

# Basic Emergency Care (BEC)

## Training evaluation

### INTRODUCTION

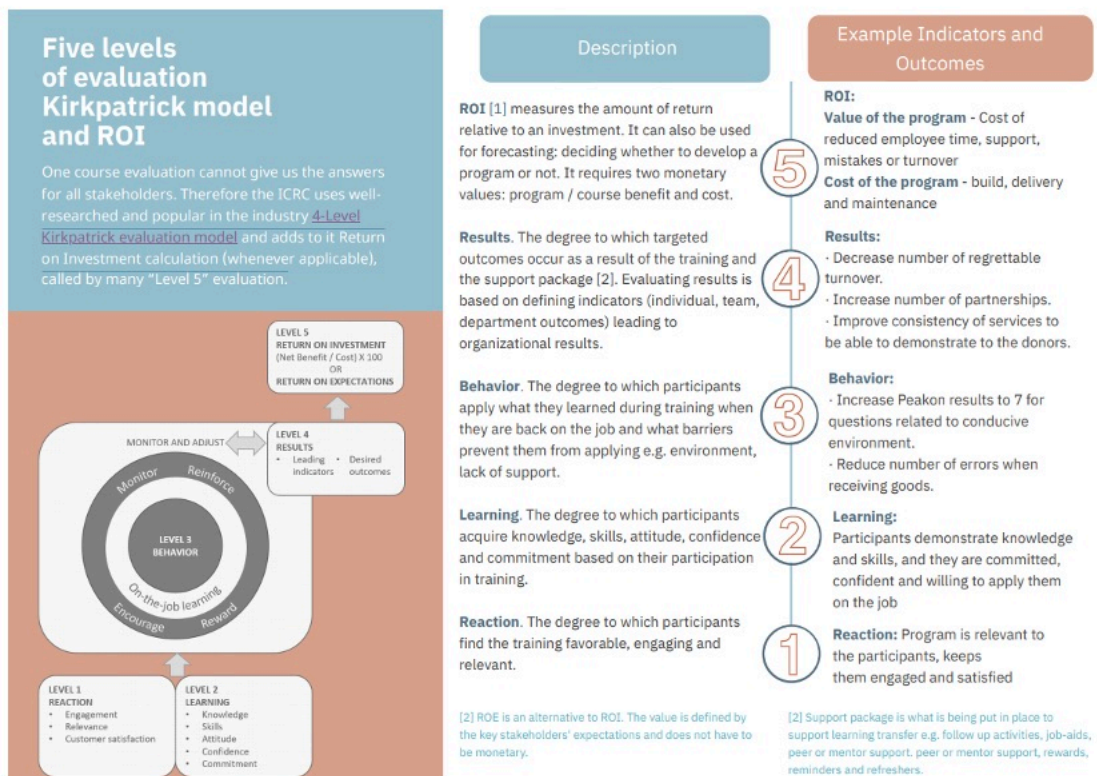
The BEC course was developed by WHO and ICRC<sup>1</sup>, in collaboration with the International Federation for Emergency Medicine, to improve clinical skills required to manage acute illness and injury with limited resources. The aim of the course therefore is to help health workers by sharing the knowledge and skills to improve their ability to provide practical and systematic health care to people / patients with acute and life-threatening clinical presentations.

Subsequent to the delivery of the BEC Course in Mexico, El Salvador and Honduras, it was recognized that post course evaluation and impact assessment is essential. This post course evaluation can take several forms and can be accomplished at different levels.

"Different stakeholders are interested in training evaluation for different reasons. Sponsors of the training and senior management may be interested in the impact of the training. Trainers would like to know how they performed and whether participants learned. Designers are keen to know whether the design is efficient and course administrators whether their service is efficient. Participants want to have space to share their feedback and trust that it was heard."<sup>2</sup>

Measuring a course for its output and not for its outcome does not show a sustainable achievement, nor does it speak about the overall objective of the course, which is a change in behavior. In alignment with the ICRC strategy, all courses should be outcome-based. Evaluating a training in the different possible levels shortens the bridge. ICRC uses a well-known research method called the 4-Level Kirkpatrick Evaluation Model and adds to it "Return on Investment calculation", called by many the level 5.<sup>3</sup>

According to the Training Evaluation Guide provided by ICRC, the 5 levels are as follows:



The key outcome for a clinical course is to determine whether patient care delivered by the course participants has improved. Therefore, the following evaluation was done at level 3, aiming to understand changes in the participants' behavior after the course and the overall application of their gained skills in their daily work.

The courses were delivered in three Latin American countries: México, Honduras and El Salvador. They involved both ICRC staff and non-ICRC health workers.

Depending on the country and its the current sanitary restrictions, the course was delivered in three different modalities:

- Face-to-face (five days in a row)
- Face-to-face (one session every month)
- Hybrid (Videos, online, face-to-face skills)

The focus areas were:

- ABCDE Method,
- Transfer of patients
- Trauma - primary survey
- Trauma - secondary survey
- Shortness of breath
- Shock
- Altered consciousness

The methodology consisted of:

- Presentation / videos on the subject matter
- Case discussion
- Skills stations
- Workbook
- Knowledge evaluation (tests)
- Simulations

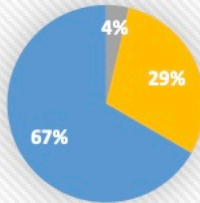
## METHODOLOGY

According to the ICRC training evaluation guidance, there are several ways of conducting an assessment. For instance, Observation on-the-job, Interview with supervisor or peers, Survey, Self-monitoring, Action plan monitoring, Touch-base meetings with supervisor, Observation report by supervisor, Observation report by peers, Monitoring use of additional resources / job-aids provided and Success Case Method, to mention some.

In this evaluation, due to the lack of time and resources, the modality chosen was a post course participant survey. The respondents come from 5 BEC courses conducted in 2020 and 2021 in Honduras, El Salvador and Mexico.

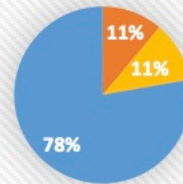
The survey was created and developed in conjunction with Subject Matter Experts (SMEs). It contains 19 closed-ended and open-ended questions due to be answered in approximately 5-7 min in MS Forms. The time given to answer was 7 days. The survey is in Annex 1.

8 a) Do you feel capable of providing practical and systematic health care to people / patients with acute and life-threatening clinical presentations? Being 1 = Definitely No, 5 = Definitely Yes



■ One ■ Two ■ Three ■ Four ■ Five

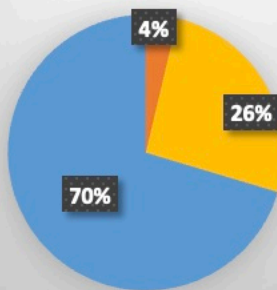
8 b) Do you feel that the knowledge and skills acquired in the BEC course improved your ability to provide practical and systematic health care to people / patients with acute and life-threatening clinical presentations? Being 1 = Definitely No, 5 = Defin



■ One ■ Two ■ Three ■ Four ■ Five

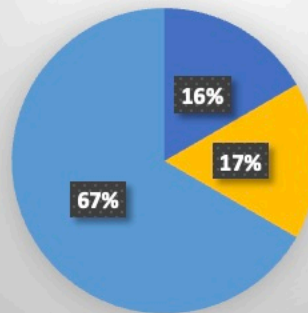
**Question 9.** Evaluate the benefit of the different types of training for your learning. Being 1 = not beneficial to my learning process 5 = very beneficial to my learning process

Presentation / videos on the subject matter



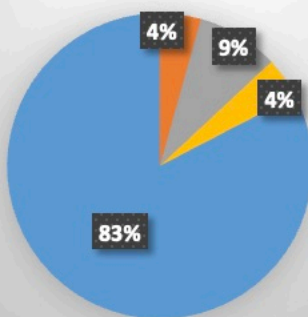
■ 1  
■ 2  
■ 3  
■ 4  
■ 5

Case discussion



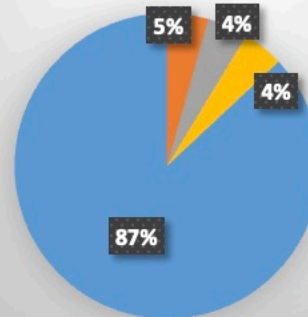
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Simulations



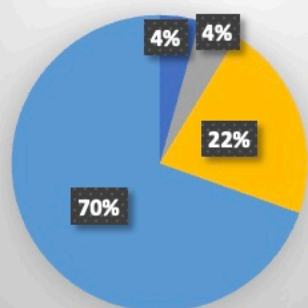
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Skills stations



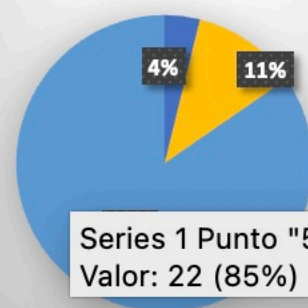
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Workbook



■ 1  
■ 2  
■ 3  
■ 4  
■ 5

Knowledge evaluation (tests)



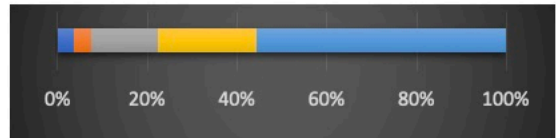
■ 1  
■ 2  
■ 3  
■ 4  
■ 5

Series 1 Punto "5"  
Valor: 22 (85%)

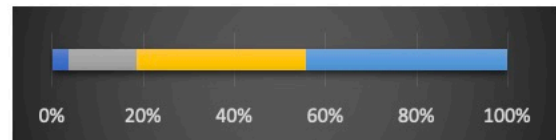
**Question 10.** In the following subject areas, indicate your level of improvement since you attended the course. Where 1 = no changes from the course 5 = very significant change from the course.

1 2 3 4 5

ABCDE Method



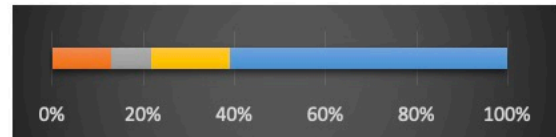
Transfer of patients



Trauma – primary survey



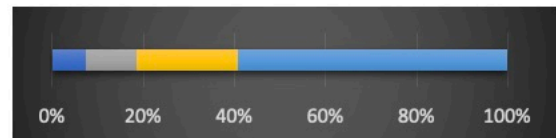
Trauma – secondary survey



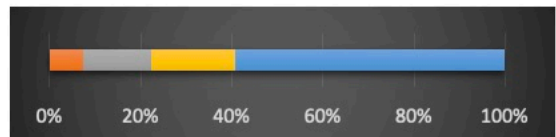
Shortness of breath



Shock



Altered consciousness





This wordle was created with the answers from participants. The three words that were repeated the most were "supplies", "material", "lack of".

**Question 16.** How do you plan to overcome them?

Different options mentioned were:

- By giving priority to other health facilities in other courses
- By asking for the necessary supplies
- By analyzing which participants can become trainers
- Through students
- By being updated
- By practicing
- By organizing trainings

**Question 17.** What additional support could supervisors provide so that you can apply your skills and knowledge learned in the program?

Most participants spotlighted the importance of capacity building, delivering courses, receiving support from the technical side and keeping the communication channels open.

**Question 18.** What specific suggestions do you have to improve the training?



The majority of participants were fond of continuing with simulation, being some of the comments "Simulations must stay as part of BEC" and "Keeping and increasing the number of simulations".

**Question 19.** Other comments:

- "In question 8, the reason for answering in general "with little or no change" is not because the course is poorly designed. I tell you that my previous training is internal medicine and critical medicine, and these



topics are part of my professional training. The primary objective for which I took this training is to be an instructor, to replicate the knowledge with the primary providers in the ministry of health of my country."

- "I did not like the course, it is too BASIC and I consider that it is not a plus for pre-hospital care with our [REDACTED] since they already have training in advanced trauma"
- "That trainings like the BEC be given more frequently"
- "Very good course with trained staff"
- "Thank you for including health in detention"
- "That the course is not every 8 years that is more frequent and those of the committee in the same way that they visit the units and community more frequently and not every 8 years"
- "Thank you very much for the opportunity and greetings to all"
- "Congratulations to the teachers, creators and producers of this BEC course, since there is no doubt about the importance and usefulness of this course in improving the provision of health services in emergency units."
- "a complete success"
- "I thank the [REDACTED] for their interest in keeping us trained [REDACTED]  
[REDACTED] I thank you very much and I hope that we can be together again to share our experiences. Blessings to the entire team facilitating the course for being willing to teach us and clarify doubts."
- "It was a great learning experience in my work area to have received the course."