**Electronic Supplemental Material 2:**

For 2017, HCAHPS used the following questions to assess effectiveness of pain management.

During this hospital stay:

1.         Did you need medicine for pain?

2.         How often was your pain well controlled?

3.         How often did the hospital staff do everything they could to help you with your pain?

Beginning in Q1 2018, HCAHPS questions were updated with the following questions.

During this hospital stay (Industry Edge 2017; Thompson, 2017):

1.         Did you have any pain?

2.         How often did hospital staff talk with you about how much pain you had?

3.         How often did hospital staff talk with you about how to treat your pain?