Presented at the 2016 Radiosurgery Society Scientific Meeting



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Filmless MLC Quality Assurance in Robotic Radiosurgery



Disclosures

- Speaker is the owner and president of <u>Spectrum</u> <u>Medical Physics, LLC</u>, which has contracts or financial interest with:
 - Standard Imaging Inc.
 - Siemens Medical
 - Integrated Medical Technologies
- Speaker received financial reimbursement for travel associated with the presentation presented herein (Standard Imaging Inc).



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QA StereoCheckerTM

- Filmless CyberKnife® QA System
- High-Resolution Flat-Panel
 Imager
- 200 micron Resolution
- High Frame Rate
- Portable and Compact











- Aligned using implanted high-Z markers
- Automated alignment using treatment localization system
- Fast and consistent setup
- No manual manipulation of robot
- No attachment to collimator housing
- Designed to be used by physicists and therapists



Gibbs Cancer Center & Research Institute





- Available for CyberKnife M6
- 26 leaf pairs
- 0.385 mm wide at 800 mm
- Full over-travel
- Allows for treatment of larger lesions
- 100 mm x 115 mm
- Leaf Position Accuracy ≤0.95 mm



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- Less than 5 minutes
- Replaces visual film-based tests
- Replaces monthly Garden Fence Tests
- Capable of detecting 0.2 mm leaf variations









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Thank You

J. David Myers, CMD Michael Starnes, CMD Ryan S. Dubose, MS DABR Kevin L. Shay, MS DABR Daniel B. Fried, MD PHD Melanie Rhyne, RT Abby Sammut, RT Lauren Miles, RT LinLee Khoune, RT



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Questions?

