Appendix 1: Format VBHC projects (multiple 2019)

Format VBHC project						
[title of project]						
ABSTRACT (Max. 150 words)						
A) What does this project contribute to the improvement of the quality of care at your department or organisation?						
	mpetencies (for example communicator, collaborator, leader, health I) trained and evaluated by conducting and implementing this VBHC					
C) How will you secure thi	s VBHC project within your organisation or at your department?					
1) Medical specialty:						
2) Issue:	[describe with a max. of 150 words what the problem or issue is you would like to change with this project]					
3) Goal of the project:	[describe what your main goal is]					
4) Plan of action:	[describe your plan of action stepwise, max. 200 words. Describe the procedure and your plan of implementation. Explain both analysis and plan of action]					
5) Aimed results:	[describe, max. 150 words, your aimed results of this VBHC project, in terms of costs and effects]					
6) Achieved results:	[describe, max. 150 words, your results so far, in terms of costs and effects]					
7) Evaluation:	[describe, max. 150 words, how you will evaluate the costs and effects of your VBHC project, in the long-term]					
8) Consolidate:	[describe, max. 150 words, how you will institutionalize this project within the current structure of the organisation or department]					
9) Generalizability:	[describe if your results might be applicable at other departments, organisations or regions]					
10) Role resident:	[describe your role in this VBHC project]					
11) Learning effects:	[describe what you learned by executing this project, how you learned this and how evaluated what you have learned]					
12) Mentor:	[describe the role of the mentor / supervisor regarding the execution of the VBHC project]					
I agree this information will be published at the OORZON (Southeast region of Netherlands) website.						

Appendix 2: Topic list for semi-structured interview

The topic list was constructed by two experienced researchers in this field, minor changes were made after a pilot interview.

	1) General information					
	- Definition of VBHC & position in PGME					
	- Goal of own VBHC project					
	- Orientation (education, process, care delivery,)					
	2) Implementation					
	- Enhancing factors					
	- Hindering factors					
	3) Learning goals and learning curves					
VBHC-	- initial goal					
Projects	- achieved goal					
	4) Self-perceived competency training					
	- components trained & developed					
	5) Self-perceived effect on influencing medical care					
	- patient outcomes and experiences					
	- costs (for example in monetary terms, efficiency, others)					
	6) Embedding within organisation					
	- reasons					
	- enhancing or hindering factors					

Appendix 3: Basic characteristics and focus of projects of the residents interviewed

	Specialty	Impl.*	Primary focus	Res.**	Explanation of exact focus
R1	Neurosurgery	Yes	Education	No	Development of a training session for other residents on registration and finances in their department
R2	Anesthesiology	Partly	Care and efficiency	No	ICT application to register any language barriers and provide helpful tools to overcome this language barrier
R3	Anesthesiology	Partly	Care and efficiency	No	ICT application to register any language barriers and provide helpful tools to overcome this language barrier
R4	Rehabilitation	Yes	Care and efficiency	No	Improving the leading time of patient letters
R5	Neurology	Yes	Care and efficiency	No	Implementation of digital patient letters to improve lead time
R6	Pediatrics	Yes	Care and efficiency	No	Give residents a day at another speciality to learn from each other and see possibilities to make work more efficient
R7	Rehabilitation	Yes	Care	Yes	Stop standard laboratory testing on admittance, only perform test when necessary
R8	Psychiatry	Yes	Care and efficiency	Yes	Send a standard SMS reminder before outpatient consults to reduce the number of no-shows
R9	Gynaecology	Yes	Care and efficiency	Yes	Direct removal of a catheter after a laparoscopic hysterectomy
R10	Pediatrics	No	Care and efficiency	No	Implementing a new structure for duty schedules to bring more continuity on the ward
R11	Neurology	No	Care and efficiency	No	ICT application to show when a patient had completed in hospital treatment and is waiting for a bed elsewhere

^{*} Implemented at time of the interview. ** VBHC project was part of a research project or PhD trajectory

Appendix 4: Tips for residents' performing a VBHC project within a modified model of change

Examine the VBHC problem thoroughly

- Complete assessment of the current situation from multiple perspectives (patient, doctor, organisation, etc)
- Take the culture of the organisation into account

Establish a sense of urgency and/or relevance

Identify potential problems that could stand in the way of your change

- Identify and involve all stakeholders

Form a powerful coalition with enough power to lead the change

Different key roles:

- Sponsor and/or advocate (can be a supervisor or mentor for instance)
- Implementer (often resident)
- Change agent (often resident)

Create a vision and develop strategies for achieving that vision

- keep it small and keep it simple, within your scope of power

Communicate your vision

Plan for short-term wins

- make sure you can show what is improved

Consolidating improvement and still produces more change

 implementation is more than changing a protocol. All employees involved need to work in the new way.

Institutionalizing your change so it is incorporated in the new culture

- make sure you can show what is improved to support the sense of urgency to stick to the new way of working
- secure the new way of working in ways that are not solely depending on your presence