



# Sex and Gender in Digital Health Systems: Current Challenges and a Proposed Solution

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01

Current  
Landscape

02

Proposed  
Solution

03

Successes  
and  
Problems



01

# Current Landscape

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Of Digital Health Systems



Sex/Gender Data



Digital Health System

Clinical Uses

- Reference ranges for blood tests
- Diagnosing
- Shielding for X-rays
- Preventive screening (e.g. cancer of certain organs)

Administrative Uses

- Billing and insurance
- Patient identification
- Room assignment
- Public health surveillance

# Problems Caused by Current System



02

# A Proposed Solution

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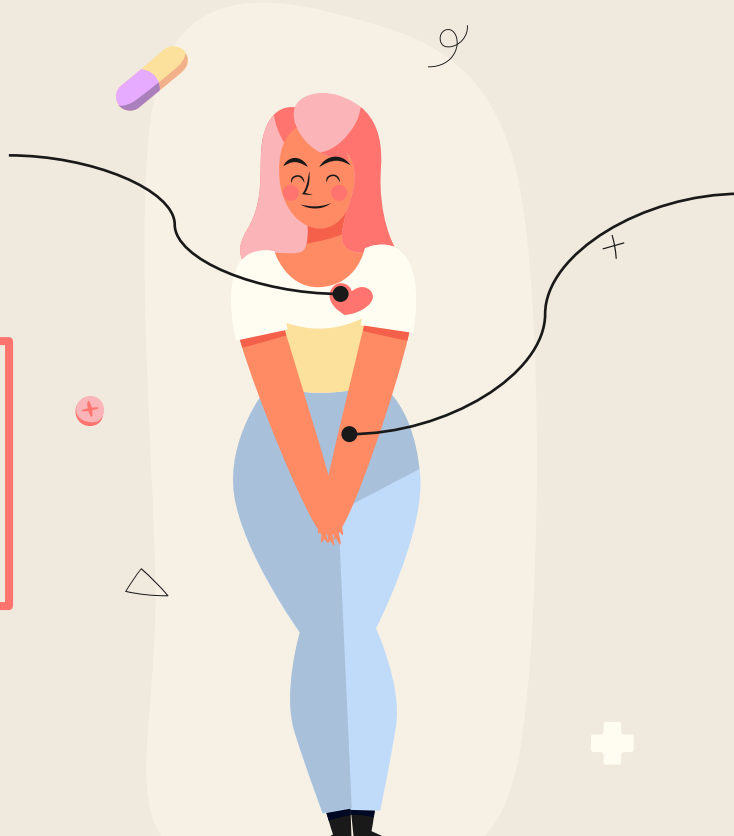


# Anatomic Inventory

Organ  
Inventory

Hormonal  
Inventory

Example:  
Patient comes in  
with pelvic pain.  
They need a X-ray  
and a blood test





# Organ Inventory



Lists what organs the patient actually has.

- Reproductive organs
  - Ovaries, Testes, Prostate etc.
- Non-reproductive organs
  - Kidneys, Lungs, Breast/Chest etc.

Can list if the patients have both or just one (unilateral or bilateral symmetry).

Presence or absence model (ICD-11 Codes).





# Hormonal Inventory

List what Hormones are present in a patient body and at what levels (e.g baseline or goal level).

- Gender Related Hormones
  - Testosterone, Estrogen
  - FSH-Menopause
  - Etc.
- Non-Gender Related Hormones
  - ALT/AST - Liver Function
  - GH - Pituitary Gland and Tumours

Can include if these hormones are produced in the body or introduced from an external source (e.g endogenous or exogenous).





03

# Successes and Problems

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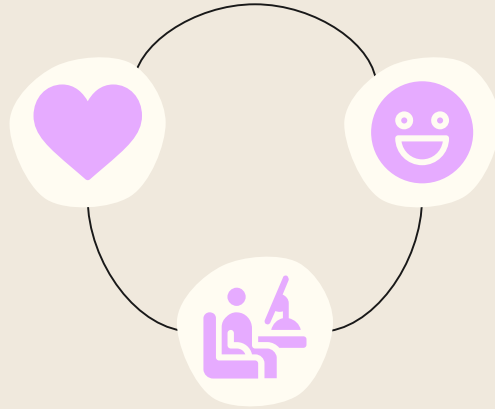
How Anatomic Inventories can improve healthcare and some problems they might causes.



# Successes

## Eliminate Assumptions

Healthcare is based on what the patient actually has and what their current body is like.



## Improve patients' healthcare experiences

Patient -centered, individualized care  
Personalized interactions  
Limits inappropriate care

## Create rich datasets for secondary use

- Research
- Quality Improvement
- Best practices
- Policy and Legislation
- Improve healthcare for future generations

There are other successes as well, this is a small selection of common positives.

# Some Problems

## Implementation

01

- Resistance to change
- Organizational readiness
  - Especially for communities and care providers who are under great strain and/or have limited resources

03

- Ensuring inventories are up to date and accurate
- IT problems and bug fixes

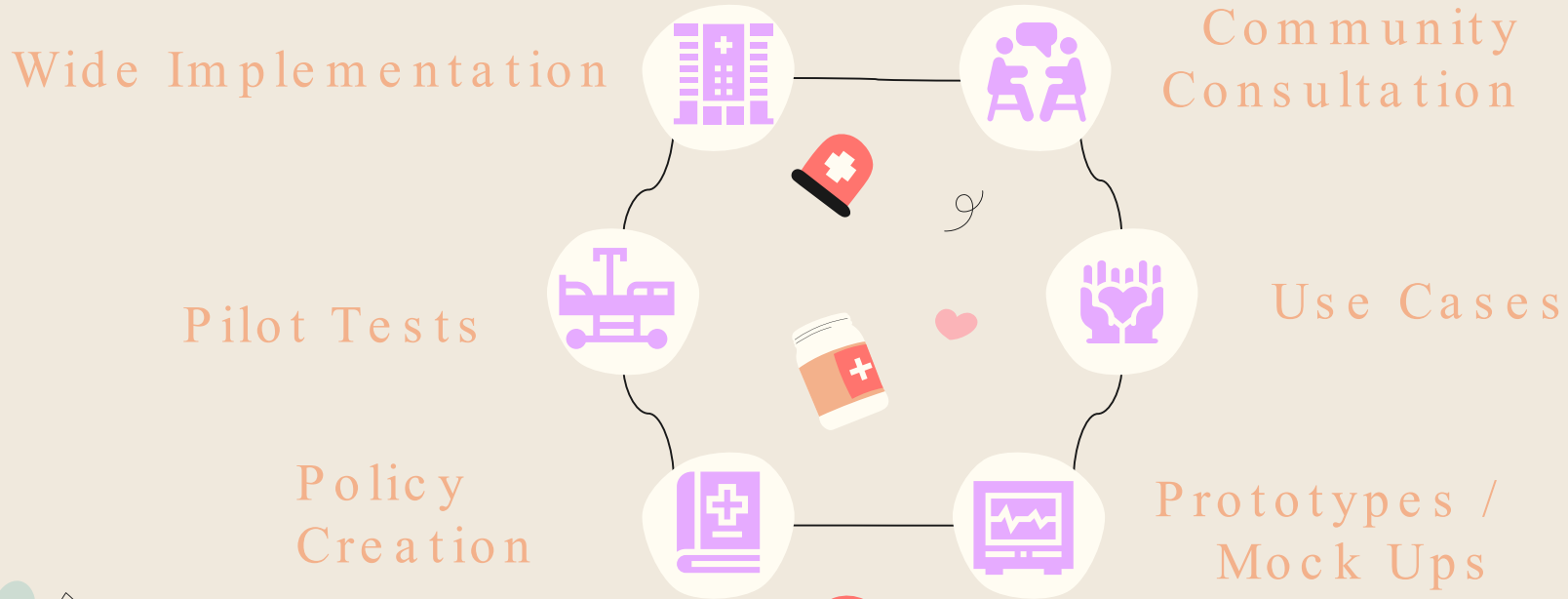
02

## Privacy

- Can potentially 'out' patients
- Inappropriate data sharing/access

There are other problems as well, this is a small selection of common concerns.

# Next Steps



# Conclusion



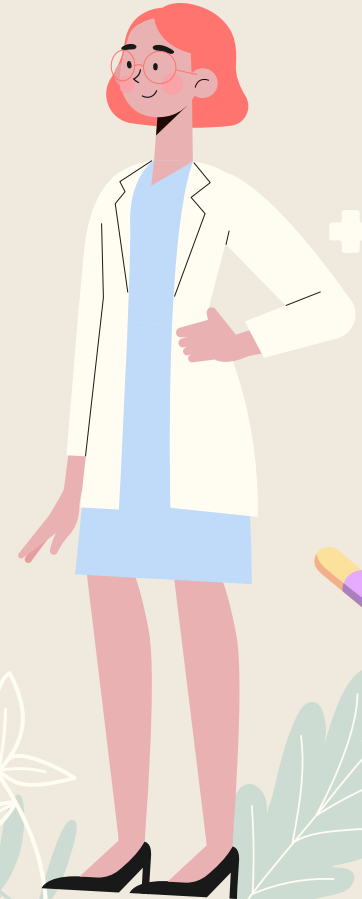
Current Digital Health Systems have many shortcomings in regards to sex/gender data. **This result in many negative aspects for patients, providers, and systems.**



Anatomic Inventories are **a proposed solution** to alleviate, limit, or fully eliminate these negative aspects. Anatomic Inventories can accurately capture rich data about what organs and hormones are currently present within a patient body.



While there are some challenges with the implementation and use of anatomic inventories, **there are many benefits to be gained.**





# Thanks for your time and attention

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