

Abstract Submitted
for the OSF05 Meeting of
The American Physical Society

The Feasibility of Developing an X-Ray Based Quality Assurance Tool for Patient Proton Range Compensators COURTNEY BUCKEY, Ohio Northern University, ANTHONY MASCIA, Midwest Proton Radiotherapy Institute and UCLA, JONATHAN FARR¹, Midwest Proton Radiotherapy Institute — There exists the need to develop a stronger quality assurance regimen in order to crosscheck the physically manufactured compensator with the treatment planning prescribed compensator. Currently, the compensator QA protocol involves manually measuring a representative group of drill points and if that group coincides with what is expected, the compensator passes the QA procedure. However, in the clinic, the case when a compensator passes the QA protocol but is actually flawed (i.e. the false-positive) must be reduced or eliminated. It may be possible to develop a radiographic tool and accompanying computer analysis program to measure every manufactured drill point and compare them to the treatment planning compensator request within minutes.

¹Advisor

Terry Sheridan
Ohio Northern University

Date submitted: 18 Sep 2005

Electronic form version 1.4