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March 27, 2010

Rebecca Smith-Bindman, MD Professor, Radiology and Biomedical Imaging, Epidemiology and Biostatistics, Obstetrics, Gynecology and Reproductive Sciences University of California, San Francisco

Re: Submission of a Diagnostic CT Radiation Dose Quality Metric to the NQF

Dear Rebecca:

I strongly support the quality metric you are submitting to the National Quality Forum focused on quantifying the radiation associated with Computed Tomography. Measuring and reporting dose information in a simple and consistent fashion would be an extremely important first step toward reducing variation, and thereby improving the safety and quality of CT imaging. Currently, many imaging facilities are not aware of the doses they are using, and this metric would increase awareness among facilities about the importance of assessing radiation doses, and would provide a way for them to do so in a simple and straight forward fashion. I believe the adoption of the metric you have proposed would guide radiology facilities who want to collect dose index information, and would help them to understand how their dose indices compare with optimal performance standards. These data would easy for facilities to collect, and could immediate lead to local quality improvement efforts where problems are identified. It would also encourage facilities to compare dose indices, and thus encourage them to optimize doses.

I am in been actively involved in radiation dosimetry and radiation protection for more than 30 years. I am the director of Health Physics Programs and Clinical Professor of Radiology and Radiation Oncology at the UC Davis, School of Medicine. I also serve as Scientific Vice-President and member of board of directors of the National Council on Radiation Protection and Measurement's (NCRP). In addition I chair the NCRP scientific advisory committee on Radiation Protection in Medicine. The NCRP was established in 1929 and operates under a 1964 congressional charterer with a mandate to evaluate and provide expert consultation on a wide variety of radiological health issues in the public interest. At our forty-sixth annual meeting held earlier this month in Bethesda, the focus of the meeting was on communication of radiation benefits and risks in decision making. There are currently very few data regarding the radiation doses used in CT, and these data are needed. In fact, within the NCRP, we have a scientific committee led by Dr. James Brink (Chair of Radiology at Yale University), that has been created to try to summarize current doses associated with CT and other imaging modalities. However it has been difficult to assemble the type and scope of data that the committee needs. The metric that you are creating would directly help us with this important effort of obtaining current dose data, so that diagnostic reference level data can be created.

Please let me know if I can provide you or the NQF any other information for consideration of this metric.

Sincerely,

Jerrold T. Bushberg Ph.D., DABMP Clinical Professor, Radiology and Radiation Oncology Director of EH&S and Health Physics Programs Asst. Director, Adm. & Prof. Svcs. University of California, Davis Health System University of California, Davis School of Medicine