



KubeCon



CloudNativeCon



China 2024

# Opportunities and Challenges of Cloud Native Technology in US Healthtech

Katerina Arzhayev,  
Director of Product Management, Healthcare Edge  
SUSE

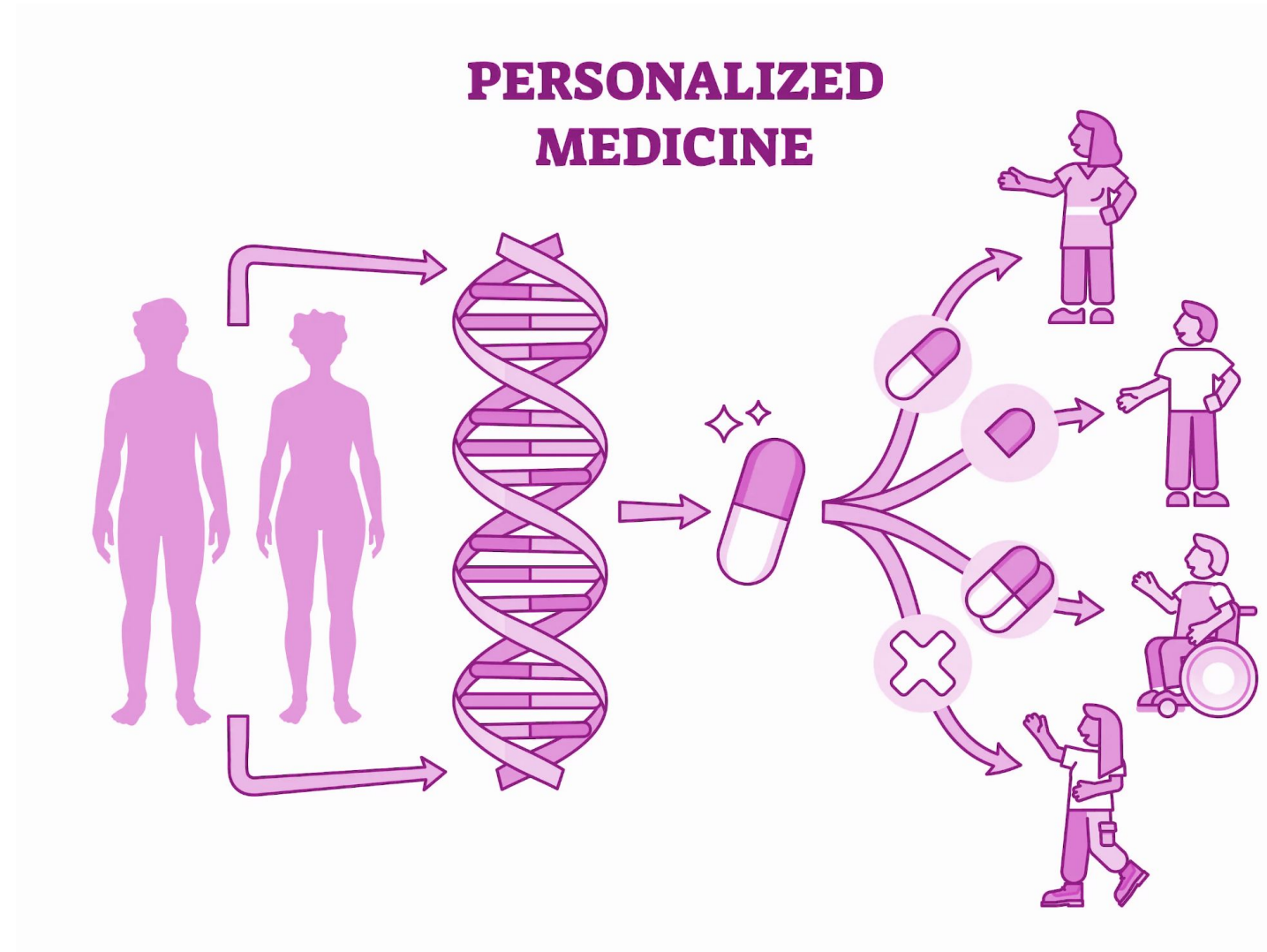
# The State of Healthcare (or Care of Health)



China 2024

**Healthcare** is at its best, **individual**.

At its worst, **regional**.



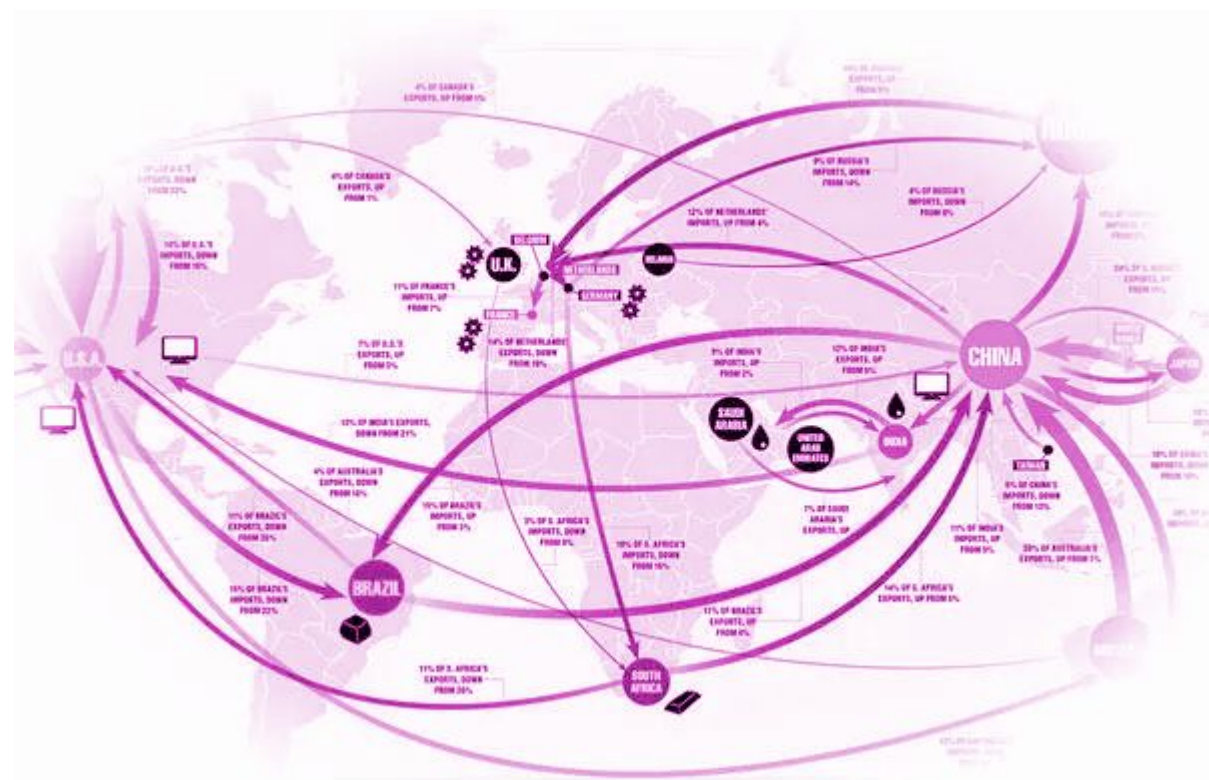
# The State of Healthcare (or Care of Health)



China 2024

**Healthtech** is at its best, **global**.

At its worst, **regional**.



# The American Healthcare Ecosystem

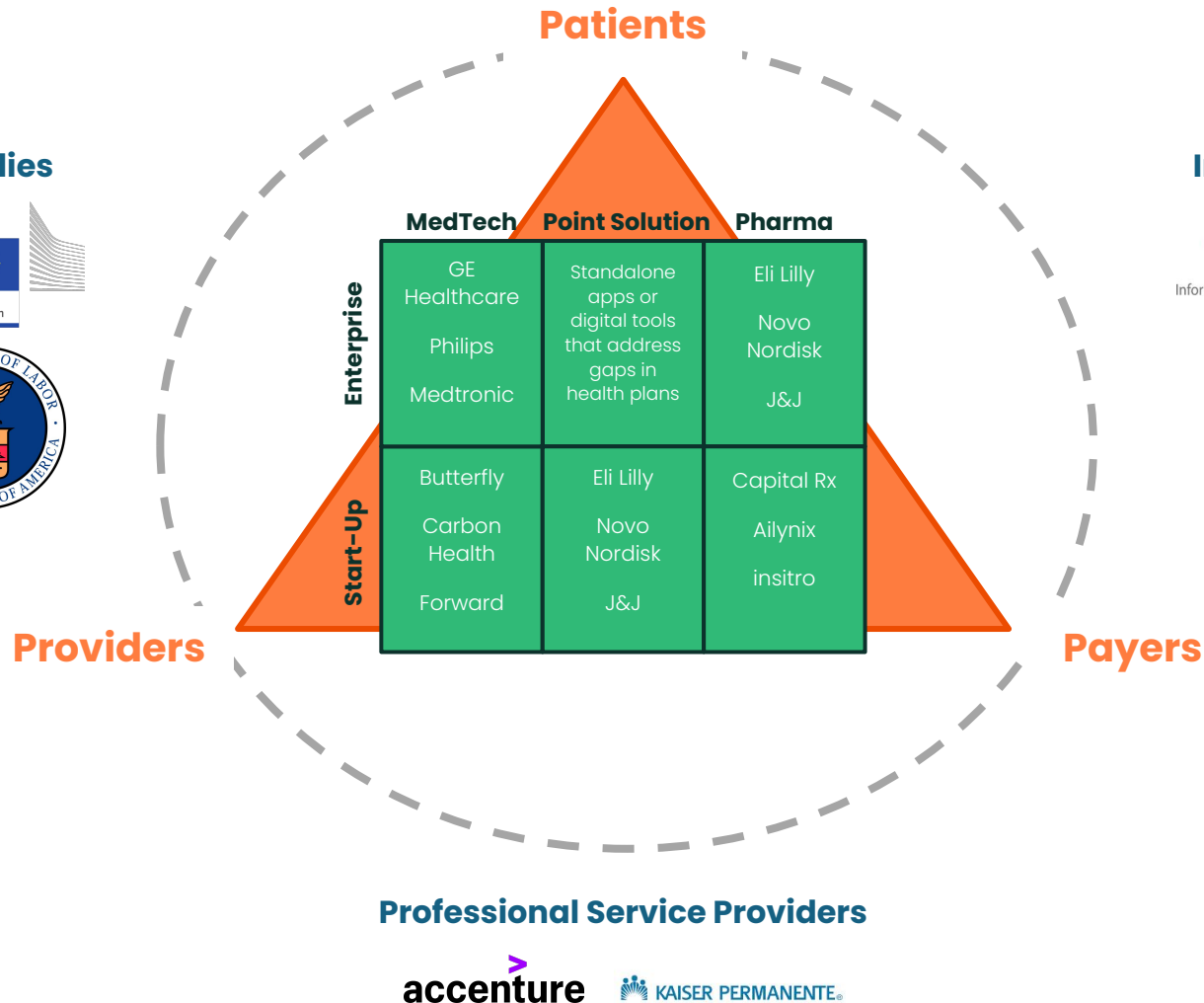


China 2024

## Regulatory Bodies



## Industry Associations





# The American Healthcare Ecosystem

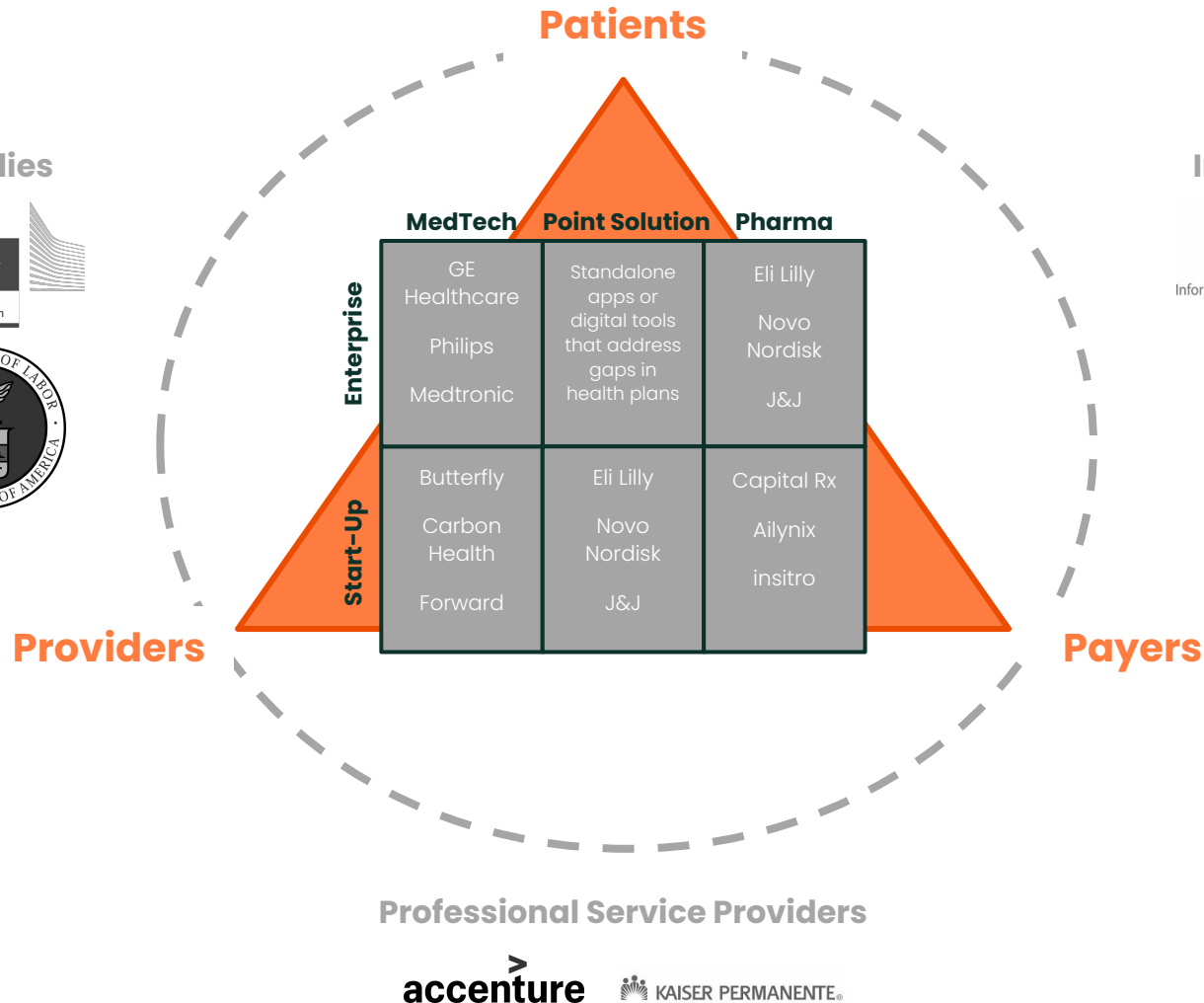


China 2024

## Regulatory Bodies



## Industry Associations



# The American Healthcare Ecosystem

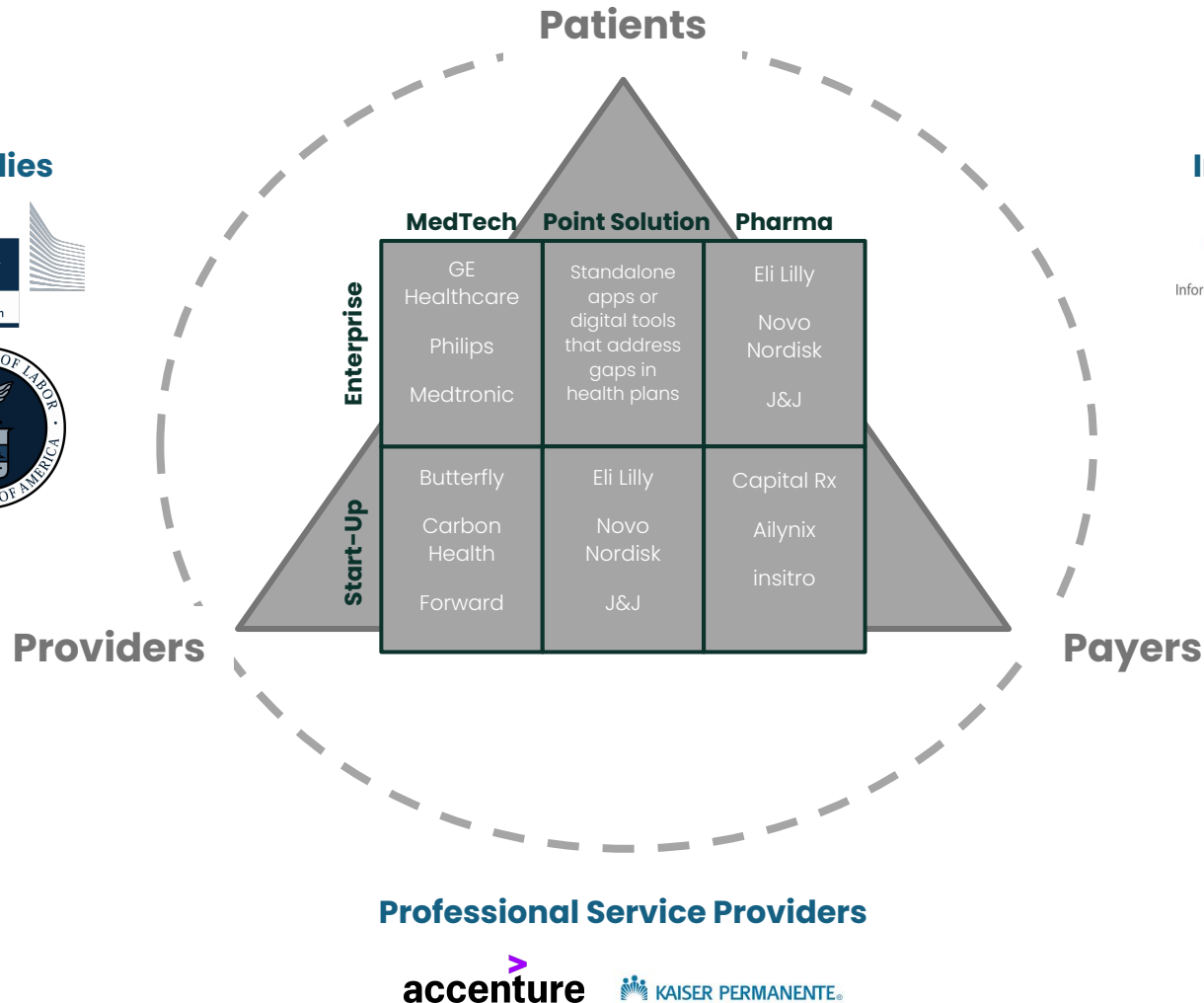


China 2024

## Regulatory Bodies



## Industry Associations



# The American Healthcare Ecosystem

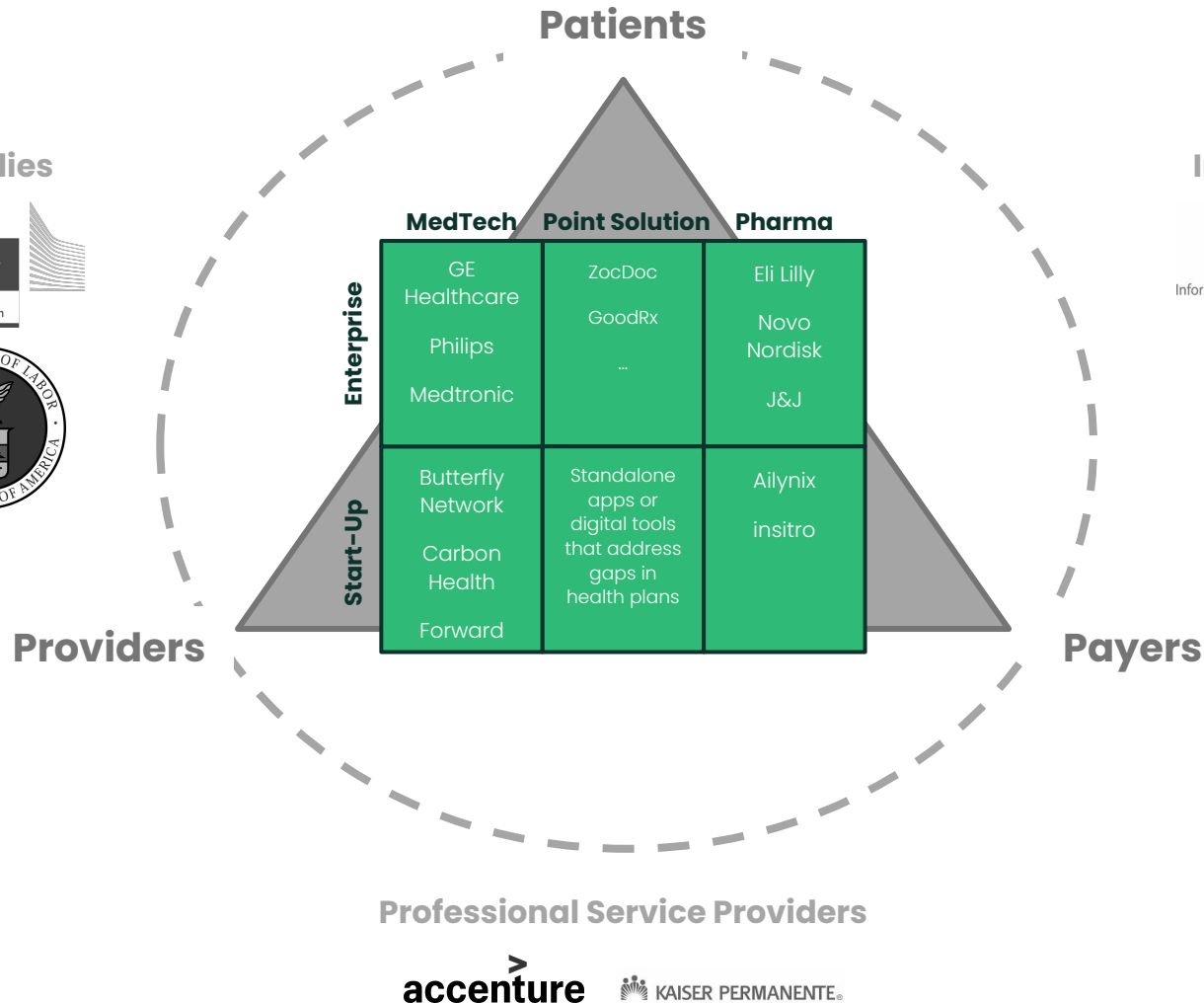


China 2024

## Regulatory Bodies



## Industry Associations



# Use case: Mobile Surgical Imaging



China 2024

- Real-time data processing
- Built with legacy in mind
- Expected to Operate “Indefinitely”
- Operational Resiliency

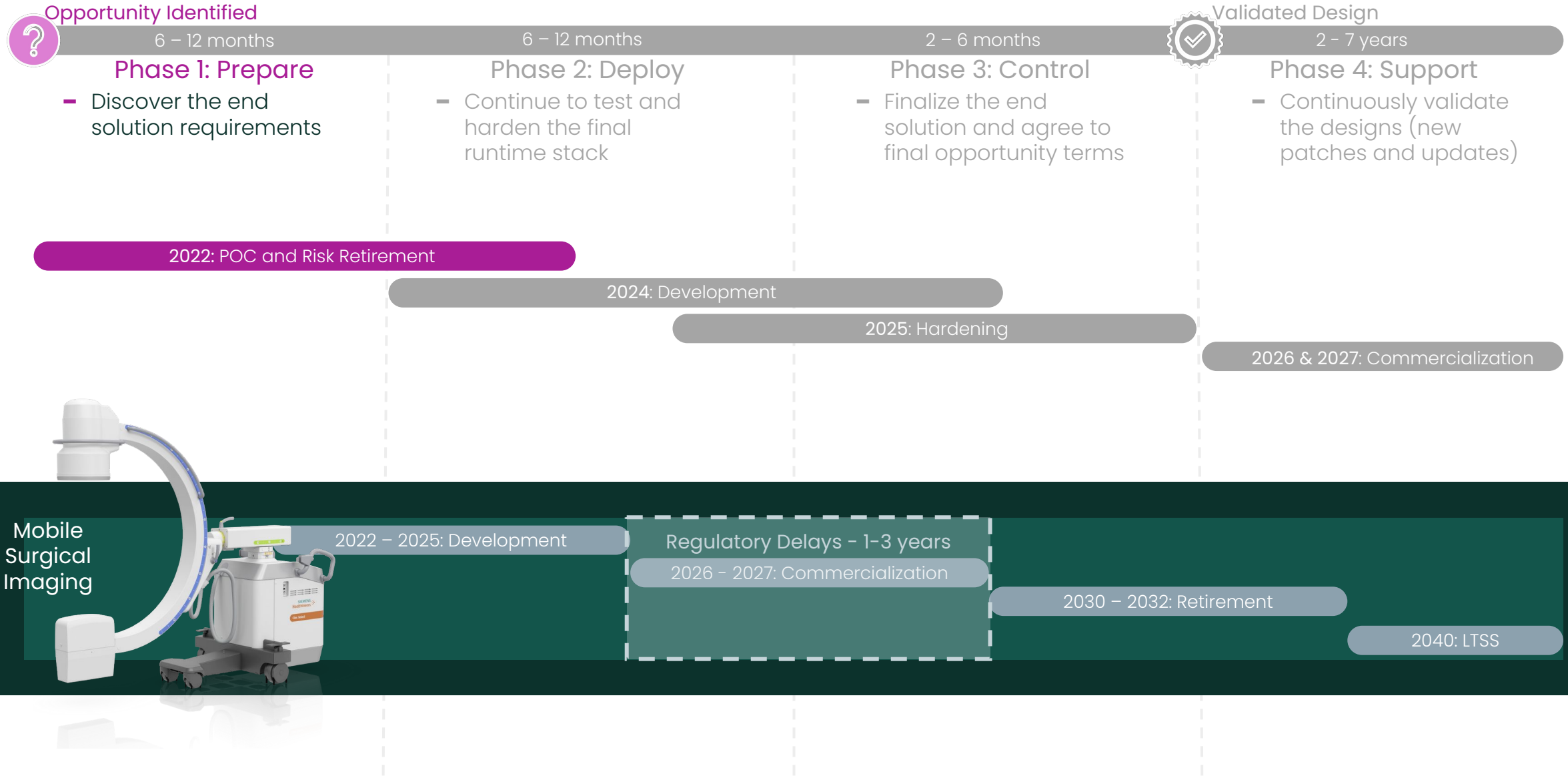




# Use case: Mobile Surgical Imaging



China 2024



# Paradox 1: Technology



China 2024

**Technology:** Healthcare is both **incredibly high tech** with implanted medical devices keeping people alive, and also about **three decades behind** in terms of technological advancement.



75% of all medical communication is still transmitted by fax



70% of providers use legacy systems. The average organization has almost 1,000 unique applications in use



The health care sector employs about 14% of the US working population

# Paradox 2: Regulation



China 2024

**Regulation:** Healthcare needs to be **highly individualized**, to the genetic level, while also maintain **strict standards** and best practices identified on an industry level.

**64%**

Increase in regulations  
for device  
manufacturers since  
2015

**\$31M**

Average total cost for  
participants to bring a  
510k product from  
concept to clearance  
(\$24M spent on  
FDA-related activities)

**3 years**

Time spent on  
regulatory approvals to  
market devices globally

# Paradox 3: Data

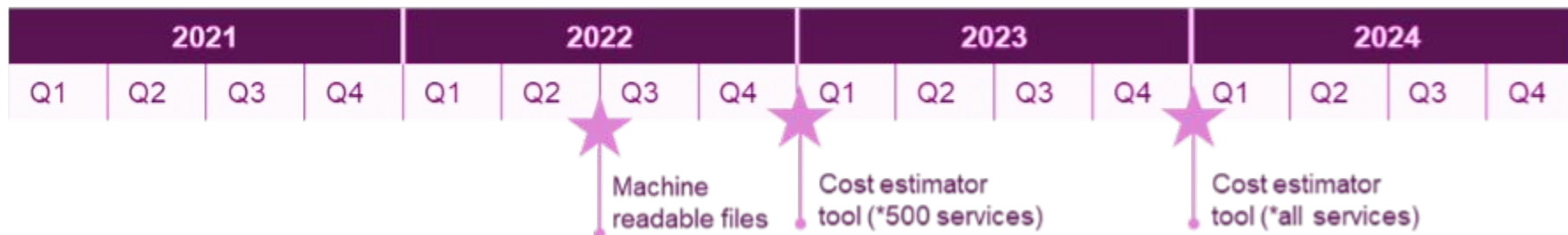
**Data:** Healthcare data needs to be **highly secure** and with restricted access controls put in place, but if a patient asks for their data, they need to have **immediate access** and transferability.



**1 in 4**

Consumers have their healthcare data stolen

## Transparency in coverage timeline





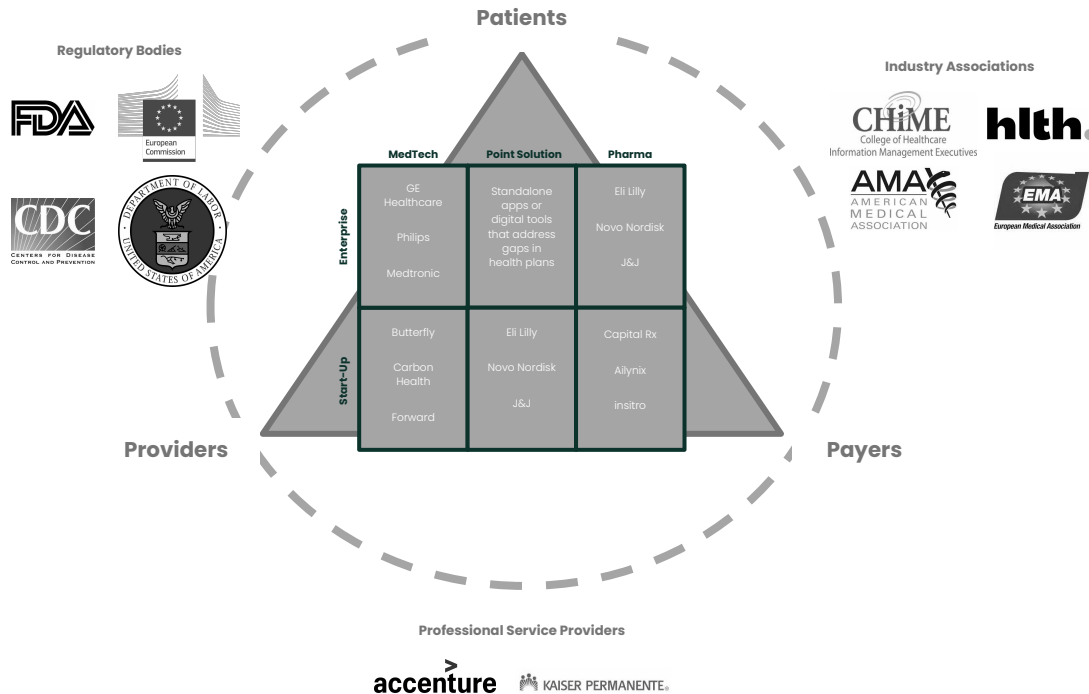
# Solution: Coopetition



China 2024

## 1. Understand

The market and assess the go to market strategy



## 2. Cooperate Regionally

Form strategic partnerships, engage with professional organizations, leverage channel partners

## 3. Compete Globally

Continue to build trust and credibility through continuous innovation



**KubeCon**



**CloudNativeCon**

THE LINUX FOUNDATION



**AI\_dev**  
Open Source GenAI & ML Summit

---

**China 2024**

---