

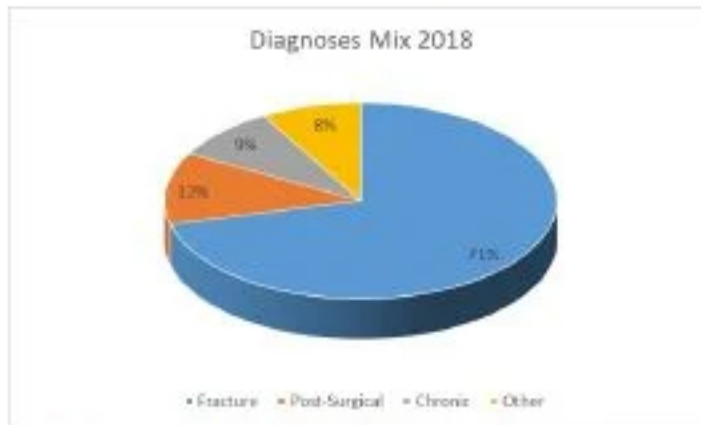


"Elegant design and function that our patients love. It's brilliant."

- Dr. Craig Huston and Dr. Brandon Beauchamp

**Commercially Available and Validated:**

- **Over 1,000 patients** have used ActivArmor for healing over the **last 5 years**.
- **Hundreds of physicians across the US** have prescribed ActivArmor orthoses for wide range of diagnoses, including:
  - Distal radius fracture
  - Broken wrist
  - Boxer fracture
  - Thumb and finger fractures
  - Carpal tunnel
  - Post-surgical support, e.g. CMC, tendon repair
  - Other chronic conditions and sports support



**Tested and Certified:**

- Biocompatibility tested (*ISO 10993-5 certified*)
- Listed with the *FDA* as a Class 1 splint
- **Covered by most insurance**
- Microporosity testing completed for cleanability

**Collaborations and Partnerships:**



- Robert E. Fischell Medical Device Institute
- Department Of Aerospace Engineering, Clarke School of Engineering, University of Maryland
- FDA, Center for Devices and Radiation Health, Office of Science and Engineering Laboratories

**Publications and Data:**

- Minute Porosity of 3D Printed Casts and Splints May Allow Water Entry, Diana Hall (ActivArmor), Lex Schulteis (Univ of Maryland), et al. ACSM 2017 Supplement (<https://activarmor.com/wp-content/uploads/2020/08/Poster-for-ACSM-2017.pdf>)
- Skin Compatibility with 3D Printed Casts and Splints, Diana Hall (ActivArmor), Lex Schulteis (Univ of Maryland), et al. Abstract presented at ACSM 2019.

Research abstracts presented at:

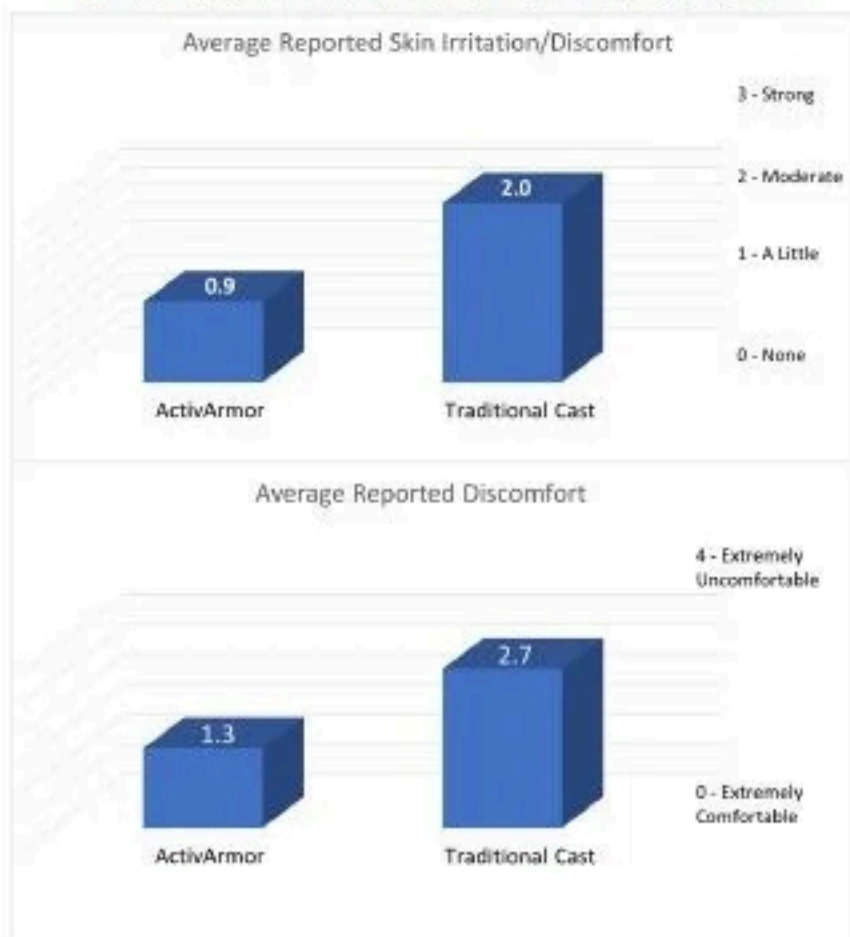


- **Bacterial Load Study** (December 2019): 6 volunteers wore a traditional cast on one arm/leg and an ActivArmor cast on the other for 10 days. Upon removal, the patient's skin was swabbed with sterile saline and incubated on Agar plates. The bacterial colonies were recorded (see photos at right).

*"It actually decreases the bacterial level, because you can actually wash underneath."*

— Michael Fitzmaurice, MD, Fitzmaurice Hand Institute, Scottsdale, AZ

- **Patient Comparative Survey Results** (December 2019): 15 volunteers were put in both traditional and ActivArmor casts and asked to compare their experiences quantitatively on a numerical scale. The statistical results are exhibited in the charts below.



**Traditional Cast      ActivArmor**



*"You don't get the skin breakdown that you do with traditional casts. Less risk of skin infection; you can view the incision as well as pin sites, where you can't monitor those in a traditional cast. So these are great for post-op patients. We've seen the same healing rates, I'd say... better [with ActivArmor] because it's a great fit and it's a great immobilizer."*

- Jason Browder, PA, Alpine Orthopedics, Gunnison, CO

## Sleep and Hygiene Studies (December 2019):

15 volunteers were put in both traditional and ActivArmor casts and asked to compare their experiences quantitatively on a numerical scale. The statistical results are exhibited in the charts.

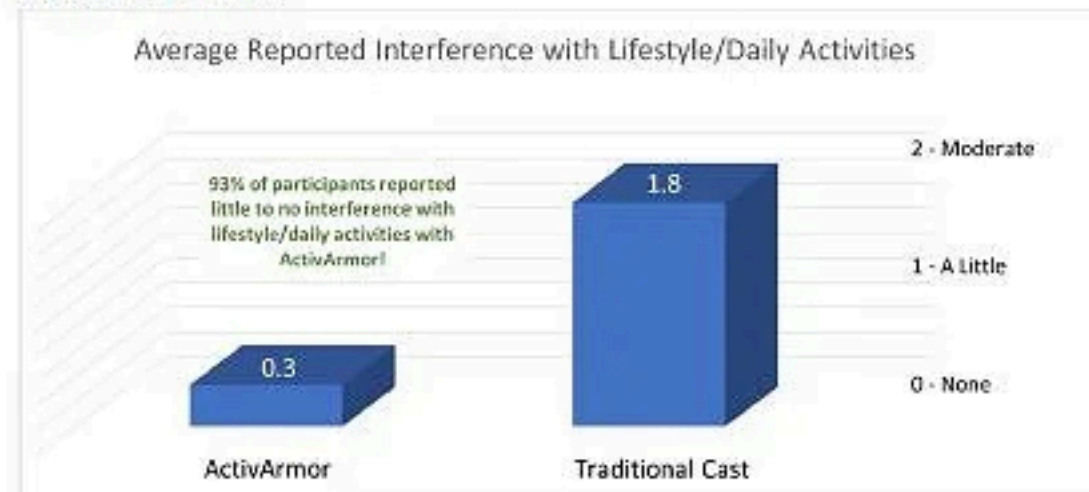


### Average Reported Interference with Hygiene Practices

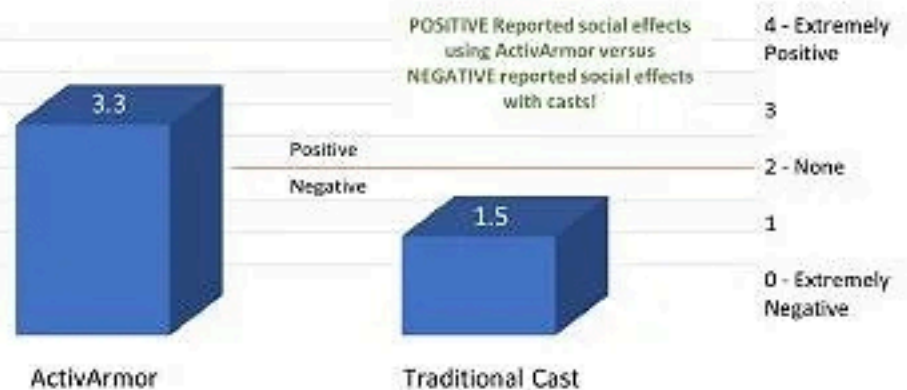


## Patient lifestyle and social effects (December 2019): 15 volunteers were put in both traditional and

ActivArmor casts and asked to compare their experiences quantitatively on a numerical scale. The statistical results are exhibited in the charts.

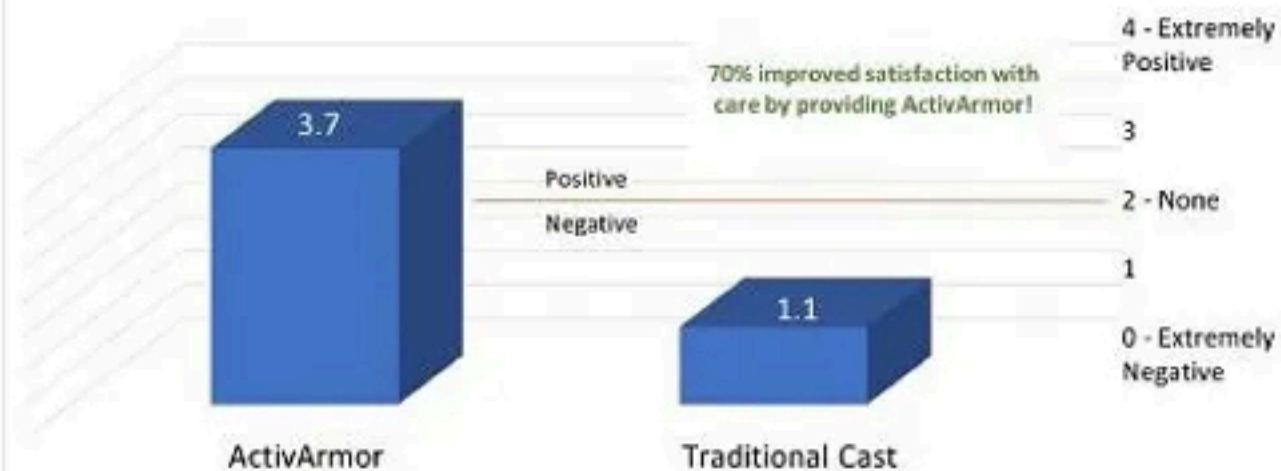


### Average Reported Social Effects/Attention



## Patient Satisfaction (December 2019):

### Average Reported Satisfaction with Care



93% of respondents preferred wearing ActivArmor over a traditional cast

