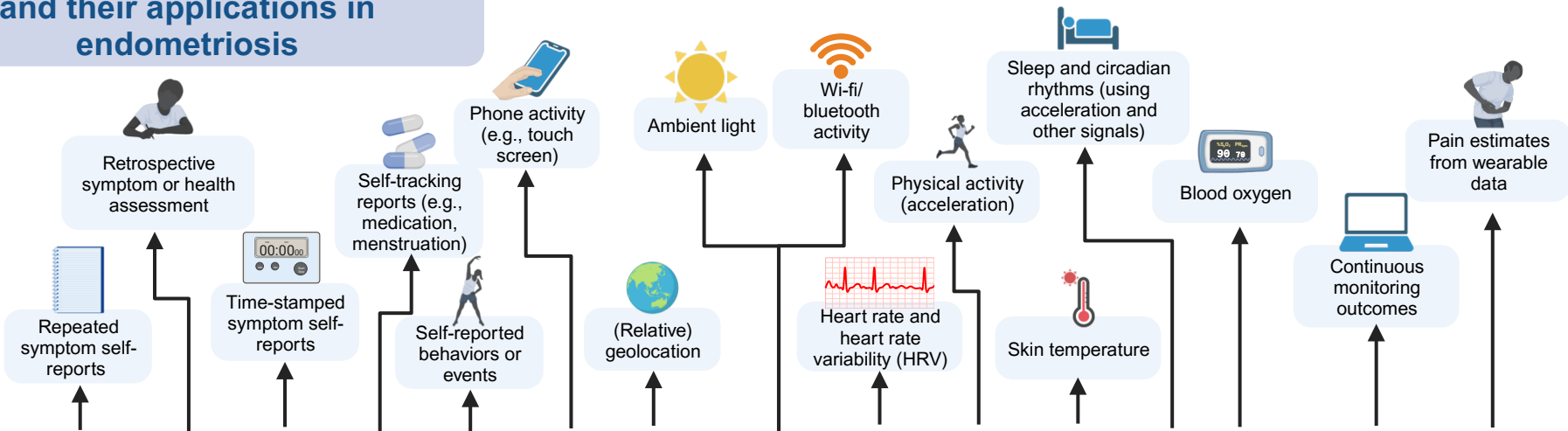


# Methods for symptom tracking and their applications in endometriosis

Types of data collected



## Traditional methods

In-clinic questionnaires  
Daily diaries

## Smartphone technology

Smartphone apps for self-tracking

Ecological momentary assessment  
In-built smartphone sensors

## Wearable technology

(Adhesive) body sensor

Smartwatch or wrist-worn sensor  
Ring, necklace, or glasses sensor

## Future digital technology systems

Endometriosis applications

- Used to collect data on medical history or symptoms
- Tracking symptoms and medication through daily diaries
- Requires active participant input

- Ecological momentary assessment used to study how behaviors, events, or emotion affects symptoms
- Longitudinal self-tracking gives insight into long-term symptom trajectories and treatment course
- Capitalizing on smartphone sensors to collect data complementing self-reports

- Objective physiological signals and behaviors could be used to *passively and continuously* monitor symptoms outside of clinic
- Signals from wearables can be processed to study physical activity, sleep and circadian rhythms in relation to symptoms
- Behaviors or physiological signals could be used to predict pain flares

- Combine self-report and data from wearables for personal monitoring
- Personalized treatment approaches
- Digital self-management tools