The theory behind the current method for assessing radiation dose in CT (the CT Dose Index) will be reviewed. This method has many positive features, and a growing number of limitations. In many ways, technology and imaging equipment has extended beyond the scope of our current CTDI methodology. Several groups have been formed to develop a different approach to assessing CT radiation dose, and many issues must be carefully considered. Dr. Cody will describe a new CT dose measurement process as outlined by Task Group 111, and will also provide her perspective on other interesting developments in the area of CT dose assessment. The related issues of estimated CT dose and patient dose will also be addressed, and relevant Monte Carlo modeling results will be reviewed.