PRODUCT CONCEPT: EQUISENSE
Accelerated detection of equine leg injury.

- Protects
- Senses
- Alerts
TESTING

Sketch model to test:

- Model design
- Sensor selection and resolution
- Integration with existing boots
- Simulated swelling
MARKET

U.S. Industry:

• 9.2 M Horses \(^1\)
  
  40% racing or showing

• $1.9 B Industry\(^2\)

[2] IBIS world: Horse and Other Equine Production in the US industry Report
BENCHMARKING

Thermography: identifies area of injury
~ $250/service

Ultrasound: tendon and ligament diagnosis
~ $350/service

CT Scan: tissue and bone diagnosis
~ $2500/service

MOVING FORWARD

Injury Threshold Determination and Alarm Function

Wireless Information Communication

Temperature Sensing
QUESTIONS?
APPENDIX B

EquiSense Customer Information

Customer

• Spends $10,000 - $30,000 per year after purchase
• ~50% annual income $25,000 - $75,000.
• ~30% annual income > $100,000

Feedback:

• Check for abnormalities by “running hand down tendons”
• Temperature fluctuates during exercise
  o “can’t feel just by comparison”
• “my experience with one leg being more heated than the other is that it is usually quite swollen too”
APPENDIX C

Equisense Pressure and Circumference Measurements

Pressure vs. Circumference Testing

Circumference (in)

Pressure (mmHg)