- Dedicated 1 day a week technician
- 2 Anaesthetic colleagues interested
- PICU Registrar input (2 volunteers)

Development of equipment/ resources

- Laerdal SIM Baby – applied for charity funding
- Audiovisual equipment – London deanery
- Dedicated cubicle on PICU
- More scenarios – 20
- Two way evaluation process for quality improvement

Phase 3

2010

1. Keep momentum going for *SPRinT* team members (**faculty development**) *Short term wins (6)*
2. Dedicated time for **participants** *Empowered broad action (5)*

SPRinT Development – Education

- Training the trainer courses
 - London deanery
- Consolidation of learning
 - psychological input into adult learning and debriefing – Harvard simulation course 1
- Active critique of faculty performance
 - as part of ongoing process to improve team training techniques and learning

Dedicated Time for Participants

Dedicated time for

- **2 nurses**
- **1 Anaesthetic trainee** (Anaesthetic college tutor recruited to *SPRinT* team)
- **1 PICU fellow**
- **1 PICU SHO**

*Problems.....all this effort and
- Success? – NO!*

Reluctant learners!!

*No charge nurses turning up
AT ALL*

*Participants getting upset
not convinced of lessons learned*

Phase 4 – aim for success again...

2011

1. Introduce safety and CRM training before course (Harvard sim 2)
2. Make it sustainable, expand to other areas (innovation matched to needs assessments) never let up (7)

How do people learn?



- Participants should **feel safe** beforehand (adult learning techniques) **X**
- It needs to be **realistic** for engagement of senior professionals **X**
- Faculty need to be trained in debriefing and (Debriefing is where the learning is at) **✓**

Safe Environment & CRM training: 30 mins

- Game play to demonstrate principles of Crisis Resource Management and
to create a safe environment
- Introduction to mannequin and surroundings
- Non judgemental and collegial environment

Then simulation 15 mins →

Innovative models

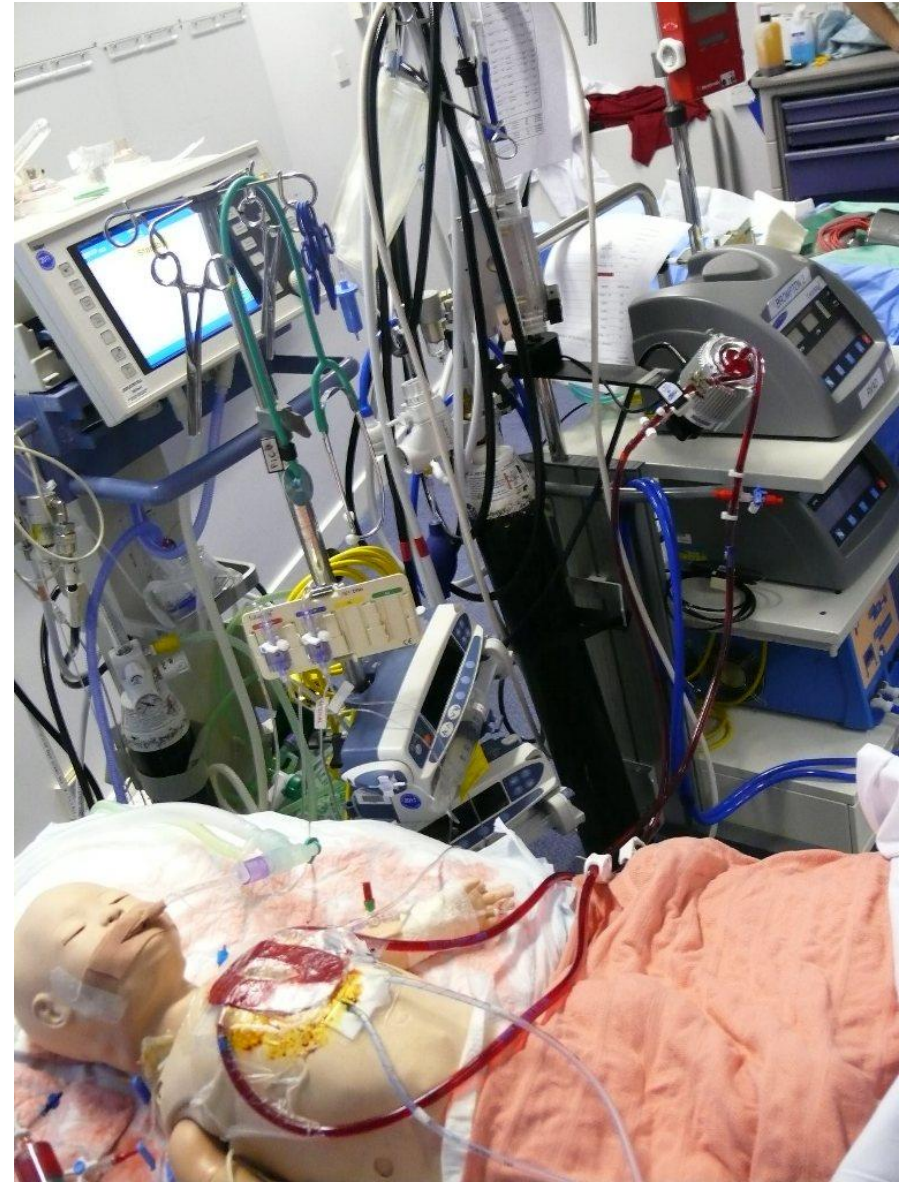
- *Emergency re sternotomy simulations*
 - Open-chest Harley baby for paediatric cardiac patients
 - Open chest adult model for adult congenital heart disease
- *Recognition of ECMO failure*
 - Open-chest ECMO model



Open-chest ECMO model

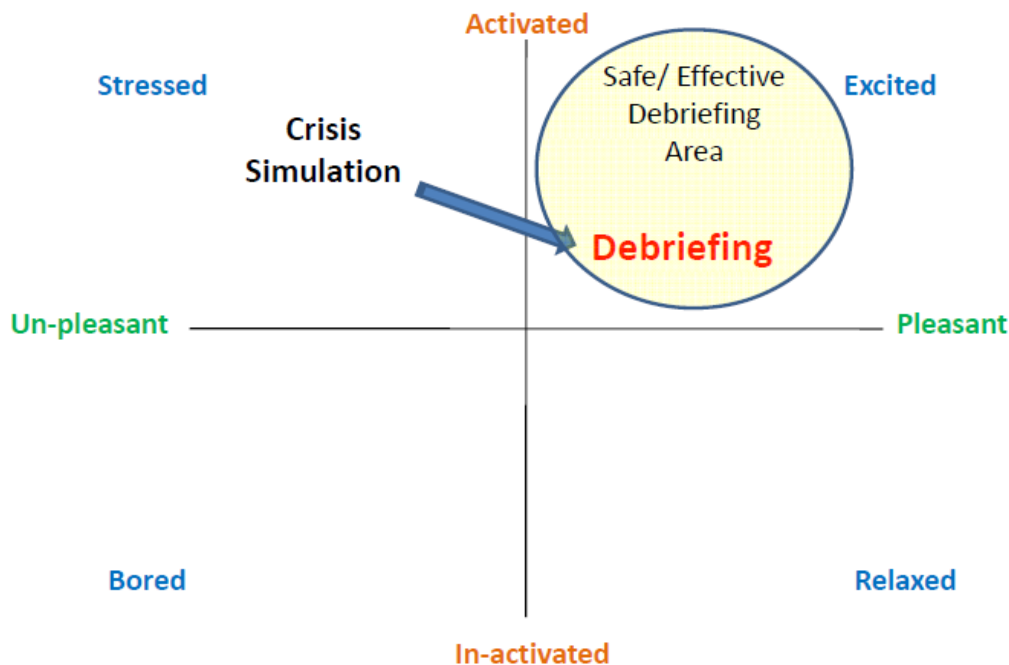
Simulating tamponade and increased venous pressures

- i. *Paediatric Open-Chest ECMO Model For Simulated Team Training* I. Atamanyuk, O. Ghez, J. Hall, L. Menadue, T. Jackson, N. Pool, R. Lytton, M. Lane, M. Burmester. 4th International Paediatric Simulation Symposia and Workshops, Toulouse Oct 2011 (abstract -oral presentation)



Video Assisted Debriefing – 40 mins

Circumplex Model of Emotion- Russell and Feldman Barrett, 1999



Learning occurs from reflecting on one's own experience

2012 – Success!

Sustained programme with 3 courses per month

BUT.....

1. *SPRinT* Project manager suddenly had to leave country
2. *SPRinT* Director seconded to direct PICU
3. Other *SPRinT* Director took up post in Melbourne

2013

- Recruited PICU nurse project coordinator
- Requests to deliver SPRinT courses to other directorates after SUIs, to practice drills
 - Cardiac catheter
 - Transfusion labs
- Charge nurses attending courses



2014

- Part of culture in paediatric directorate *incorporated change into culture (8)*
- PICU consultants attending courses
- SPRinT directors get time recognised!!!
- SPRinT courses run in other hospitals

2015-17

- Expansion into other directorates
- Setting of ASPiH standards for in-situ simulation
- Beginning to be part of culture in trust

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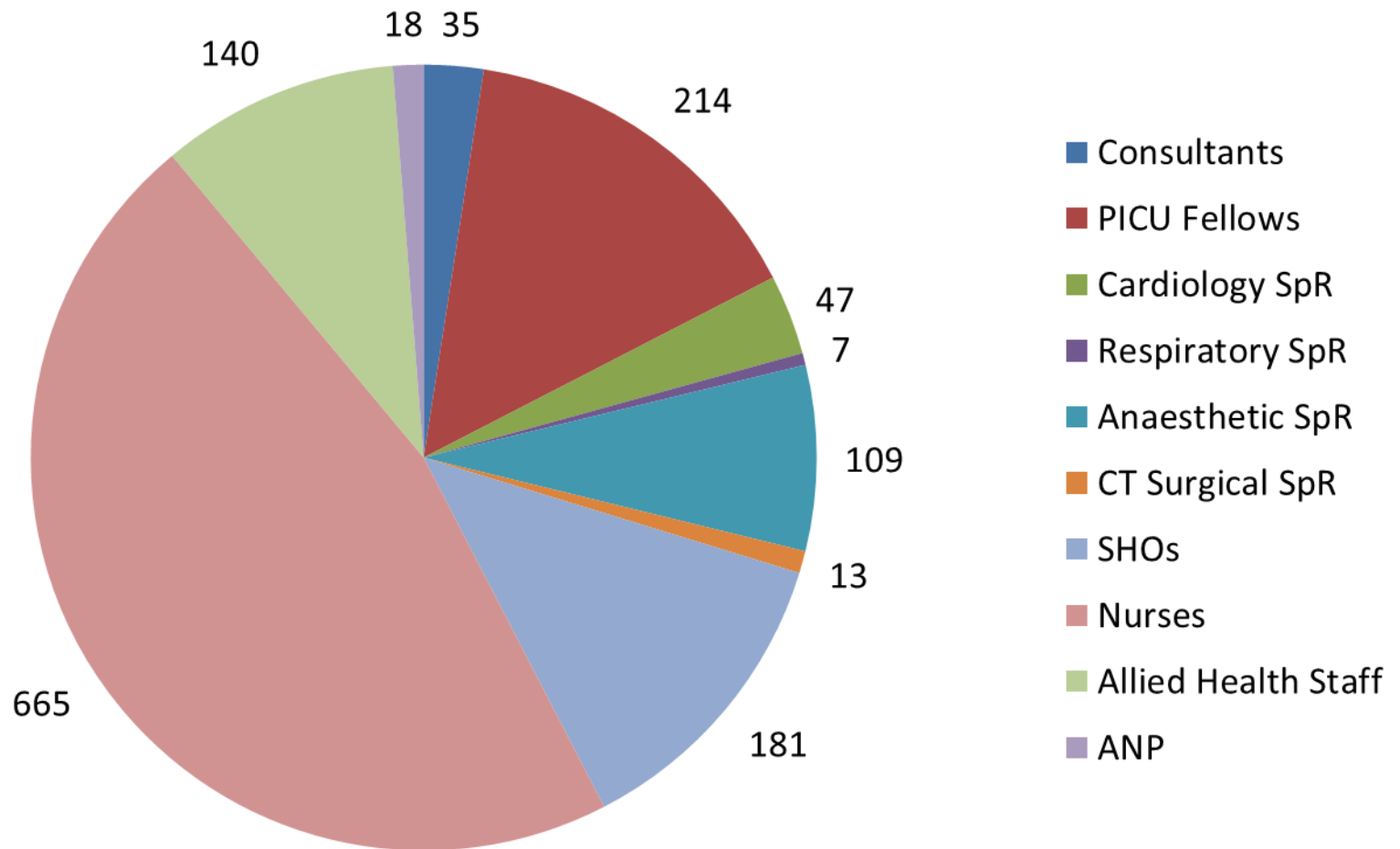
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2017-9

- Fellow left post half way through contract
 - Project manager recruited to HEE
 - New project manager on sick leave
 - Temporary halt of programme!!
-
- *In- situ teamwork scenarios is hard work and cannot run effectively without dedicated, educated staff*
 - *Better to run skills workshops in gaps*

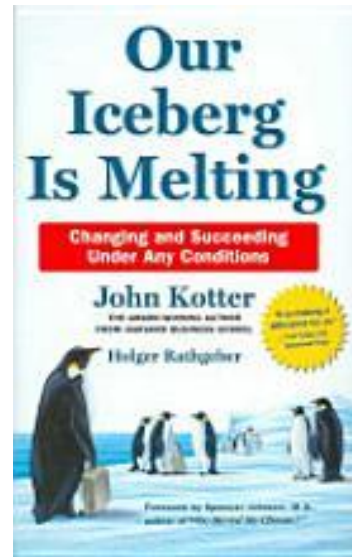
Course Participants

Feb 2008-Jan 2019 (n=2129)



Harvard Business
School

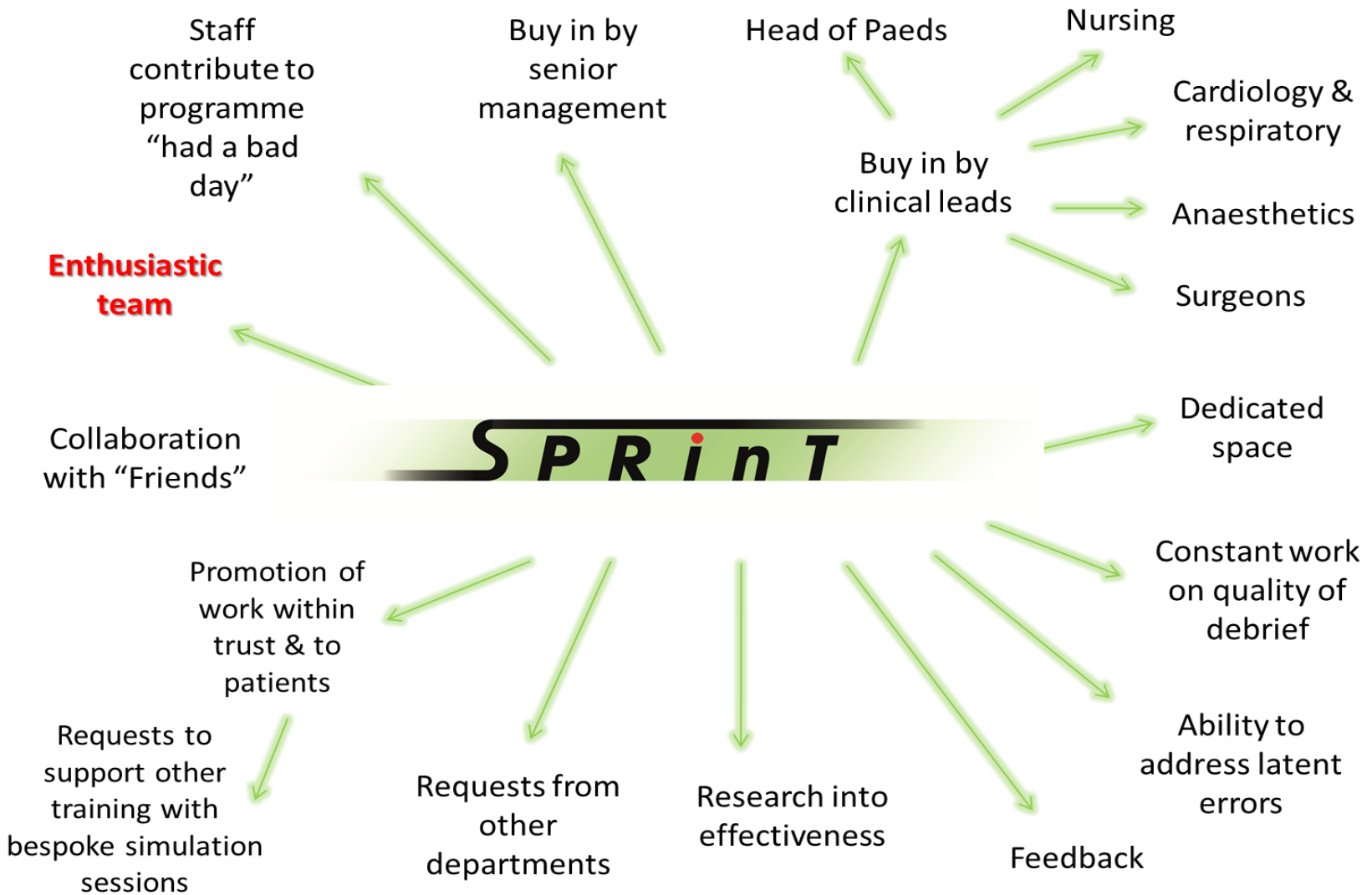
Professor John
Kotter



***Kotter's
8 step
Process
for
leading
change***

Achievements 2008-2019

1. *Buy in (created sense of urgency)* 3
2. *Created guiding team* 2
3. *Developed vision* 1
4. *Communicated vision* 4
5. *Empowered broad action* 6
6. *Short term wins* 5
7. *Never let up* 7
8. *Incorporated change into culture with actual adult learning and change in behaviour* 8



Thank you for listening



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Andrew Bailey *SPRinT* Anaesthetic Fellow
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Craig Knott *SPRinT* PICU Fellow
Christina Balnta *SPRinT* PICU Fellow

Helena Sampaio Nurse education *SPRinT*, PICU Practice Educator
Kumi De Costa Lead *SPRinT* Research Nurse, PICU Practice Educator
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