

Optimization of a Magnetically Controlled Growing Rod Ultrasound-Guided Lengthening Clinic

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100% FOR CHILDREN

Optimization of a MCGR US-Guided Lengthening Clinic

- Disclosures - none

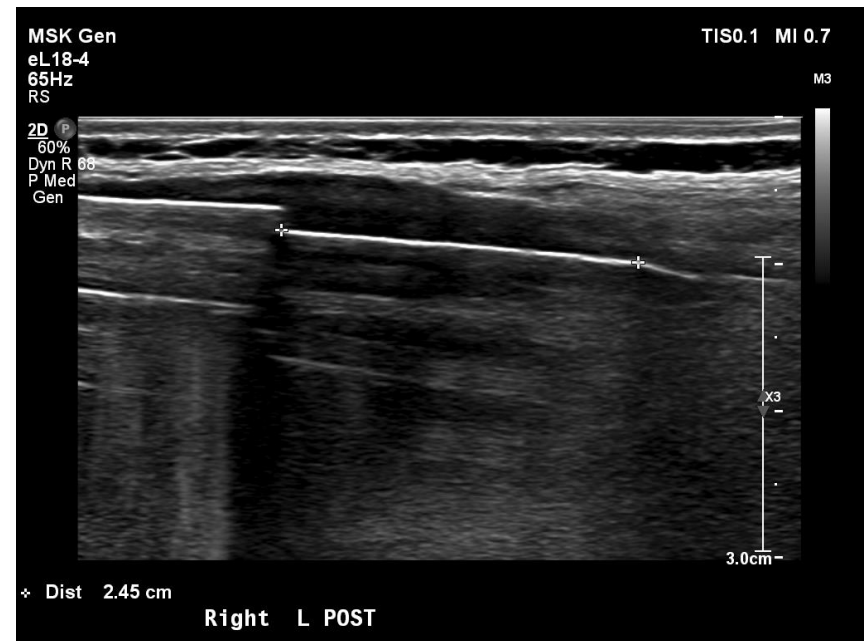
Optimization of a MCGR US-Guided Lengthening Clinic



- MCGRs have been FDA approved since 2014
- Our center now has a sizable population of children with implanted MCGRs who require routine lengthening

Optimization of a MCGR US-Guided Lengthening Clinic

- US-guided lengthening was explored starting in 2016
 - Accurate, with learning curve



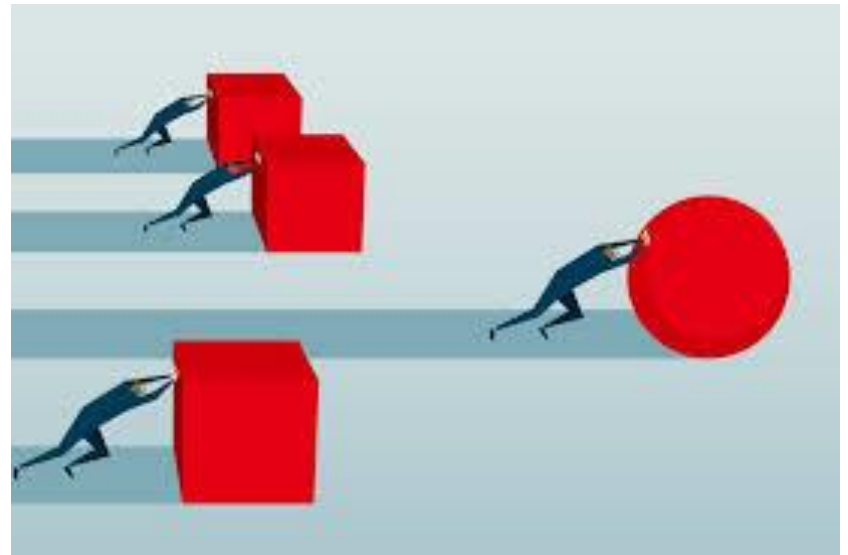
Cheung et al, *Spine* 2016

Optimization of a MCGR US-Guided Lengthening Clinic

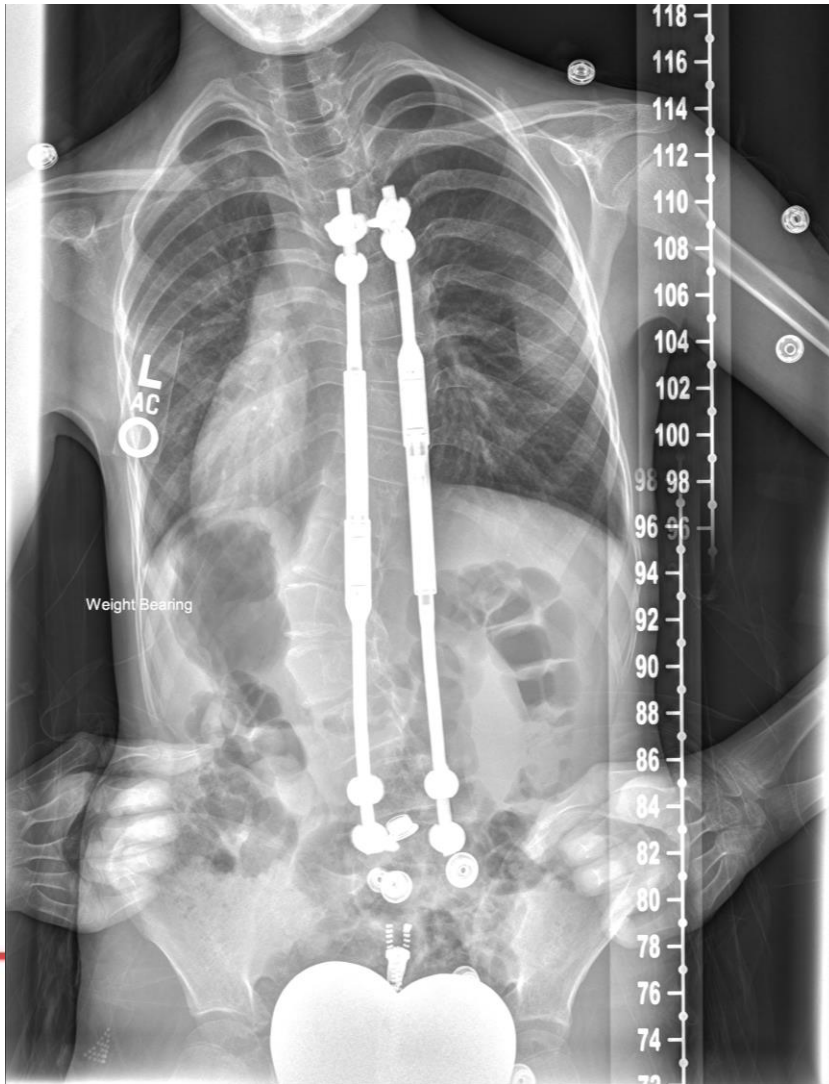
- Radiology concerns
 - Billable studies
 - Location
 - Efficiency
- Ortho concerns
 - Efficiency
 - Patient satisfaction

Optimization of a MCGR US-Guided Lengthening Clinic

- Compromise decision –
 - In Radiology
 - 2 US suites/techs



Optimization of a MCGR US-Guided Lengthening Clinic

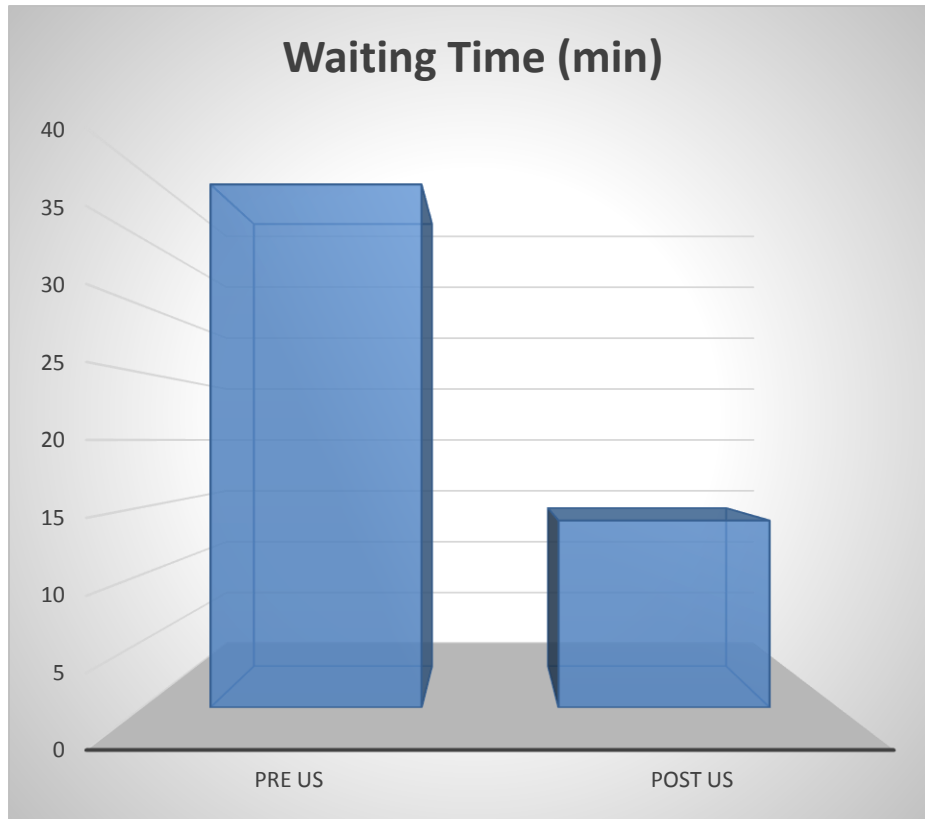


- Data collected as QI project
 - Wait time
 - Radiation exposure (calculated based on # of studies)
 - Satisfaction

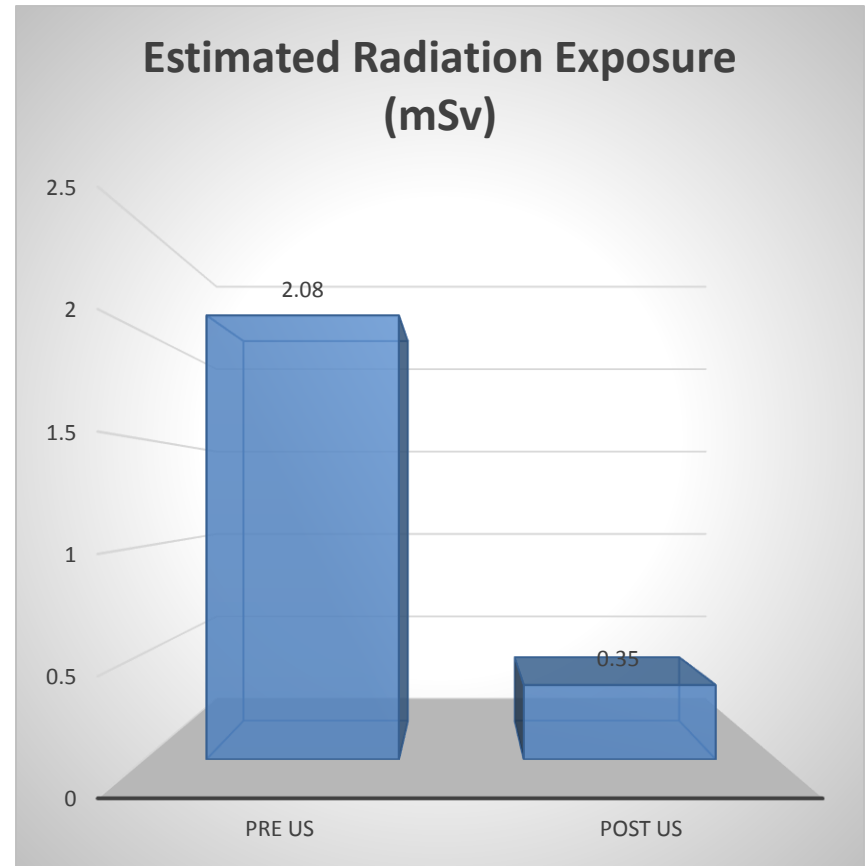
Optimization of a MCGR US-Guided Lengthening Clinic

- Results
 - 21 patients (total)
 - Clinic protocols
 - “Pre” – Standard radiographs before and after adjustment
 - “Post” – US before and after. Radiographs performed every 6 months and as needed.

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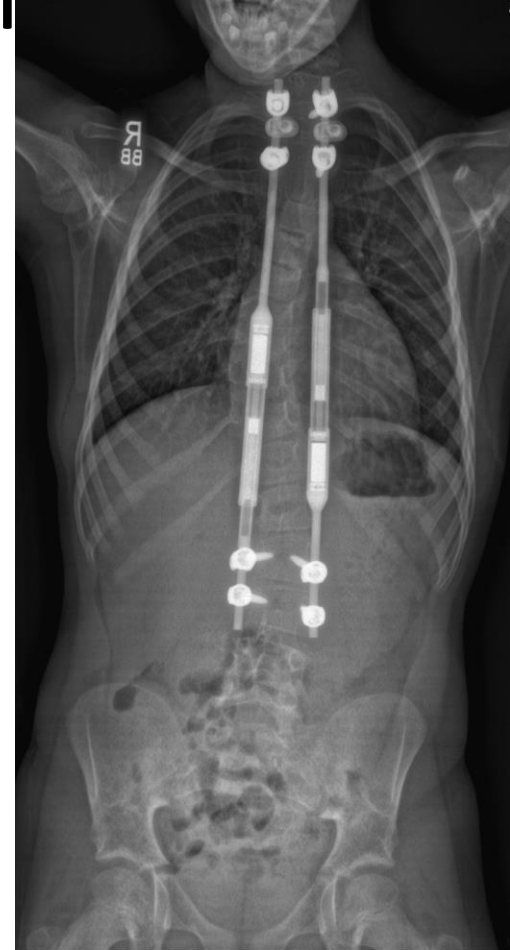


Optimization of a MCGR US-Guided Lengthening Clinic

- 91% of parents indicated satisfaction with change
 - Initial concerns included difficulty with positioning special needs patients for US and change in location
 - Those concerns have been addressed

Optimization of a MCGR US-Guided Lengthening Clinic

- Patient block time in schedule decreased from 30 to 15 min
- Further reduction in radiation exposure with EOS scanner, which has come on-line since this data was collected



Optimization of a MCGR US-Guided Lengthening Clinic

- Higher satisfaction with change
- Increased efficiency for Orthopedic provider, Radiology, and patient
- Decreased radiation exposure

Limitations

- Single institution, likely institution-specific
- No evaluation of cost

Thank You



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