Overall Recommendation including any Standard, Guideline or Option:
Recommendations and Strength (using table below):

Standards: None

Guidelines: CPR skills show declining retention after 6-12 months, unless there is refresher training (III). For best skill retention, there should be refresher training every 6-12 months (II).

Options: None

Questions to be addressed:
Primary Question: Following training (or retraining) in CPR, how long is the ability to perform effective CPR retained?

Supplemental Questions:
1. Is there a difference in retention between lay and professional rescuers?
2. Is there a difference in retention between adult, child, and infant CPR?
3. How long should the Red Cross retraining be?
4. Are there novel strategies that can enhance retention of CPR?

Introduction/Overview:
Increasing evidence reaffirms the lifesaving value of CPR in improving outcomes in sudden cardiac arrest. Recent studies among hospital and prehospital healthcare professionals have reported poor quality of CPR during actual resuscitations. Currently, the American Red Cross requires annual refresher training on an annual basis. The American Heart Association and other organizations require refresher training on a biannual basis. Several studies have concluded that CPR skills rapidly deteriorate following training. The impact on retraining intervals and the quality of CPR is unclear. Information from a scientific review may influence policy decisions on refresher intervals and potentially identify novel strategies to enhance critical skill retention.

Summary of Scientific Foundation:
The data indicate substantial CPR skill degradation occurs within the first year after CPR training for both health professionals and the lay public. The majority of skill deterioration seems to occur within the first year. There is no published evidence indicating adequate retention of CPR skills at 2 years. Two studies report adequate retention of skills at 17 and 18 months after training. Several studies report improved retention when a brief refresher is conducted every 6 to 12 months.