Appendix 4: Post-MOOC survey Version 1.0, 26/03/2019 QI MOOC Evaluation Study

Post- MOOC study survey (online) – immediately after taking the course

Thank you for taking the time to complete this survey. This survey will ask you some questions about your knowledge and understanding of QI, and your confidence in participating in QI projects since completing the course.

<u>Please note</u>: this is an independent research carried out by the University of Bath and your participation is subject to the University's own policies and terms. FutureLearn takes no responsibility for the contents or the consequences of your participation in this study. Your participation in the research has no effect on your course progress, marks or FutureLearn profile.

QI knowledge

• Self-report/subjective knowledge

Having completed the course, I have good knowledge and understanding of how...We would now like to ask you some questions to see what you know about QI. Please tell us if you agree or disagree with the following statements (strongly agree to strongly disagree).

I have good knowledge and understanding of...

- how quality improvement can lead to better outcomes for staff, patients and organisations
- how to access additional support or resources, and get others to join with you in making improvements.
- o how to start and lead a quality improvement project within my organisation.
- how to bring together a team to undertake quality improvement within my organisation

Appendix 4: Post-MOOC survey Version 1.0, 26/03/2019 QI MOOC Evaluation Study

QI MOOC knowledge and marking scheme

	Purpose	Question	Options	Correct
1.	Summary context of need for	Gaining a deeper and wider	a. Delivery systems are complex.	e e
	QI	understanding of Quality Improvement is increasingly important because	 b. Clinical knowledge is advancing rapidly. c. Patients and families expect better care. d. However rich a country there is a finite limit on resources that can be allocated to healthcare e. All of these 	
2.	To know the Institute of Medicine (IOM) definition of quality	Quality of healthcare is a wide ranging concept that should always include the consideration of	 a. Safety alone b. The cost c. Only effectiveness and efficiency d. Safety, timeliness, effectiveness, efficiency, equity and person centred aspects of care e. Just the speed of treatment according to best medical practice 	d
3.	To know the Plan, Do, Study, Act (PDSA) cycle underpins all methods	Quality improvement methods have various components the one seen in all is	 a. The Plan Do Study Act cycle b. Co-production with patients c. 30_60_90 day routine d. pattern recognition e. all of these 	a
4.	To know a combination of measures is needed	The following measurement system will ensure that the team know that change is improving the system or not	 a. A previous years baseline b. Time ordered run charts c. Staff experience of doing work differently d. Patient experience feedback e. All of these 	e
5.	To refresh their minds of what is needed to understand formal system are a small part of success	The patient voice is vital when we are redesigning approaches to care. The following prevent us hearing what they say	 a. Ensuring patients stories are part of our work b. Should be undertaken by a small sub set of the team c. Using formal reporting systems d. Developing an inclusive approach e. Building in regular feedback to everyone 	С
6.	To know that leadership is local and distributed	Which of the following statements are correct?	 a. A senior leader must give permission b. There is always a financial cost to improvement c. Leadership is focused in senior team members d. Patients can be effective leaders of improvement 	d

Appendix 4: Post-MOOC survey Version 1.0, 26/03/2019 QI MOOC Evaluation Study

		e.	Learning comes from report writing and publication	
7. To know the place and	The lens of profound knowledge	a.	is used at the end of an improvement project	b
character of this approach to		b.	rarely enables an immediate single solution to be clear	
systems understanding		c.	should be undertaken by a small sub set of the team	
		d.	is a swift task after some changes have been tested	
		e.	is only useful in technical process change	
8. To know the principles of a	Measurement for improvement	a.	examples of process, outcome and balancing measures	a
good measurement strategy	strategies always include	b.	outcome measures are all that is needed	
		c.	data that enables you to calculate p values and other evaluative statistics	
		d.	process measures alone will be sufficient	
		e.	a focus on reporting any data you have to leaders only and not to the team	
9. To know the role of systems	We build mathematical and	a.	to imitate the operation of a care system very precisely	d
modelling in a QI project	computer simulation models to	b.	to predict with great accuracy what the changes will do in real life	
		c.	as part of every QI project	
		d.	to evaluate the likely impact of change on patients, staff and systems	
		e.	all of these	
10. To be able to tell the	Analytical (mathematical)	a.	typically contain a lot of more detail than computer simulation models	c
difference between analytical	models	b.	typically require fewer simplifying assumptions than computer simulation models	
and computer simulation		c.	in general better suited in projects where we have good reasons not to include a lot of	
models			organisational detail	
		d.	are worse the computer simulation models	
		e.	all of these	
11. To know the components of	Sustaining an improvement	a.	it is incompatible with the values of the organisation	e
good leadership	developed through testing and	b.	the impact of the change on patients and staff is not well known	
	learning will not be supported if	c.	the new way is more difficult than the old way	
		d.	leaders don't promote and recognise the effort taken	
		e.	all of these	
12. To know the necessary	Spreading your improvement idea	a.		b
approaches to spread	is more likely	b.	when teams are involved early and can adapt if necessary	
		c.	with hard work you will make sure it spreads	
		d.	if you don't worry about local context, it is not relevant	
		e.	if the learning is put in a policy and implemented	

Appendix 4: Post-MOOC survey Version 1.0, 26/03/2019 QI MOOC Evaluation Study

Self- reported participation in QI initiatives (since course completion)

We'd like to find out how the course has effected learners' participation in QI activities. Since completing the course, I have ... Response options: Yes, No, I don't know, N/A

- o I have participated in QI projects or committees
- o I have provided mentorship to other colleagues on quality improvement
- o I have held a leadership position involving QI
- o I have led QI projects
- o I have taught classes on QI in my workplace

Perceived confidence in QI participation

Questions adapted from ²

After completing the course, we'd like to know how confident are in participating in different QI activities. On a scale of 1- 10, how confident do you feel in your ability to... (1 = not at all confident, 10= very confident)

- o participate in QI initiatives
- o implement QI initiatives in my organisation
- o evaluate QI initiatives in my organisation
- o lead QI initiatives in my organisation
- o teach QI initiatives in my organisation
- o Completing the QI MOOC contributed to my career growth

On a scale of 1 to 10, please tell us how confident and familiar you are in different aspects of QI after taking the course... (0 = not at all, 10 = very confident)

- I am confident to talk about the importance and approach to ensuring quality healthcare
- o I am confident to talk to others about the basics of at least one improvement method
- o I am familiar with how patients can be involved in improvement and am confident in bringing this into my work/ participating as a patient in future
- o I am familiar with how measurement matters in QI work and confident to talk about this with colleagues or at meetings
- o I am comfortable with creating or using a run chart of real time data about a change we have made / seen
- I am confident to talk about systems and to hold back from solutions until we understand those systems better
- I am confident to talk about the usefulness of modeling an idea mathematically
- o I am confident to work alone or with others to develop a QI project

Perceived capacity building

As a result of the course either during or since completing ...(strongly agree, agree, neither agree or disagree, disagree, strongly disagree, N/A category, don't know)

- o I have read other reports/ articles about QI
- I have thought about a problem with a new approach at work or in my out of work roles
- I have planned an improvement activity with others (meeting, data collection, PDSA for example)
- I have undertaken an improvement activity (meeting, data collection, PDSA for example)

Appendix 4: Post-MOOC survey Version 1.0, 26/03/2019 OI MOOC Evaluation Study

> I have learnt from being part of an improvement activity and feel more confident to participate and contribute

o I am now part of a regular improvement team at work

Feedback on the course

Overall, how much did you enjoy your course experience? (Responses: A great deal, a lot, a moderate amount, a little, not at all)

Please tell us which of the following statements you agree with (strongly disagree, disagree, neither agree or disagree, agree, strongly agree)

- o The course contained the information I needed
- o The course was an appropriate length
- o The course content was relevant to my profession or field
- o The course content matched my expectations
- o I was satisfied with the topics covered during the course
- o The quizzes were a useful way to assess what I have learnt during the course
- o My perspective has changed as a result of taking the course
- o I've changed the way I do an aspect of my work as a result of taking the course
- o I would recommend this course to friends and colleagues
- o I've shared what I have learned with colleagues
- o Taking the course has had a positive impact on my work and/or personally
- o The course made good use of videos and other relevant resources
- o The course was interactive and required me to think and respond to questions
- o The group discussion posts were a useful way to interact with other learners
- o I exchanged ideas or learnt from a discussion point made by another learner
- o I was satisfied with the teaching style of the educators
- o I felt able to ask for help or clarification from the educators/ course team if I needed it =
- o Please tell us your thoughts and suggestions on how we could improve the course (e.g. was there any information not covered by the course that you think we should include)
 - What was the most enjoyable part of the course, and why? (open-ended)
 - o What was the least enjoyable part of the course, and why? (open-ended)
 - Please tell us your thoughts and suggestions on how we could improve the course (e.g. was there any information not covered by the course that you think we should include)