

Careers in Healthcare/Medtech

*Evaluating options for an Awesome Future in
Health & Medtech*

Coppell High School –Engineering Boosters Club

23rd April 2026

Biten Kathrani





Academics

- M. Tech Biomed. Eng., IIT Mumbai
- MBA, Wharton Business School
- Certified Patent Agent

Boston
Scientific

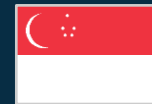
Biten Kathrani

Global Head R&D, A&R Surgery, J&J Medtech

CHS High Schooler's Dad | Passionate Medtech Leader | Healthcare Innovator | Start-up & People Mentor | Digital Health Evangelist

31 years of re-inventing myself everyday with a purpose of shaping the future of healthcare innovation and developing talented teams & serving patients (6 R&D Centers, 12 Disease Areas, MM Lives)

Johnson & Johnson





Learn about our healthcare areas

[Explore medicine and therapy products →](#)

[Explore MedTech products →](#)

[Medicines & therapies →](#)

Oncology

Immunology

Neuroscience

Cardiopulmonary

[Medical devices & technology →](#)

Cardiovascular

Orthopaedics

Surgery

Vision

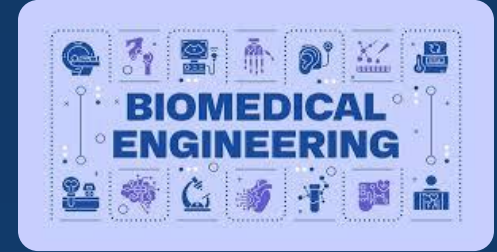
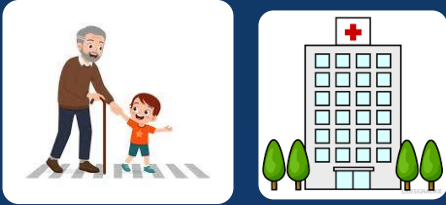
Curiosity & Inspiration



Confusions

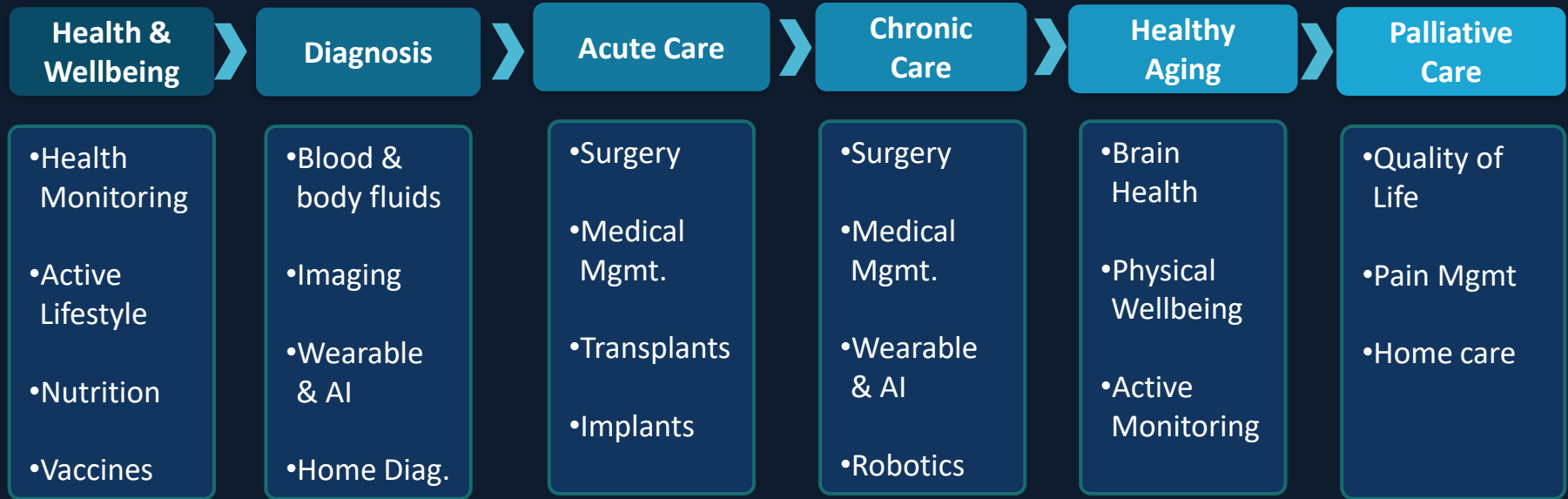


North Star



How Healthcare uses technology

From Staying Healthy to Getting Better



WHY Healthcare Is a Smart Career Move



MARKET VALUE (2025)

\$9.8 Trillion

Growing 6.5% every year through 2035!








GLOBAL WORKFORCE

70M+ Health

Workers

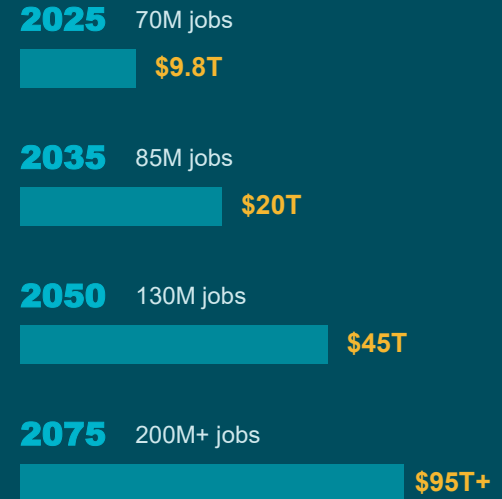
10M+ workers needed by 2030 — huge opportunity!

Key Healthcare Roles & Skills

-  Physicians & Surgeons
-  Nurses & Midwives
-  Pharmacists & Therapists
-  Biotech & Genomics
-  Health IT & Data Science
-  AI & Robotics in Medicine
-  Health Administration
-  Allied Health & Caregivers



Future Growth Projections



How Startups Are Shaking Up Healthcare

DIGITAL HEALTH STARTUP FUNDING (2025)

\$22.3B

19% YoY growth | 14 new unicorns in 2025
62% of VC dollars go to AI-enabled startups

AI STARTUP DOMINANCE

85%

of all GenAI spend in healthcare flows to startups over legacy vendors

Key Startup Sectors

- AI-Powered Diagnostics & Clinical AI
- Digital Therapeutics & Mental Health
- Telehealth & Remote Monitoring
- AI Drug Discovery & Biotech
- Wearables & Medtech Devices
- Revenue Cycle & Admin Automation
- Longevity & Healthspan Tech
- Genomics & Precision Medicine

Startup Ecosystem Growth

2026 AI-native era begins

\$30B+

2035 Digital health matures

\$120B+

2050 Autonomous care models

\$500B+

2075 Full AI-human integration

\$2T+

WHAT are the Careers You Can Get in Healthcare/Medtech?



Forensic Science



Physicians



Research



Bioinformatics



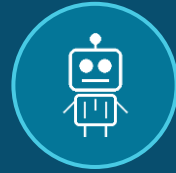
Biotech / Genomics



Pharma



Biomedical



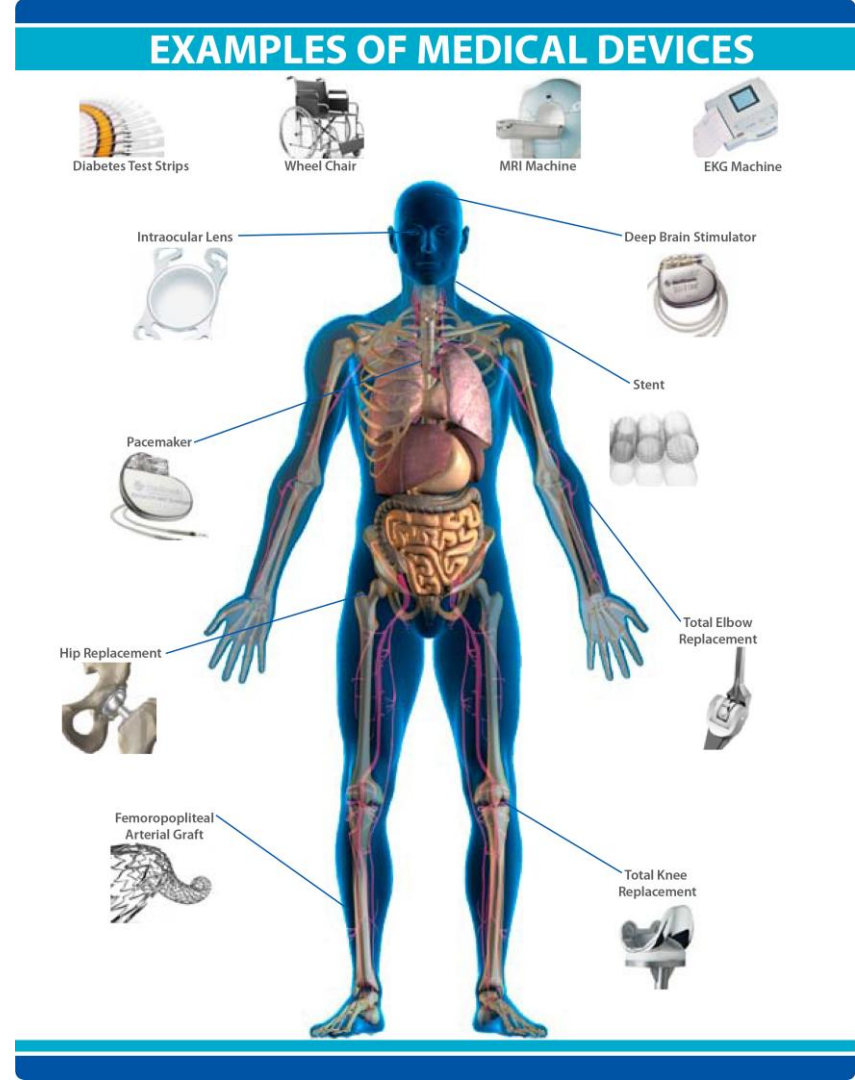
Robotics & AI

Medtech Opportunities

Build the Tech That Saves Lives

Types of Jobs / skills / Engineering

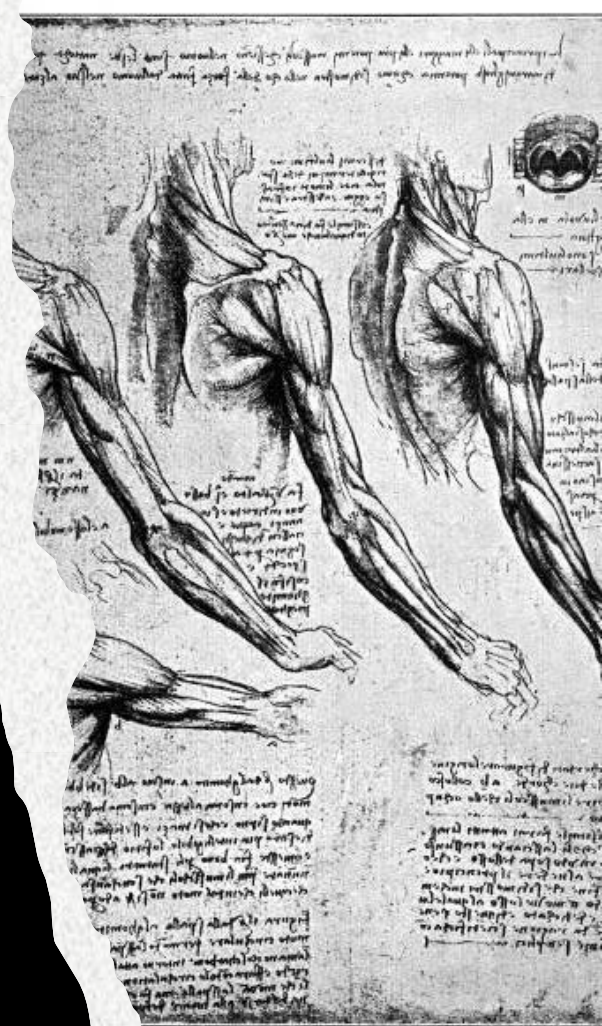
- Biomedical Engineering
- Materials Science
- Chemical Engineering
- Mechanical Engineering
- AI, Data science & Software Engineering
- Robotics Engineering
- Electrical & Electronics Engineering
- Industrial Design
- Plastics & Polymer Science
- Quality Engineering
- Clinical Research
- Business & Marketing
- Surgeons, Nurses, Pathologist





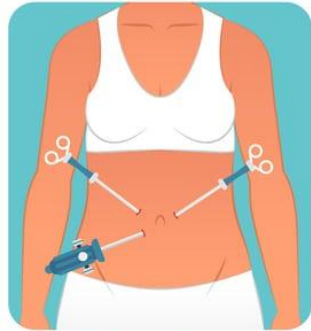
WHO

Can Build a
Career in
Healthcare?
(Hint: YOU Can!)

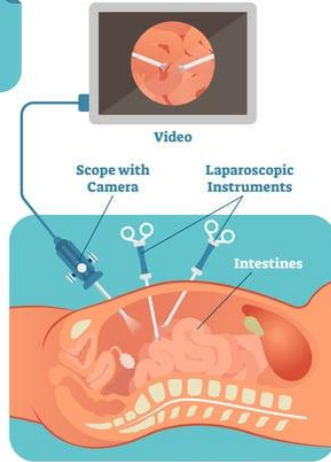


ANATOMICAL SKETCHES.

LAPAROSCOPIC SURGERY



Patient Front

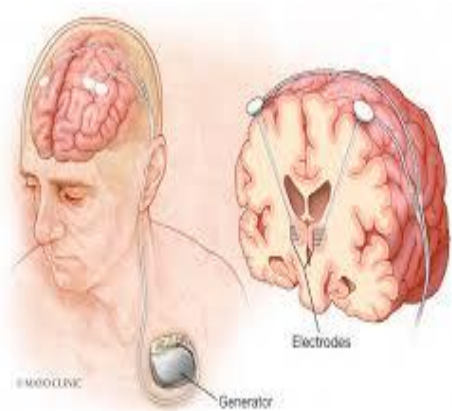


Patient Side View



Minimally Invasive Surgery
(Laparoscopic & Endoscopic Surgery)

Cool Tech in Medicine



[Patrick Scott: DBS for Essential Tremor](#)

Neuromodulation (Deep Brain Stimulation)

Cool Tech in Medicine

[Brennan High School students get a hands-on lesson in robotic surgery](#)

Surgical Robotics

1MM surgeries annually

Cool Tech in Medicine

[Aquoxis Ai Creator V13 Intro3 Us 16 9](#)

AI in clinical Practice

Cool Tech in Medicine

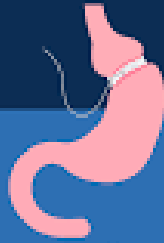
Which Bariatric Surgery is Best?



Vertical Sleeve
Gastrectomy (MSG)



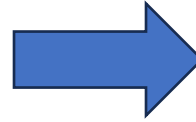
Roux-en-Y
Gastric Bypass (RYGB)



Adjustable
Gastric Band (AGB)



Duodenal
Switch (BPD-DS)



GLP 1 Weight Loss Drug

Reducing Cost, Complications & Moving site of care

Cool Tech in Medicine

Biggest Names in Healthcare You Should Know

Based on Revenue, Market Cap & Industry Rankings (2025-2026)

PHARMA

- | | |
|----------------------|-----------------|
| 1. Johnson & Johnson | 6. Novartis |
| 2. Eli Lilly | 7. AstraZeneca |
| 3. Merck & Co. | 8. Pfizer |
| 4. AbbVie | 9. Novo Nordisk |
| 5. Roche | 10. Sanofi |

MEDTECH

- | | |
|-------------------------|-------------------------|
| 1. Medtronic | 6. Becton Dickinson |
| 2. Abbott | 7. Edwards Lifesciences |
| 3. Siemens Healthineers | 8. GE HealthCare |
| 4. Boston Scientific | 9. Philips |
| 5. Stryker | 10. Baxter |

BIOINFORMATICS

- | | |
|------------------------|--------------------------|
| 1. Thermo Fisher | 6. Agilent Technologies |
| 2. Illumina | 7. Revvity (PerkinElmer) |
| 3. Eurofins Scientific | 8. SOPHiA Genetics |
| 4. QIAGEN | 9. BGI Genomics |
| 5. DNAnexus | 10. Bruker |

HEALTHCARE STARTUPS

- | | |
|------------------------|--------------------|
| 1. Tempus AI | 6. Nourish |
| 2. OpenEvidence | 7. Strive Health |
| 3. Abridge | 8. Thyme Care |
| 4. Hippocratic AI | 9. Function Health |
| 5. Ambience Healthcare | 10. Curative |

Source: Industry reports, market cap data, and startup valuations (2025-2026)

Best Schools to Study Healthcare & Engineering

PHARMA & DRUG DEVELOPMENT

1. UNC Chapel Hill
2. Harvard University
3. Univ. of Michigan
4. UCSF
5. Univ. of Minnesota
6. Univ. of Southern Cal.
7. Purdue University
8. Univ. of Texas Austin
9. Univ. of Kentucky
10. Univ. of Maryland

BIOMEDICAL ENGINEERING & ROBOTICS

1. Johns Hopkins Univ.
2. Georgia Tech
3. MIT
4. Carnegie Mellon Univ.
5. Stanford University
6. Duke University
7. UC Berkeley
8. Univ. of Michigan
9. Univ. of Pennsylvania
10. UC San Diego

BIOINFORMATICS

1. Harvard University
2. Stanford University
3. Johns Hopkins Univ.
4. UCSF
5. MIT
6. Univ. of Washington
7. UC San Diego
8. Univ. of Michigan
9. Yale University
10. UC Berkeley

TOP 5 TEXAS UNIVERSITIES

1. UT Austin Pharma | Biomed | Robotics | Bioinformatics
2. Texas A&M University Pharma | Biomed | Robotics | Bioinformatics
3. Rice University Biomed | Robotics
4. Baylor College of Medicine Biomed | Pharma
5. UT Southwestern Medical Ctr. Biomed | Bioinformatics

Your 3-Step Game Plan for Healthcare

1

Be Passionate about Human Health & Life

If you genuinely want to make people's lives better, you're already halfway there



2

Master A STEM or Tech Skill

Strive to be Really good at one thing — and never stop learning— and you'll stand out



3

Pick a Path That Keeps You Excited Every Day

Find something you'd be pumped to do for decades — that's the real secret to career happiness



Questions & Answers

Feel free to ask anything!

Thank You!