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## Automated treatment planning system commissioning: error reduction and improved efficiency for low and middle income countries come Countries

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In this work we propose standardization and automation of treatment planning system (TPS) commissioning for the purpose of error reduction, improved efficiency, and cost savings. This “new era of automation” is relevant and necessary given the global call-to-action for improving access to and investment in radiotherapy facilities for underserved populations in developing regions worldwide. As new treatment centers with limited resources are brought online, the global medical physics community will benefit from our proposed automated commissioning process that utilizes an application program interface and preloaded CPU with standard premodeled beam data, digital phantoms, and automated commissioning test suite to streamline verification testing and benchmark for ongoing QA. Current conventional procedures for treatment planning system commissioning are compared to the proposed automated commissioning process and assessed for potential risks and failures.

### Country

US

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