

### Introduction

#### Shift in surgical education.

There is an increase in **minimally invasive procedures** and the implementation of the European working time directive has reduced clinical training opportunities (1). Therefore, **simulation-based surgical education** should supplement the traditional apprenticeship model (2).

#### Development of a proficiency based stepwise training program: PROSPECT.

A training program for surgical trainees combining E-learning and virtual reality simulation training to teach basic endovascular skills outside of the operating room was developed. An RCT has proven that PROSPECT enhances endovascular performance on real patients (3).

Real life data of this effective training program are needed.

### Objectives

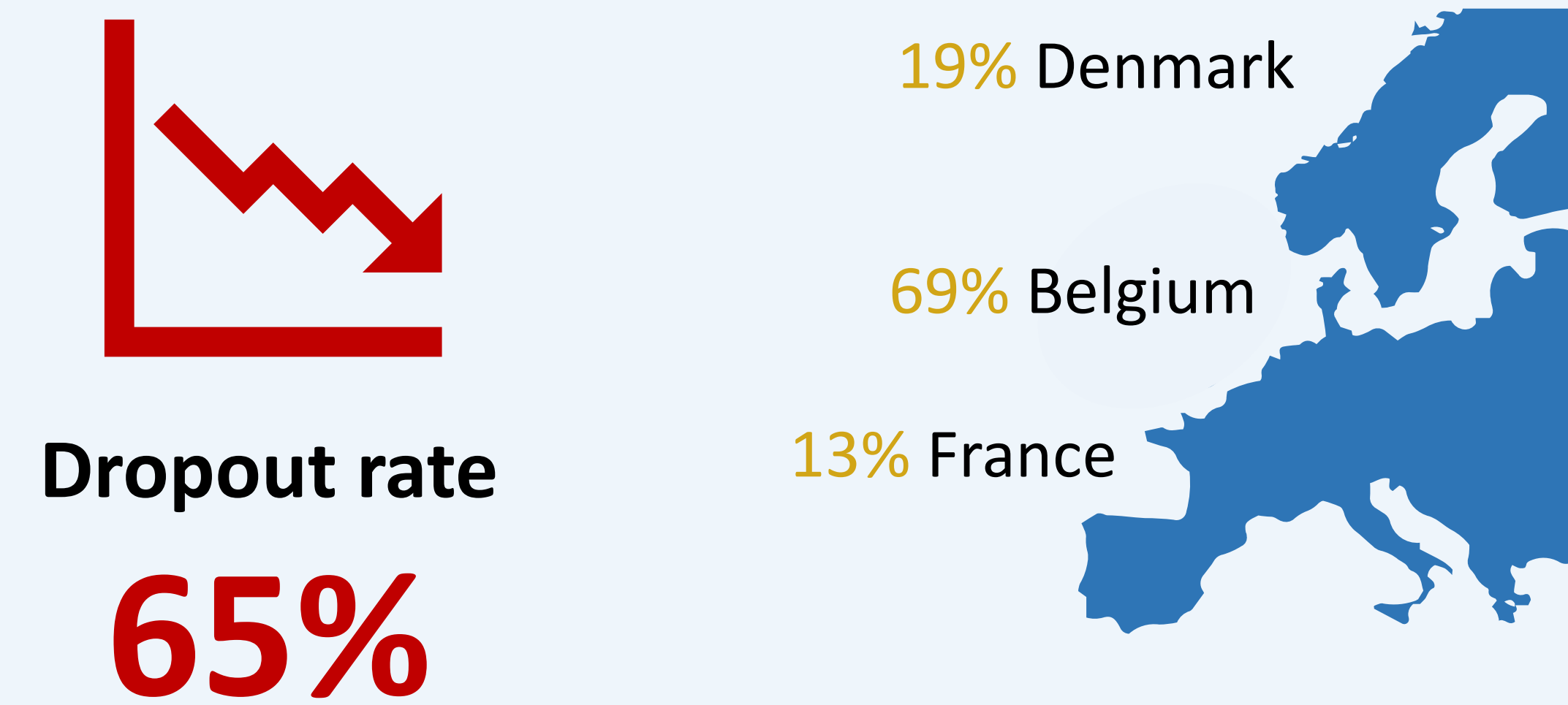
- To assess if RCT results could be replicated when **integrating** the program in **daily practice**
- Evaluation of **effects, facilitators and barriers** associated with program implementation

### Methods & Results

**Registry** **48** participants

Cognitive and technical skills assessment before and after PROSPECT:

- Baseline **cognitive skills** were high and did not improve significantly after PROSPECT.
- Trainees were significantly **faster** after completion
- Technical skill ratings improved** significantly

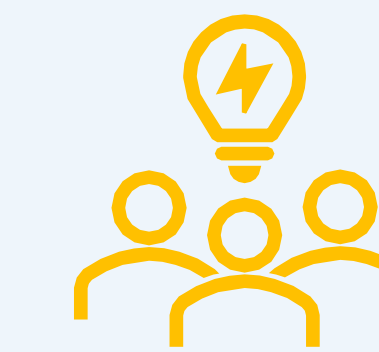


#### Survey

Anonymous online survey for both **PROSPECT participants** and **faculty** was initiated.



### Survey results



Faculty & Trainees

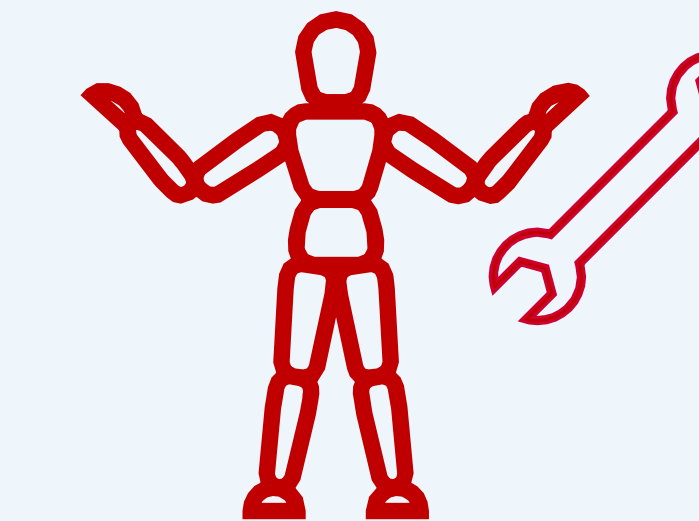
- More structured and standardised training
- Increased knowledge of basic endovascular principles and tools

Barriers

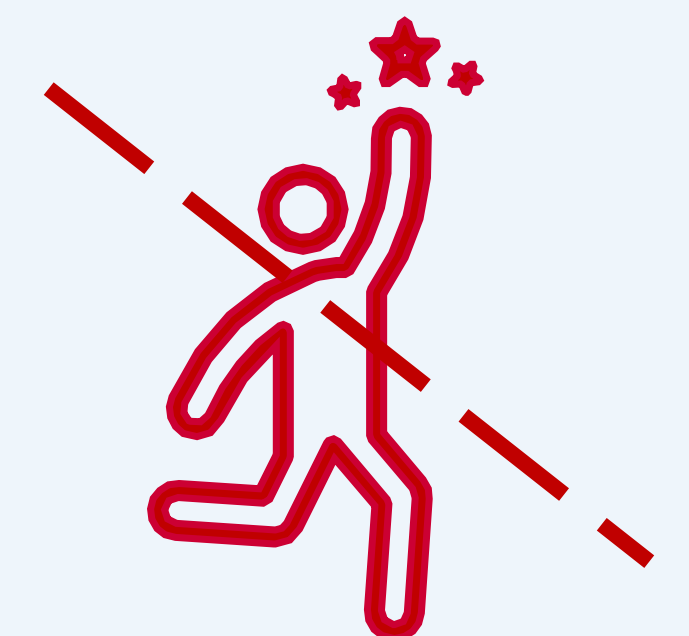
Lack of training time



Lack of technical / logistical support



Lack of motivation



Facilitators

Dedicated training time



Dedicated supervisor + Operational simulator



Mandatory training



### Conclusion

- PROSPECT allows **valuable basic endovascular skill acquisition in multiple centres**
- Real-life implementation is challenging
- Future perspectives:
  - Data collection in multicentre registry will be continued
  - Assessment of skill retention

### References

- Avgerinos ED. *Eur J Vasc Endovasc Surg.* 2013;46:719-25
- Reznick RK, MacRae H. *N Engl J Med.* 2006;355:2664-9
- Maertens H, et al. *Eur J Vasc Endovasc Surg.* 2017;54:387-96