

## FUTURE OF GLOBAL HEALTHCARE

**\$8.7**  
TRILLION

Global healthcare spend  
projected by 2020<sup>2</sup>



**11.5%**

Percent of total population  
over 65 years of age.<sup>3</sup>

## OVERALL 3D PRINTING/AM GROWTH<sup>4</sup>

**21%**

Compound annual growth rate (CAGR) of AM industry in 2017

**\$7.3  
BILLION**

2017 AM market size

**11%**

Approximate revenues from medical/dental pieces

**97%**

AM professionals who expect an increase in Medical AM/3DP applications<sup>5</sup>

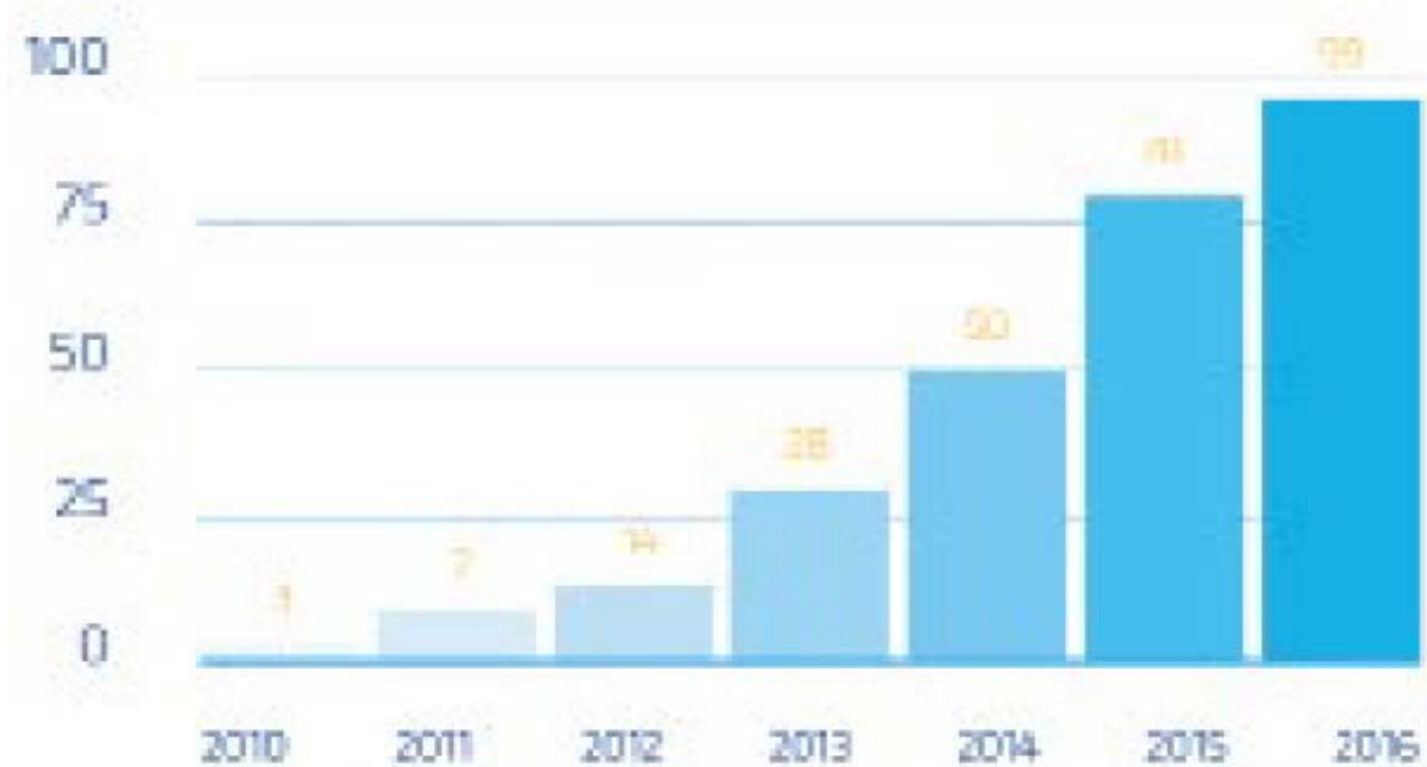
# U.S. Healthcare 3D Printing Market Share, By Technology 2013-2024 (USD Million)



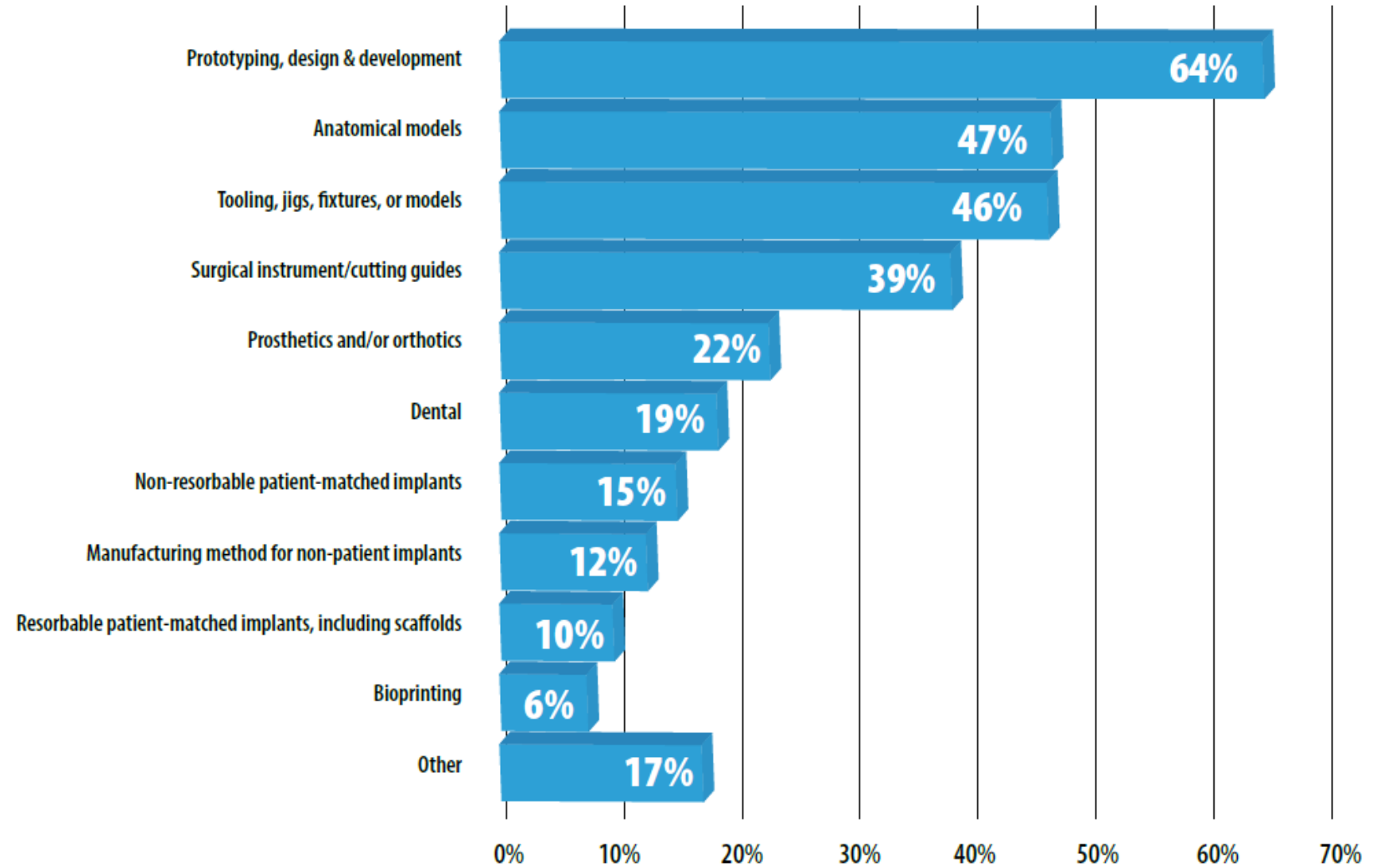
“2017 Health Care 3D Printing Market”, Global Market Insights

## HOSPITALS IN THE US WITH A CENTRALIZED 3D PRINTING FACILITY

*Using Materialise Mimics technology*



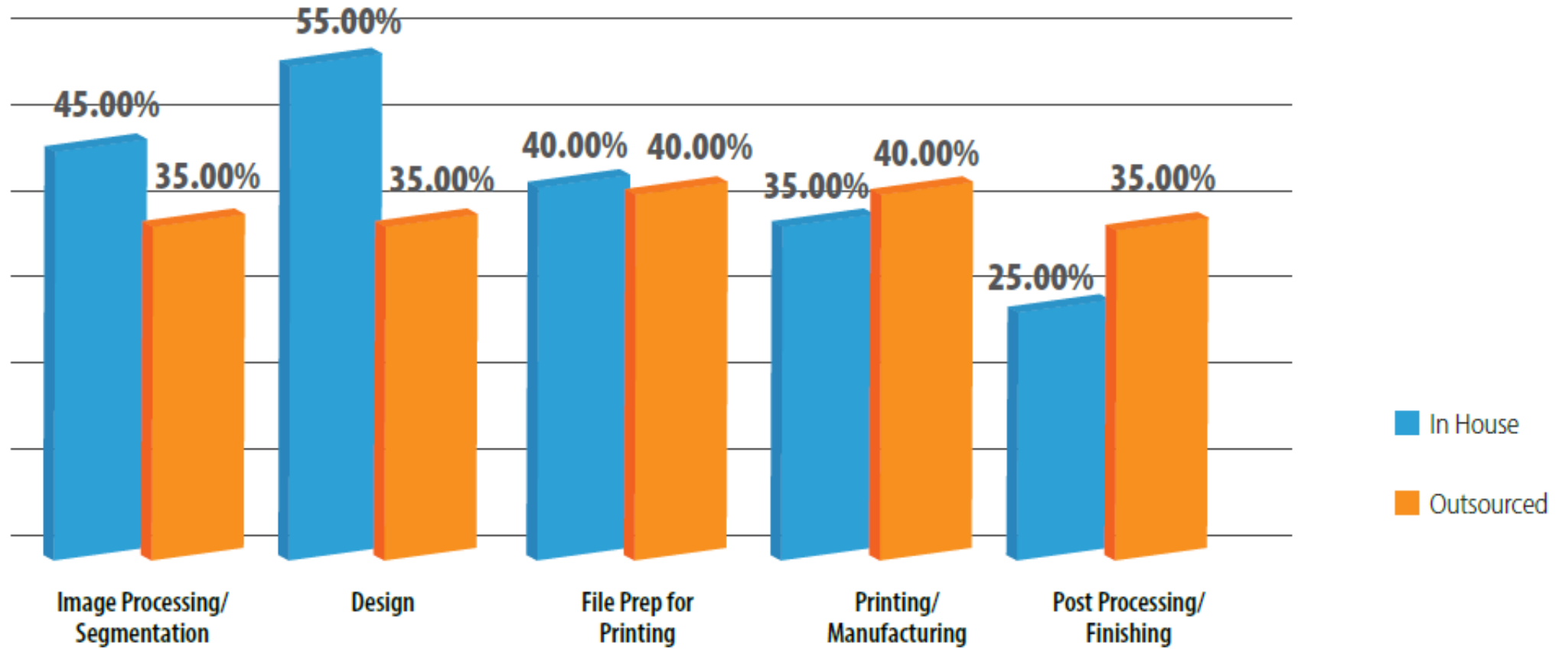
# How AM3DP is being used



“2018 Medical Additive Manufacturing / 3D Printing Annual Report”, sme

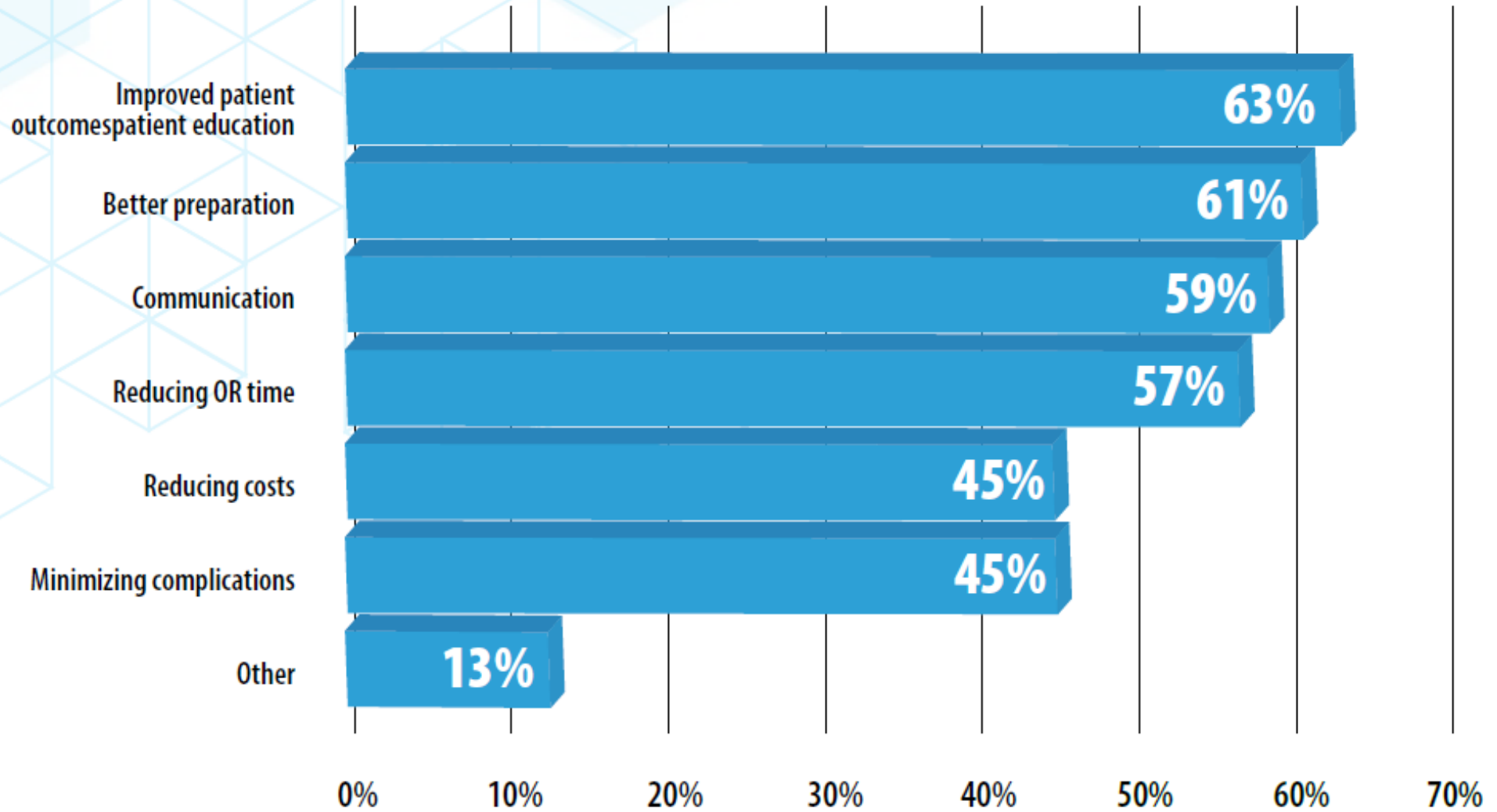
# Non-resorbable Patient-matched Implants

## Process Steps

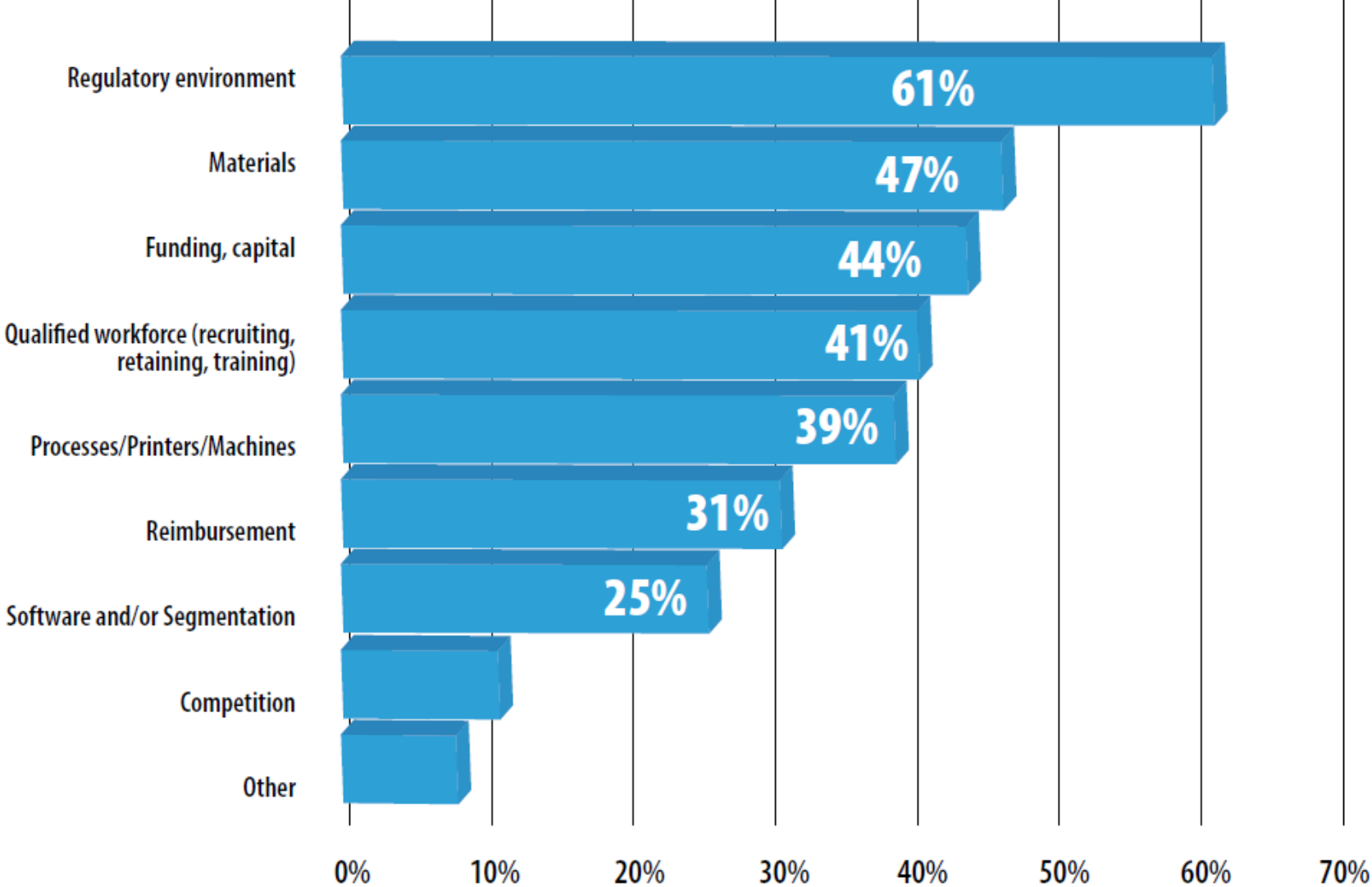


“2018 Medical Additive Manufacturing / 3D Printing Annual Report”, sme

## Anatomical Model Use Drivers



# Which of These are Challenges to Increasing Medical AM3DP Applications?





# Desenvolupaments i recerques a observar en el futur del Medical 3D Printing

- Drug Delivery Systems
- Tissue Fabrication
- Time-release Drug Delivery
- Ceramic Bone Scaffolds
- Anatomical Models Directly from Imaging Software
- Hologram 3D Printing
- 3D Printed Ovaries
- 3D Printed Wound Care and Monitoring
- 3D printed Power Sources for Implant
- 3D Printed Vascular Structures
- Printable Bacteria Inks
- ....