Office of Evidence Based Practice – Specific Care Question: ECPR

Specific Care Question: Are there any adopted standards for how soon patients should be placed on Extracorporeal Cardiopulmonary Resuscitation (ECPR) once on-call staff has been contacted?

Question Originator:

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Extracorporeal cardiopulmonary resuscitation ECPR is a method of cardiopulmonary resuscitation (CPR) that passes the patient's blood through an external device, in a process to oxygenate the blood supply.

Summary: No recommendation can be made on how soon a patient should be placed on ECPR once on-call staff has been contacted as the literature search did not identify published standards that specifically answered the question.

EBP team member responsible for reviewing, synthesizing, and developing this literature:

Jarrod Dusin, MS, RD, LD, CNSC

Search Strategy and Results: "Extracorporeal Circulation "[Mesh] OR "Extracorporeal Membrane Oxygenation"[Mesh] OR extracorporeal membrane oxygenation[tiab] OR extracorporeal life support[tiab] OR extracorporeal cardiopulmonary resuscitation[tiab] AND extracorporeal life support[tiab] OR ECPR[tiab] OR ECPR[tiab] OR ECMO[tiab] AND (guideline[ti] OR guidelines[ti] OR consensus[ti] OR practice guideline[ti]) Filters: Publication date from 1997/01/01 to 2017/12/31; English; Child: birth-18 years

(("Extracorporeal Membrane Oxygenation"[Mesh] OR extracorporeal membrane oxygenation [ti] OR ecpr [title] OR "Cardiopulmonary Resuscitation"[Mesh]))
AND methods [Subheading] AND "Time Factors" [Mesh] Filters: Humans, English

Studies <u>not</u> included in this review with rationale for exclusion:

First Author	Year	Reason for exclusion
(Lasa, 2015)	(2015)	Did not answer question
(Kolovos, 2003)	(2003)	Review article

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References

- Kolovos, N. S., Bratton, S. L., Moler, F. W., Bove, E. L., Ohye, R. G., Bartlett, R. H., & Kulik, T. J. (2003). Outcome of pediatric patients treated with extracorporeal life support after cardiac surgery. *The Annals of thoracic surgery*, 76(5), 1435-1441.
- Lasa, J. J., Rogers, R. S., Localio, R., Shults, J., Raymond, T., Gaies, M., . . . Berg, R. A. (2015). Extracorporeal-Cardiopulmonary Resuscitation (E-CPR) During Pediatric In-Hospital Cardiopulmonary Arrest is Associated with Improved Survival to Discharge: A Report from the American Heart Association9s Get With the Guidelines®-Resuscitation Registry (GWTG-R). *Circulation*, CIRCULATIONAHA. 115.016082.

