FUNG HEALTHCARE LEADERSHIP SUMMIT 2016

Leadership & Innovation in Healthcare

23 - 24 September 2016 | Grand Hyatt Singapore

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Data Analytics for Disease Management

Kian Raiszadeh, MD
CEO, SpineZone

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"A chance to cut, is a chance to cure"

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"*When surgeons reach the end of their thinking, they operate*"

Jerome Groopman

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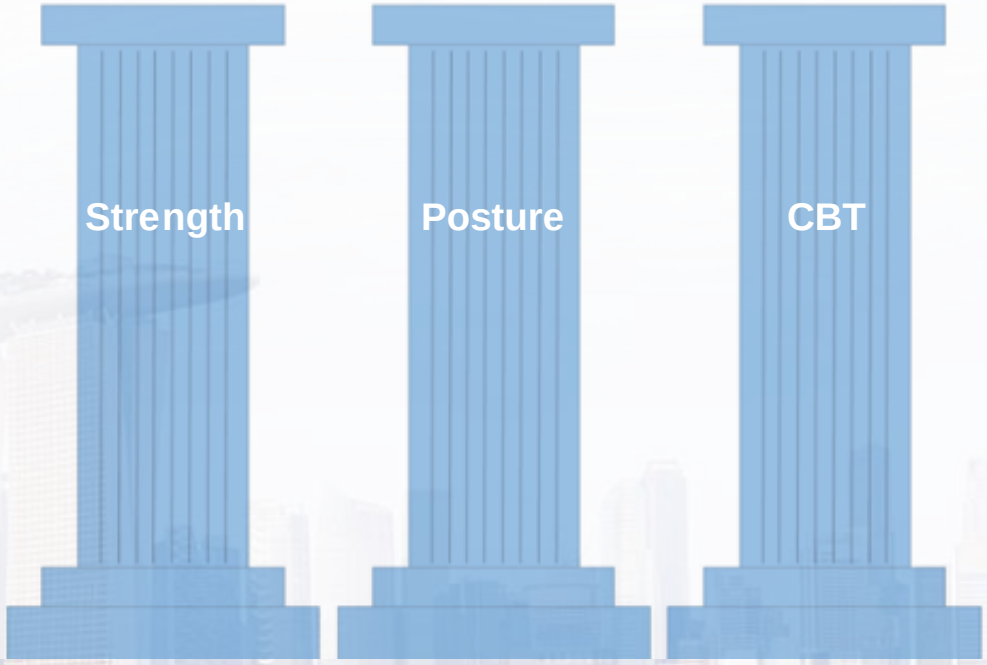
SpineZone Philosophy



Personalized Treatment based on Condition, Patient Goals

Behavior Change

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SpineZone Data Management

Patient Generated Outcome Measures
ODI, NDI, EQ5D, PCO, VAS, PHQ-4, PCS

SpineZone Generated Data
MedX Strength, ROM, Posture, Flexibility, Resistance Progression, Med Usage

Behavior Data
Program Compliance, HEP, Activity Levels, Diet

6-10 Week Program spinezone

ALERTS → PROGRAM ADJUSTMENTS → CARE EXPANSION → Customized Population Health Management

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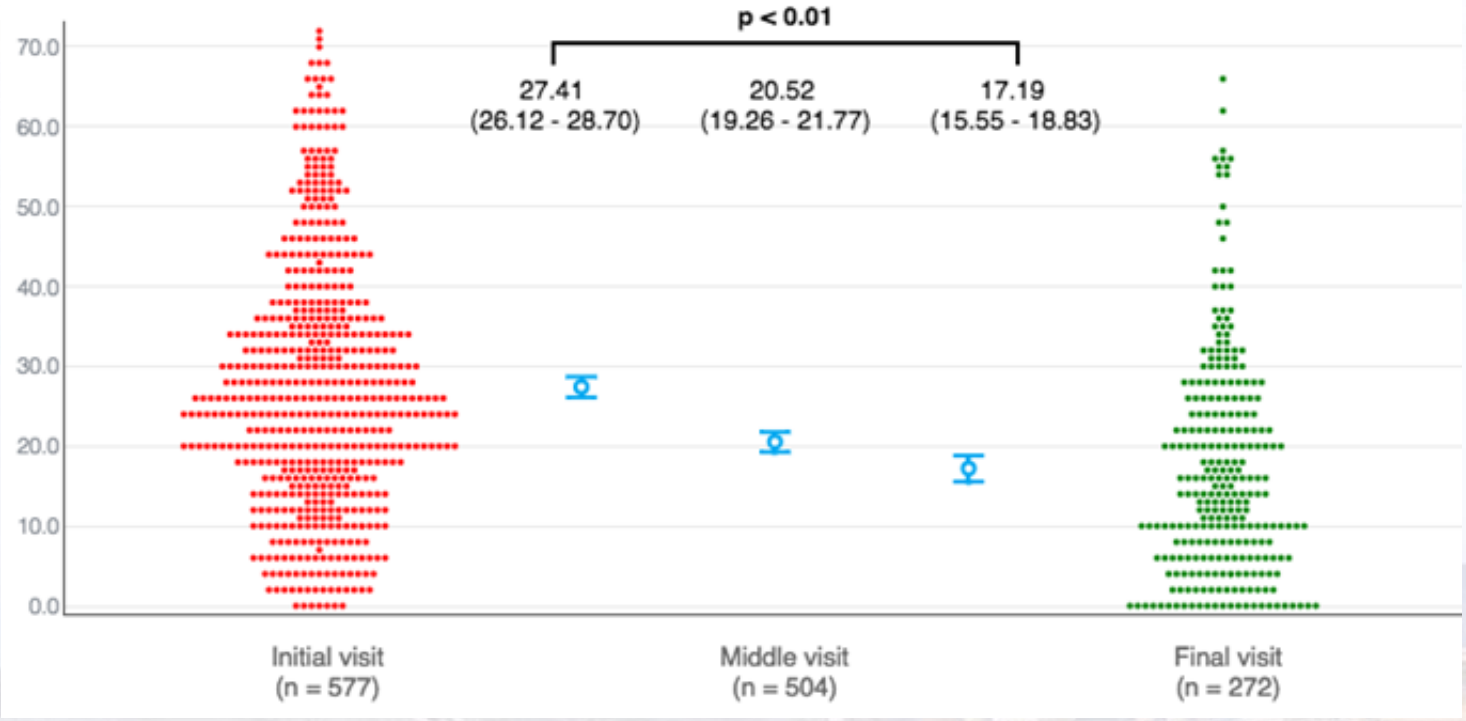
Functional Outcomes (8/1/15 - 8/1/16)

Oswestry Disability Index (0-100 scale)



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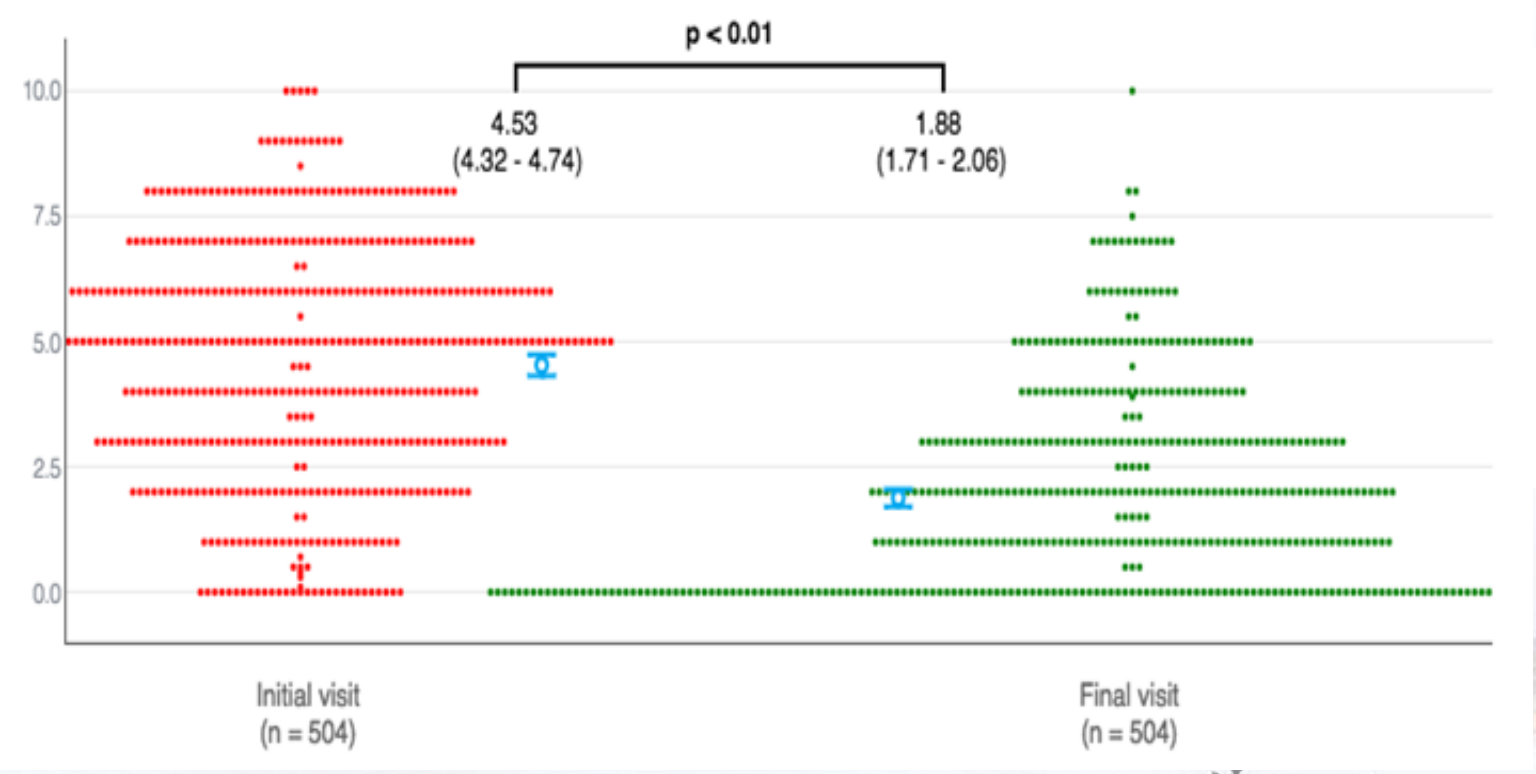
Functional Outcomes (8/1/15 - 8/1/16)

Visual Analog Scale - Back Pain Scatter (0-10 pain scale)



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Patient Centered Outcomes (initial to final)

1.9 → 5.9

1.7 → 4.2

2.3 → 5.7

2.8 → 5.6

1.9 → 5.2

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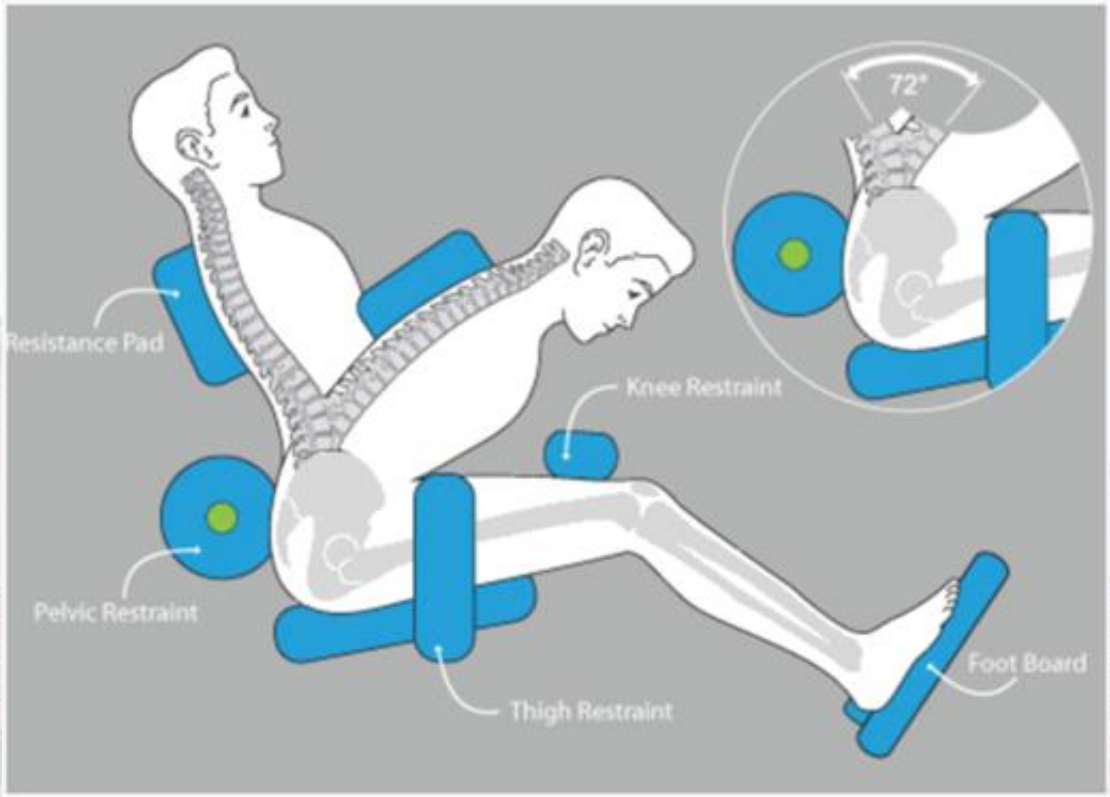
MedX Strengthening



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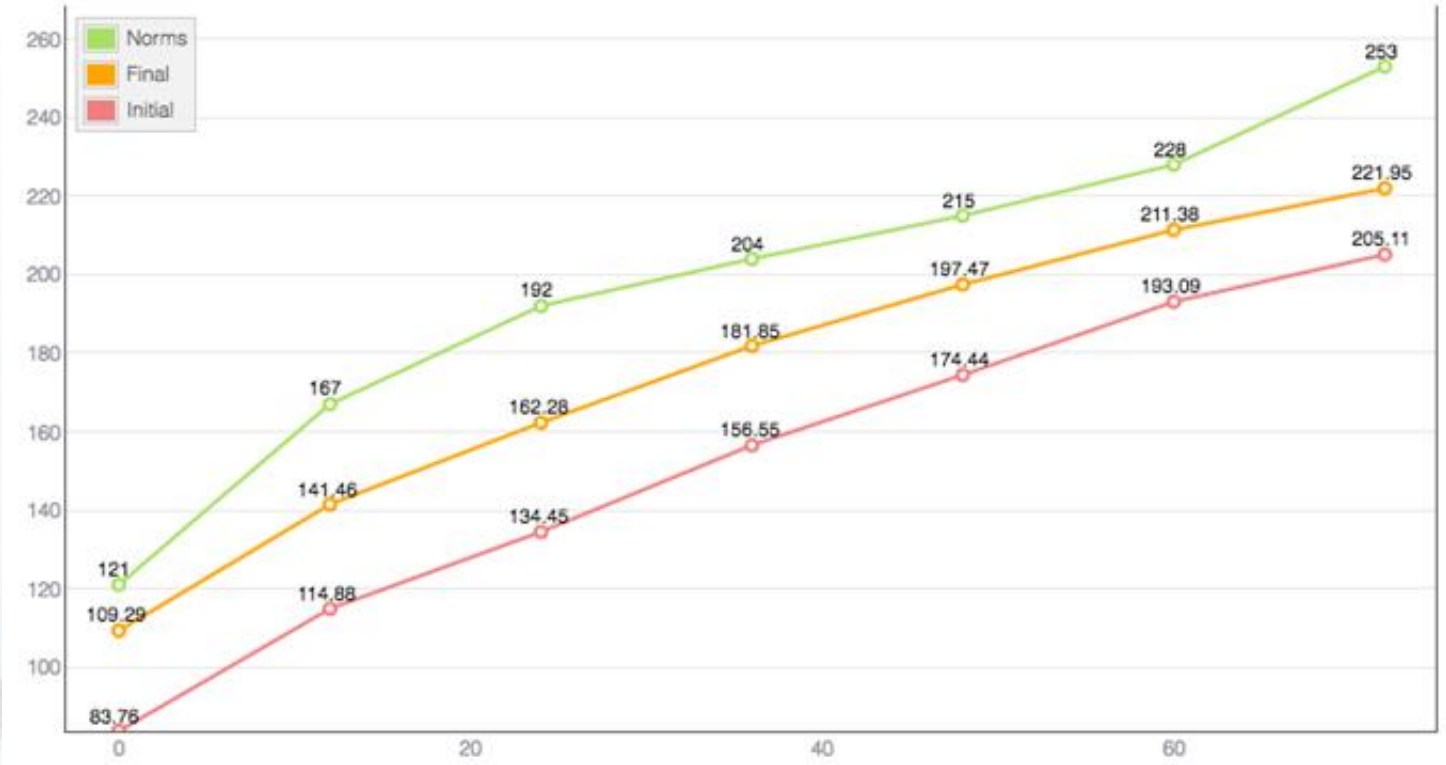
Strength Outcomes (8/1/15 - 8/1/16)
Lumbar Disc Herniation

Lumbar Strength Progression, Male 60+ years old n = 152, Strength increase 15%



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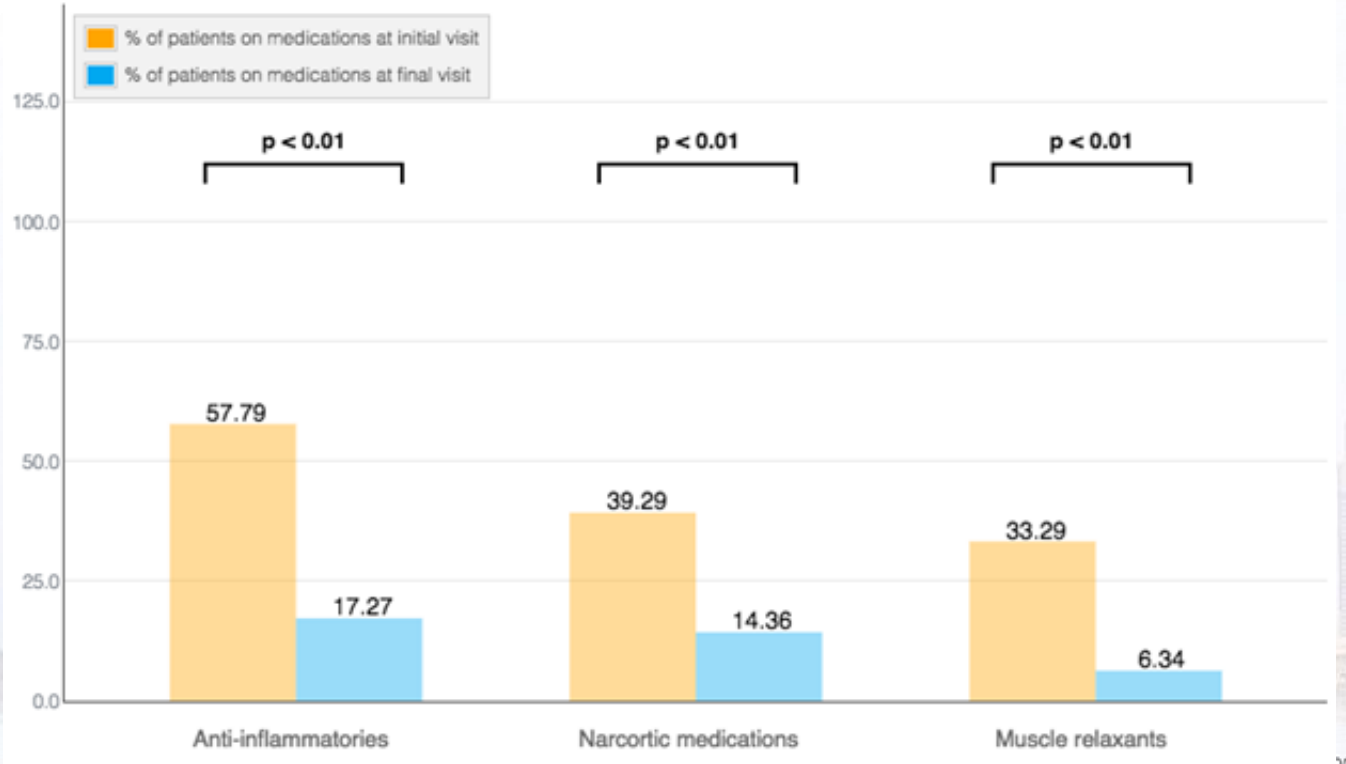
Medication Outcomes (8/1/15 - 8/1/16)

Anti-Inflamm n=822, Narcotics n = 822, Muscle Relaxants n = 820, completed program



Worse

Better

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Rate of Surgery

8% to 0.5%

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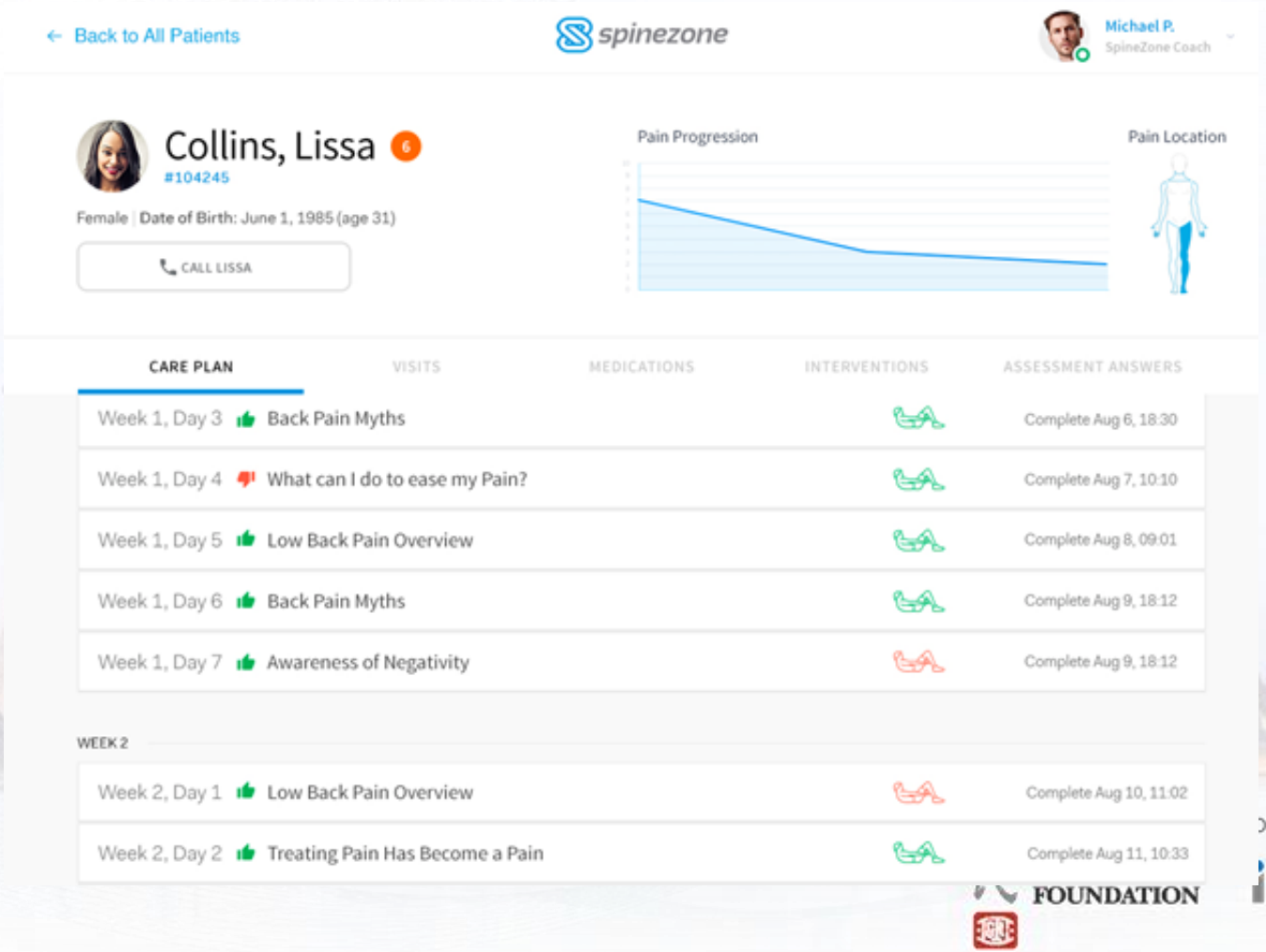

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Clinical Decision Support

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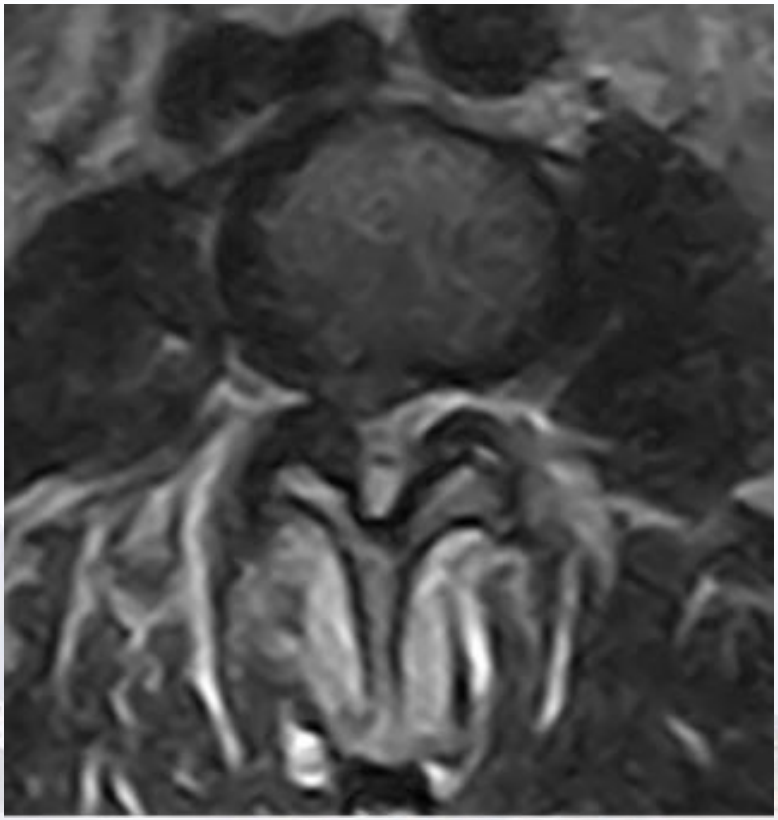
Case Example



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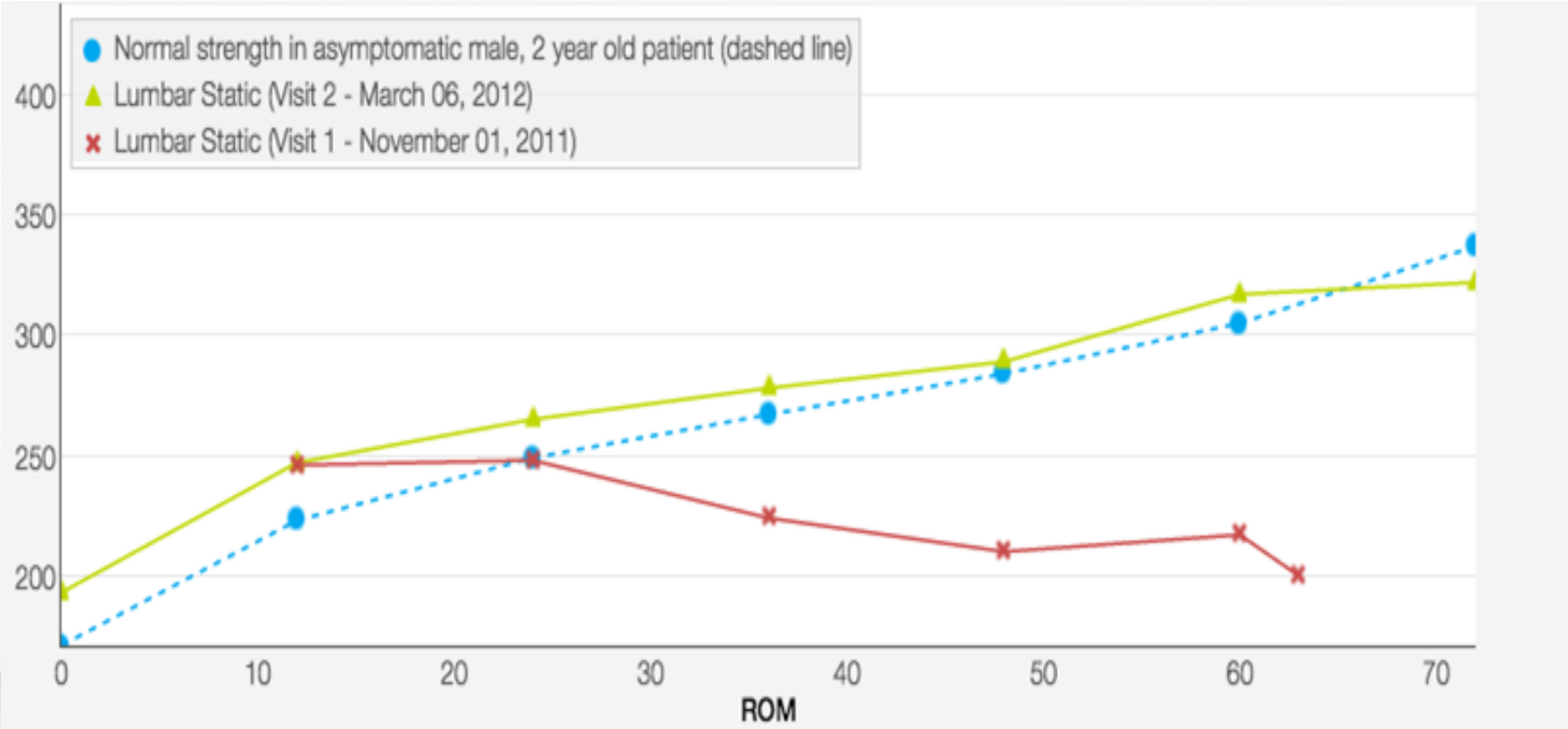
Lumbar Static Strength Test - 40% increase in strength



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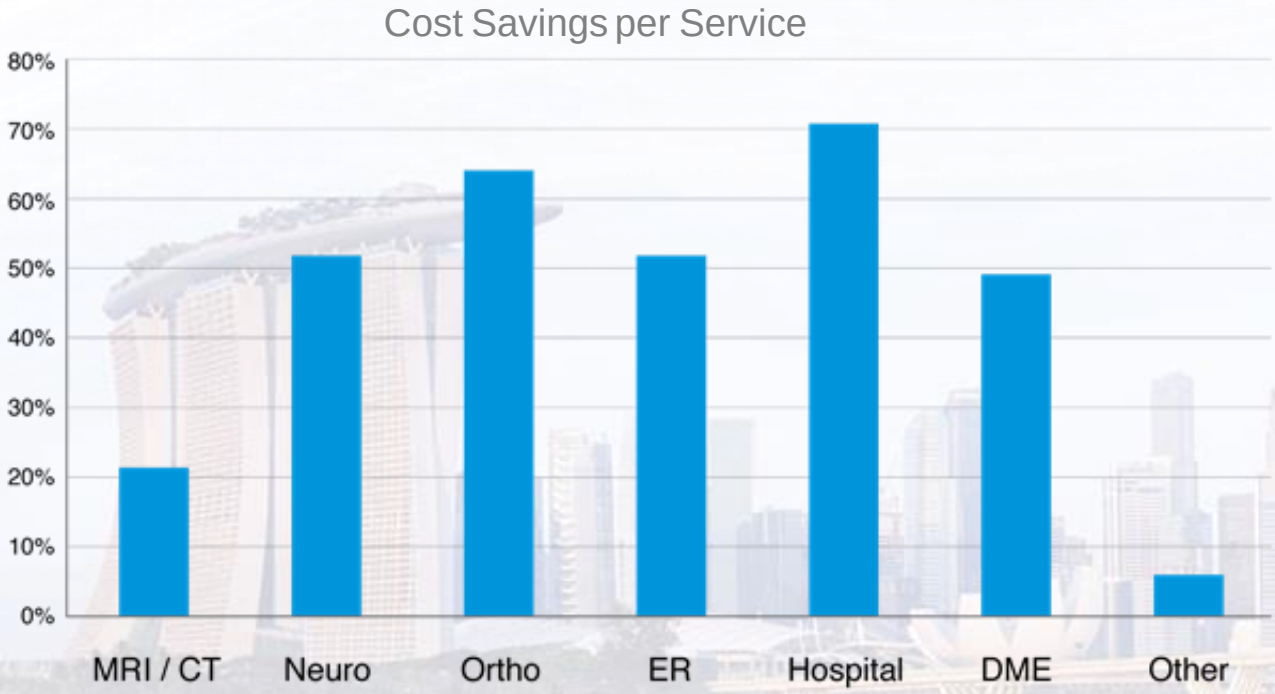
International Society for the Study of the Lumbar Spine - Seoul, 2014



31% Total Cost of Care Savings

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- SpineZone Today
- Laboratory
- Analytics

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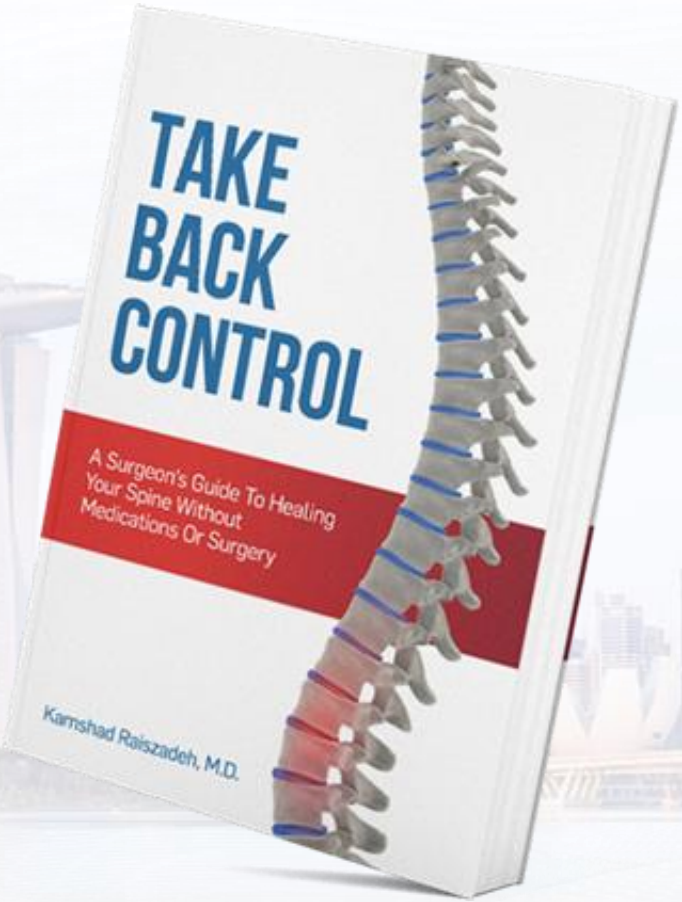

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"A chance to cut MAY be a chance to cure, just make sure the data is pure"

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