AI

- What is it
- Hype
- Examples of the possible

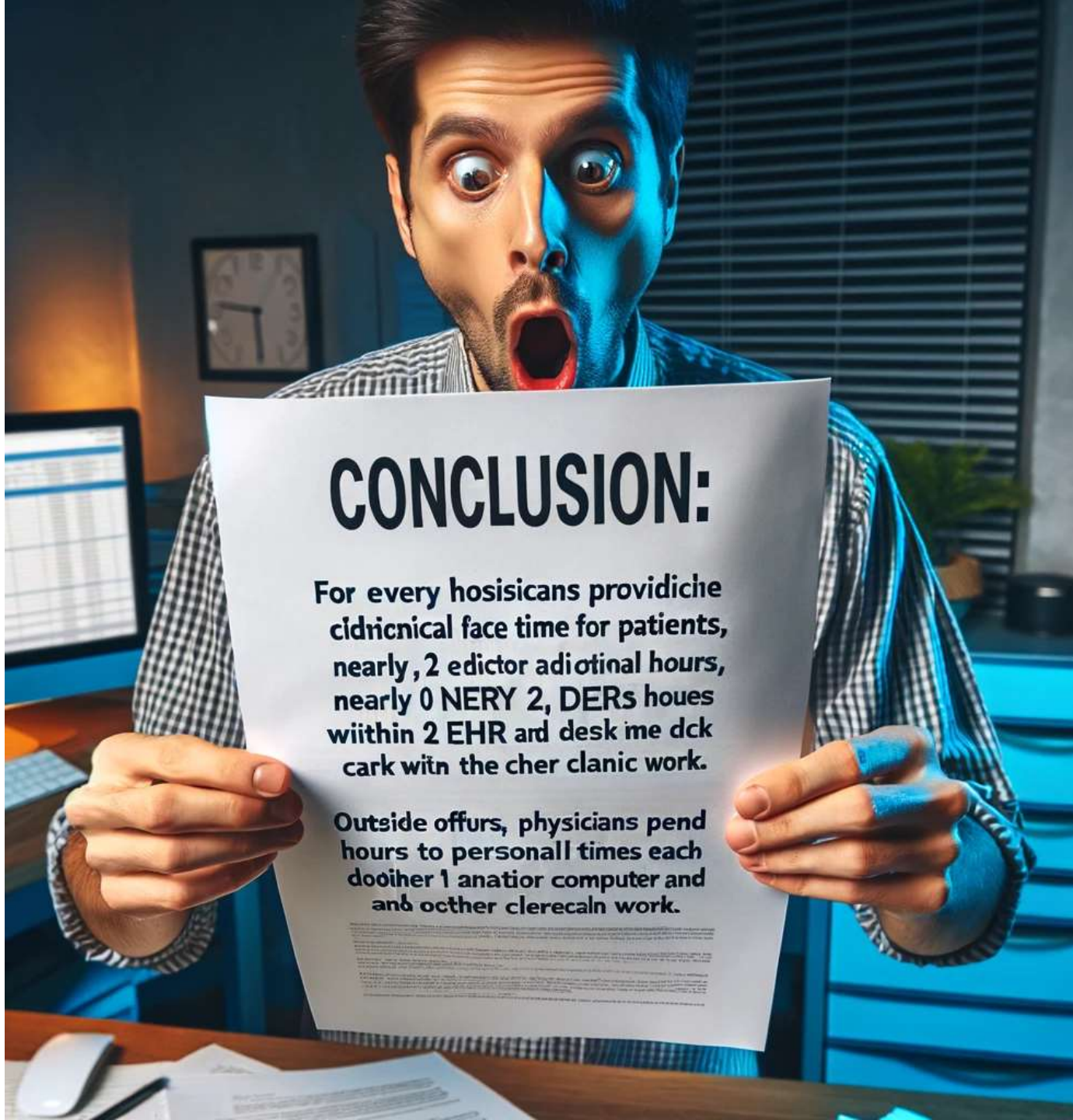
EHR – the broken promise

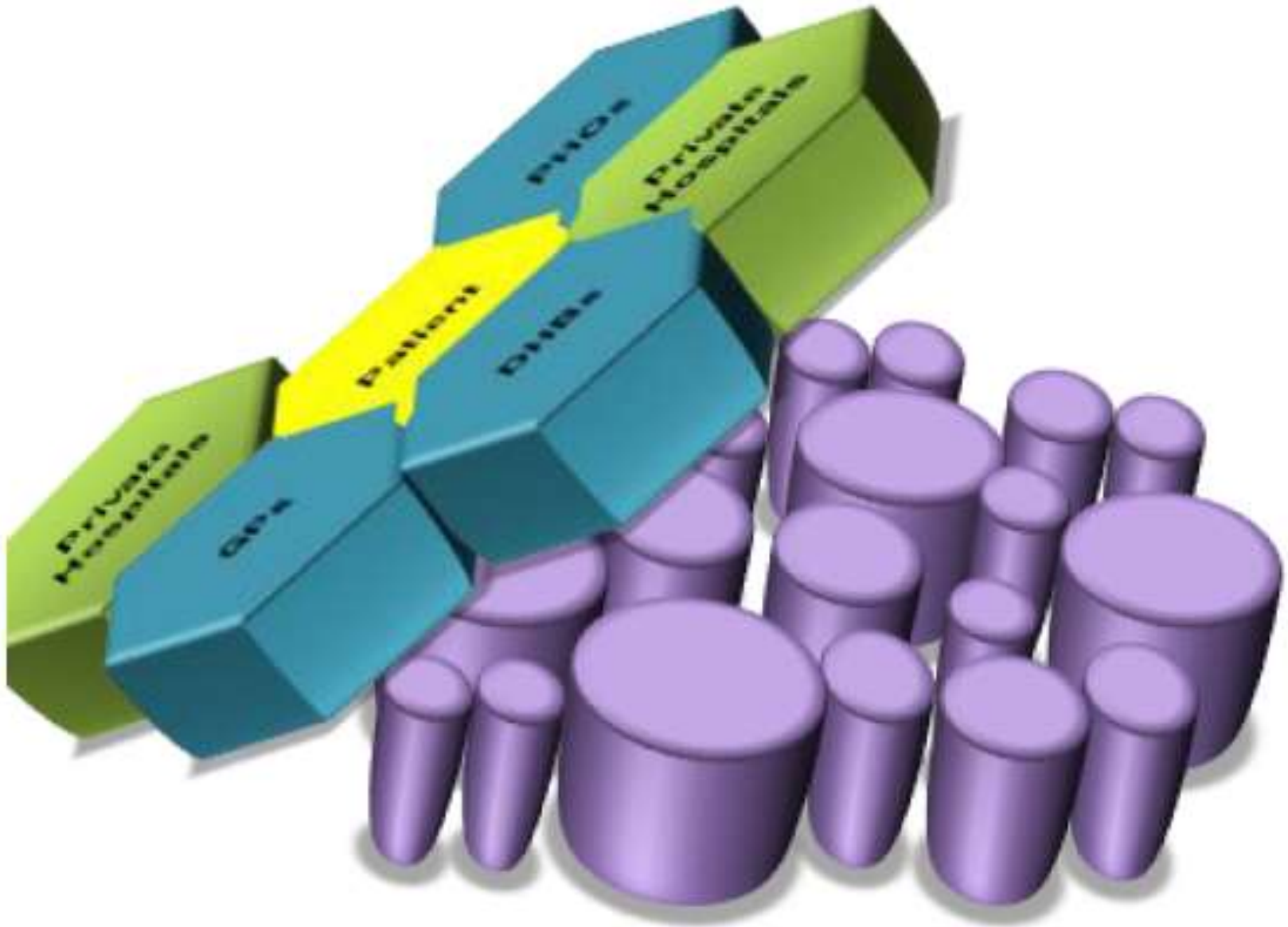
- Several research papers that analyze the time doctors spend on administrative tasks within Electronic Health Records (EHR) systems over the years:

1. **"Allocation of physician time in ambulatory practice: a time and motion study in 4 specialties"** by C Sinsky et al. (2016) discusses the division of physician time between direct patient care and EHR-related administrative tasks. It particularly notes that time spent on administrative tasks can be double that of patient care. Read more.
2. **"Relationship between clerical burden and characteristics of the electronic environment with physician burnout and professional satisfaction"** by TD Shanafelt et al. (2016) investigates how electronic health records (EHRs) contribute to clerical burden and physician burnout, examining the impact on professional satisfaction. Read more.
3. **"The impact of electronic health records on time efficiency of physicians and nurses: a systematic review"** by L Poissant et al. (2005) provides a comprehensive review of the effects of EHRs on the time efficiency of healthcare professionals, highlighting an increase in time spent on documentation. Read more.

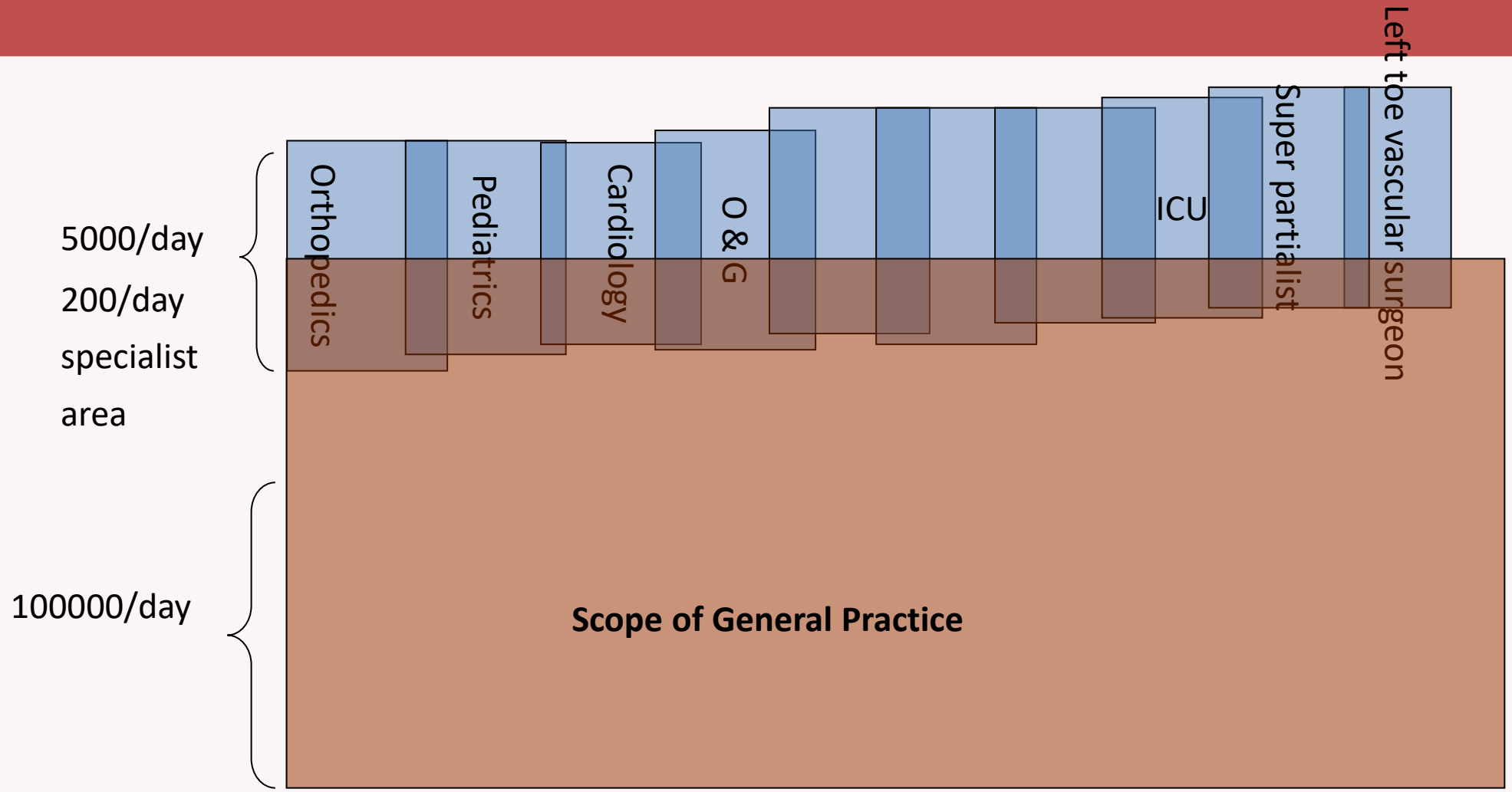
- For every hour physicians provide direct clinical face time to patients,
- nearly 2 additional hours is spent on EHR and desk work within the clinic day.

- Outside office hours, physicians spend another 1 to 2 hours of personal time each night doing additional computer and other clerical work.

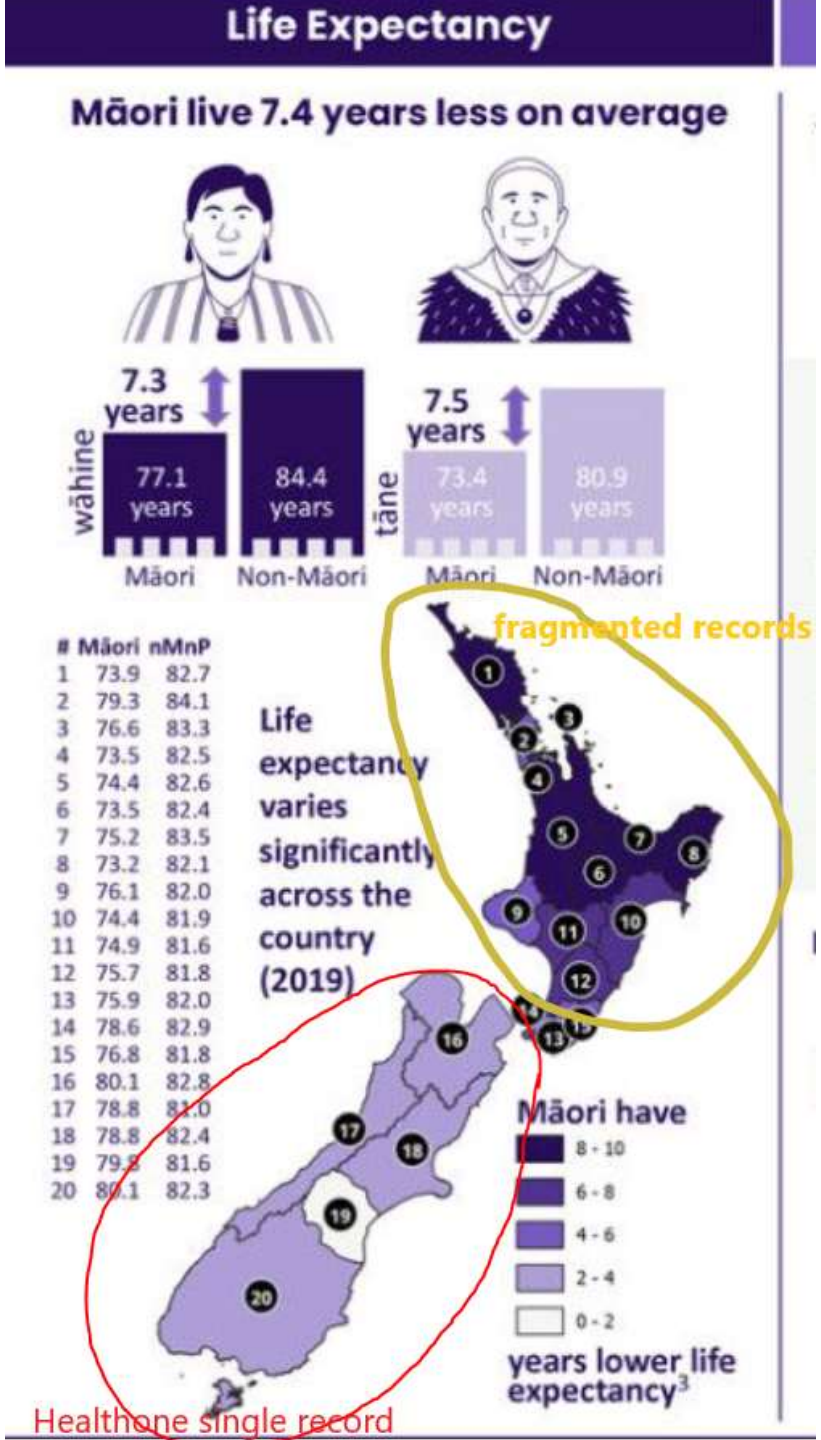



PHOs
Private Hospitals
Patients
DHBs
GPs
Private Hospitals

How do we divide the work?

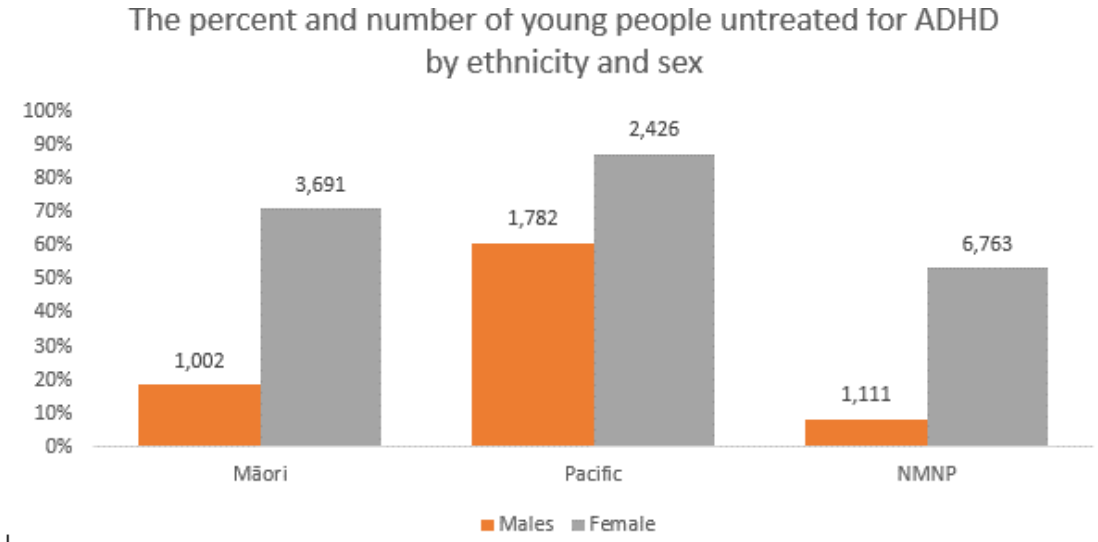


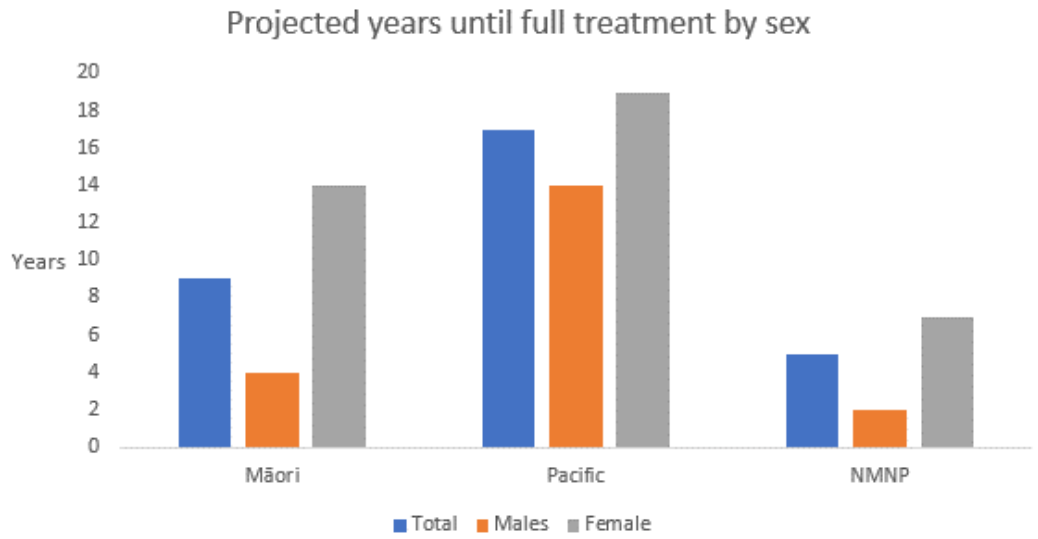
- Open notes


Life Expectancy
Māori live 7.4 years less on average
7.3 years
wāhine
77.1 years
84.4 years
7.5 years
tāne
73.4 years
80.9 years
Māori
Non-Māori
Māori
Non-Māori
fragmented records
Māori nMnP
1 73.9 82.7
2 79.3 84.1
3 76.6 83.3
4 73.5 82.5
5 74.4 82.6
6 73.5 82.4
7 75.2 83.5
8 73.2 82.1
9 76.1 82.0
10 74.4 81.9
11 74.9 81.6
12 75.7 81.8
13 75.9 82.0
14 78.6 82.9
15 76.8 81.8
16 80.1 82.8
17 78.8 81.0
18 78.8 82.4
19 79.8 81.6
20 80.1 82.3
Life expectancy varies significantly across the country (2019)
Māori have
8 - 10
6 - 8
4 - 6
2 - 4
0 - 2
years lower life expectancy[3]
Healthone single record

Big data – breaking promise?

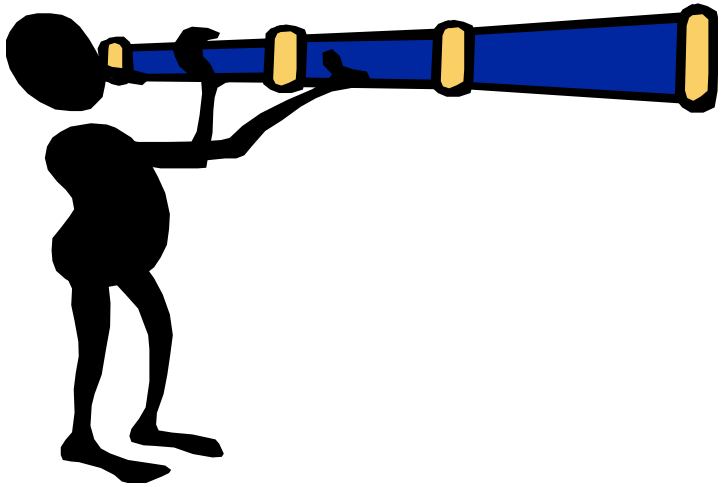
wearables





Use of Telemedicine

- Virtual and Remote in location only. USA/UK audit
- Full access to IT needed.
- Equipment is here just people to get past.
  - Examples of cases it has improved management

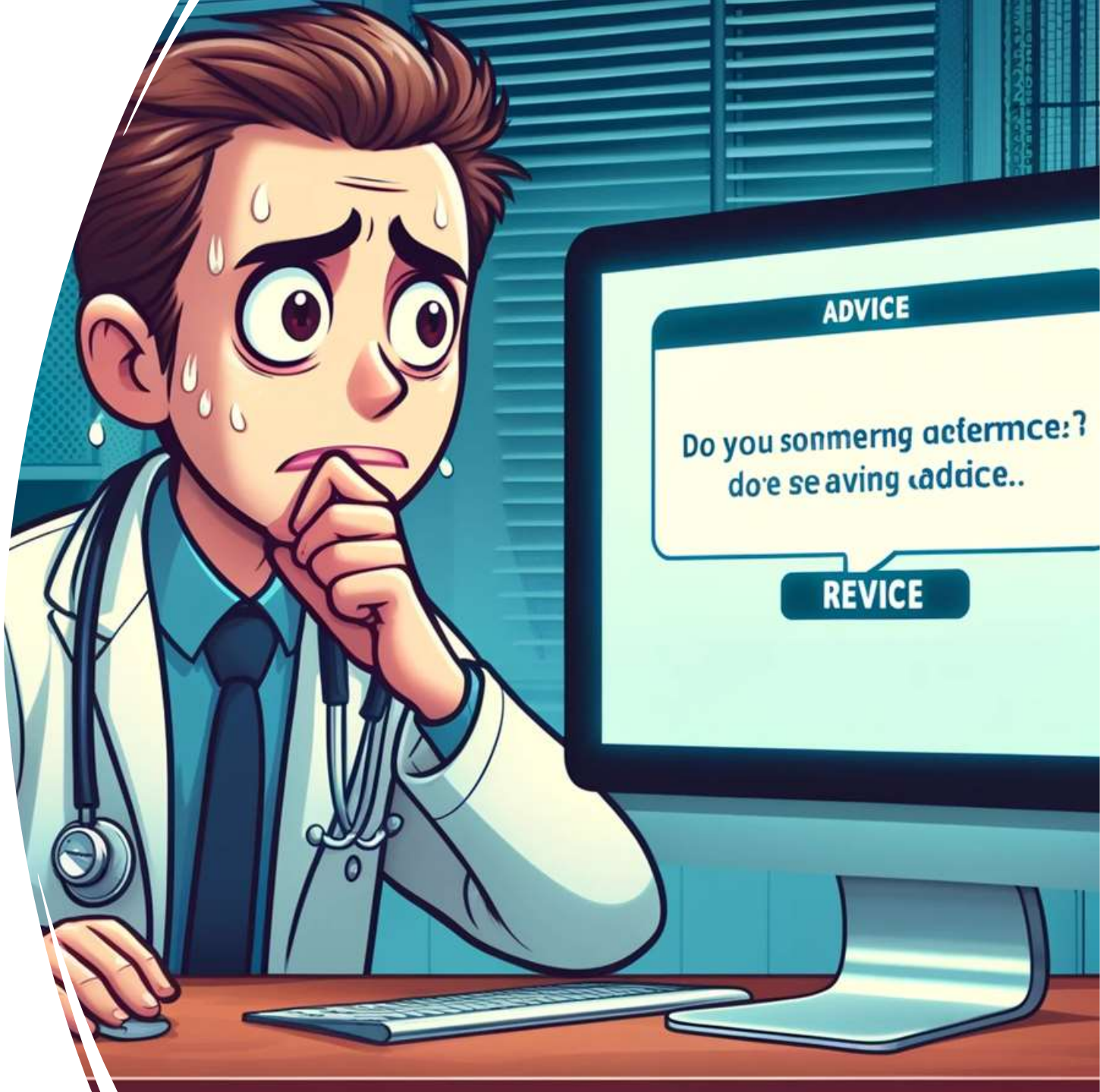


AI-Powered Diagnostics: Precision and Speed

- AI in radiology and pathology
- Early disease detection through AI algorithms
- Case studies and real-world applications

- Multi modal

- Personalized Medicine: Tailoring Treatments with AI and quantified self



In Males on family, painful, fragile skin.

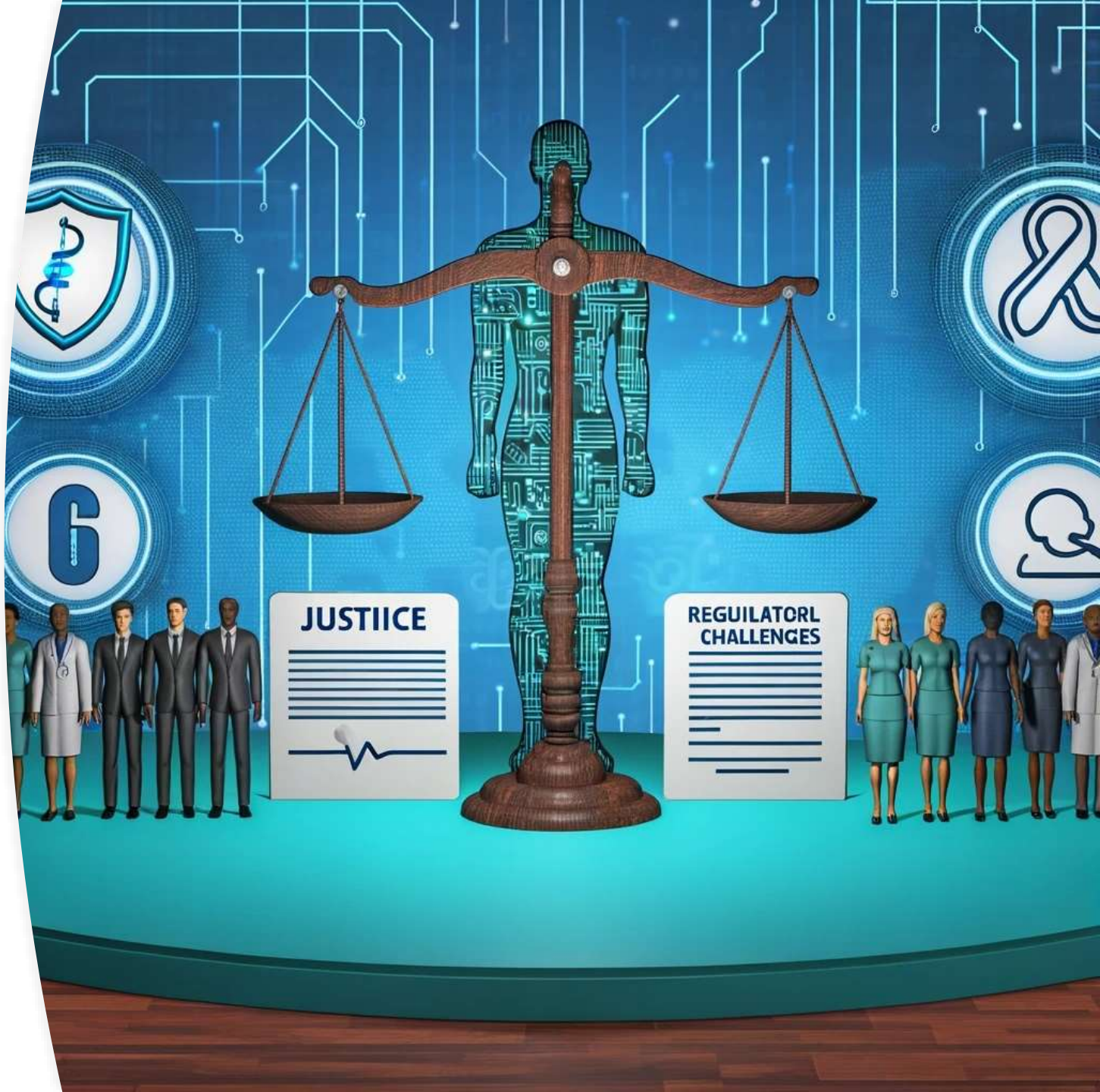
- Given the familial pattern and the description, a hereditary condition like **Porphyria Cutanea Tarda** or Actinic Prurigo could be more likely. However, an accurate diagnosis would require further clinical evaluation, including history, examination, and possibly laboratory tests. It's important to consult with a dermatologist for a definitive diagnosis and appropriate management.

Ethical Considerations: Navigating AI in Healthcare

- Integration with electronic health records (EHR)

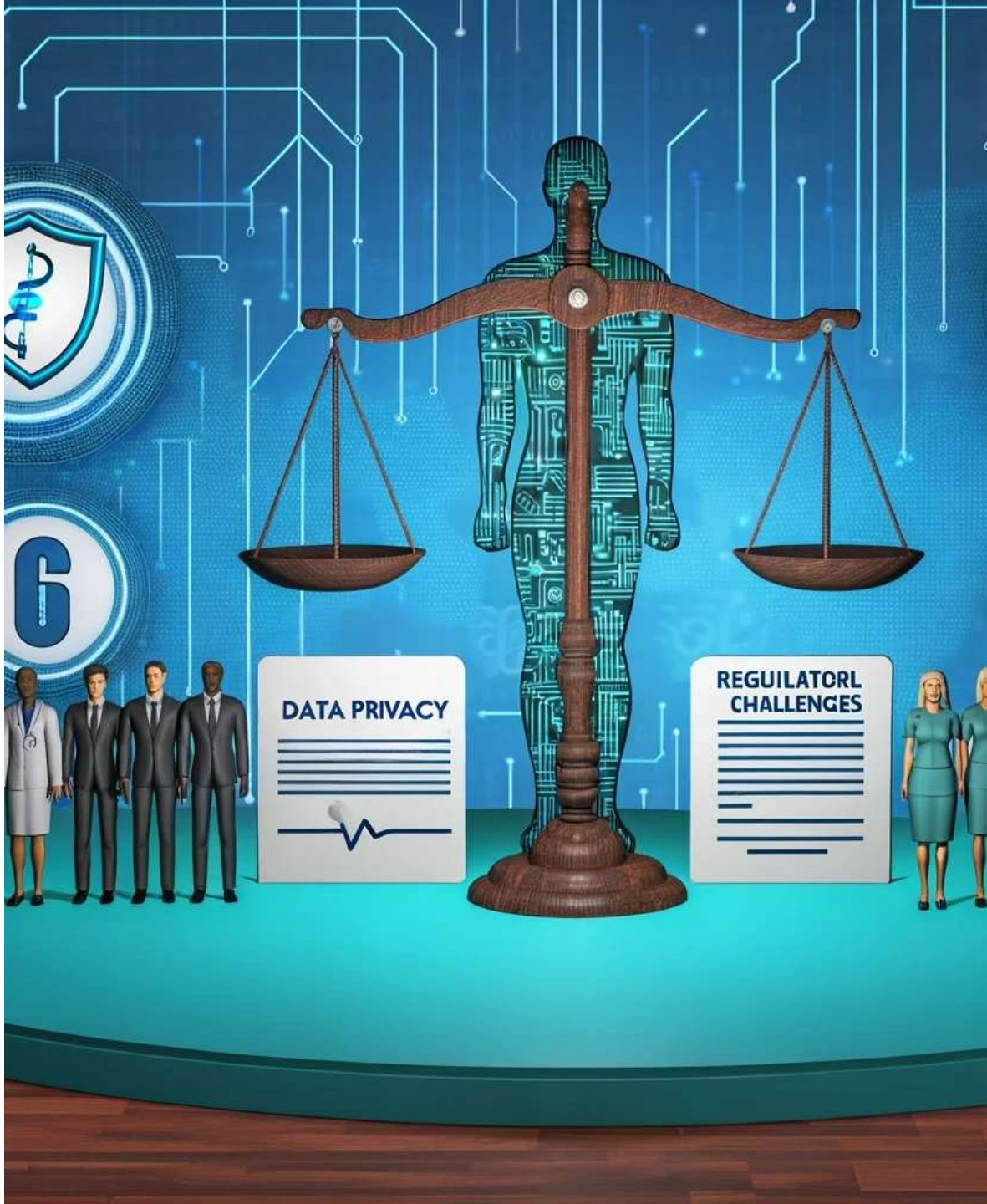
- • Data privacy and security
- • Bias in AI algorithms

- • Regulatory and legal challenges



Virtual Health Assistants: Enhancing Patient Engagement

- • AI chatbots and virtual care platforms
- • Improving patient education and self-management
- • Possible implementation examples
- a multiple spec ai advisor?



Workflow Optimization: Reducing Burden on Healthcare Providers

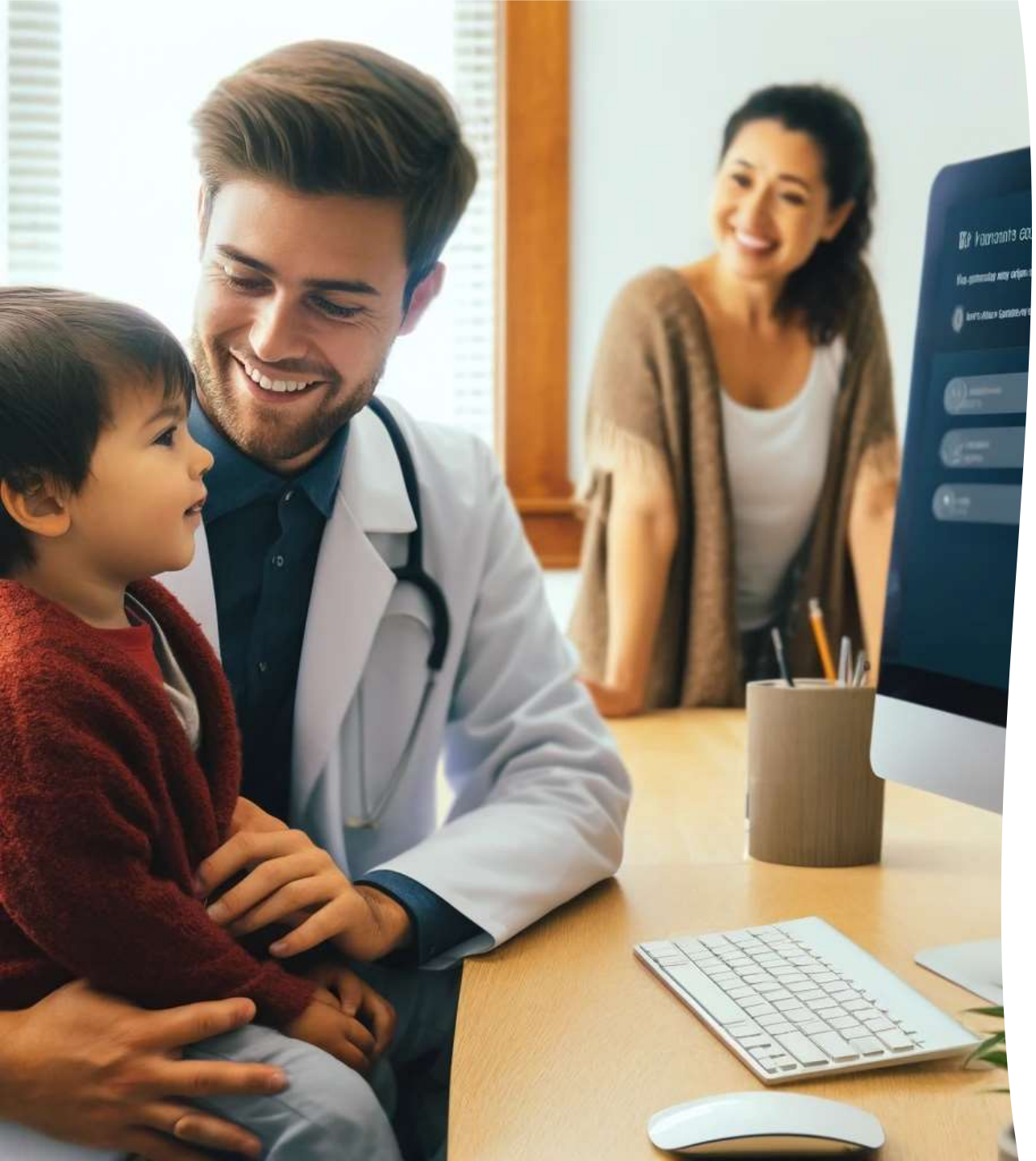
- • AI in administrative tasks and documentation
- • Streamlining patient scheduling and resource allocation

- You may not know it


IS IT CAKE?
1:43
CC


Result
Result
Clear!
No visible signs of STIs spotted for now
But this isn't an all-clear for STIs


Result
Result
Hold!!!
We spotted something sus.
Protection's still your best play!



Ai view of Trust

- Chief complaint
- - Tiredness
- - Gonalgia and instability after a fall

- History of present illness
- - Tiredness since August 21st
- - Fall on August 21st, left leg bruised
- - Left knee gave out during the fall
- - Bruising from knee to ankle
- - No head injury during the fall
- - Knee pain and instability since the fall
- - Possible arthritis in the left knee

- Current medications
- Warfarin

- Physical exam
- - Left knee: full range of motion, no pain along joint line
- - Ankles: not swollen

- Assessment & Plan
- 1. Tiredness:
- - Possible low iron
- - Perform blood tests for iron, vitamin 12, and other vitamins
- 2. Gonalgia and instability:
- - Possible arthritis, fall-related injury
- - Monitor knee condition, consider physiotherapy, and use a walking stick for support
- 3. Hypertension:
- - Elevated blood pressure during consultation
- - Monitor blood pressure at home, consider adding blood pressure medication if consistently high

Patient Instruction:

Go to Dots

Based on our discussion and examination, I have outlined the following instructions for you:

1. Since you're feeling tired, we think you might have low iron. We need to check this with a blood test. So, your first task is to get a blood test done. This test will also check for vitamin 12 and other vitamins.

2. You've been having some knee pain and instability. This could be due to arthritis or maybe a fall-related injury. To help with this, you should keep an eye on your knee condition.