

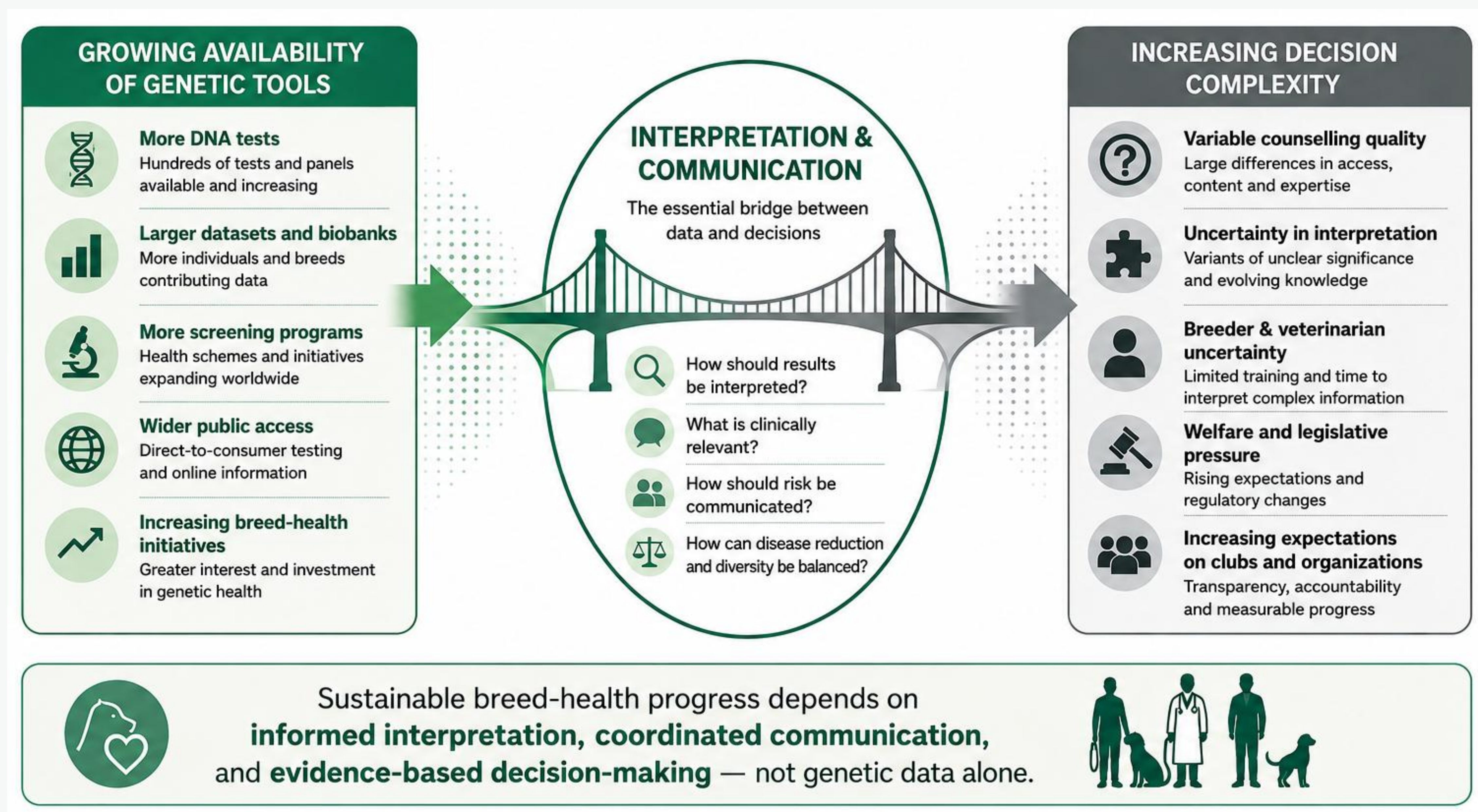


# From Genetic Data to Better Breeding Decisions: Building Evidence-based Collaboration Between Stakeholders

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## Why Does Genetic Guidance Matter Now?

Companion animal genetics is evolving rapidly. The increasing availability of DNA testing, growing health datasets, welfare-focused legislation, and public scrutiny of breeding practices are creating new opportunities — but also new challenges — for stakeholders involved in dog health and breeding.



## Building Better Decisions Together

### Pet owners

#### What they contribute

- Longitudinal health data
- Environmental/lifestyle data
- Survey and screening participation
- Welfare-focused perspectives

#### Challenges they face

- Confusing online information
- Variable test interpretation
- Emotion-driven decision-making
- Limited access to unbiased guidance

#### What supports better decisions

- Clear communication
- Educational resources
- Transparent expectations
- Collaborative decision-making

### Breeders

#### What they contribute

- Pedigree knowledge
- Long-term line observations
- Reproductive decisions
- Health screening participation

#### Challenges they face

- Balancing diversity vs disease reduction
- Interpreting complex DNA results
- Conflicting advice
- Public scrutiny

#### What supports better decisions

- Access to evidence-based interpretation
- Population-level strategies
- Transparent collaboration
- Longitudinal health tracking

### Breed Clubs & Registries

#### What they contribute

- Population coordination
- Data infrastructure
- Health program organisation
- Breed-specific policies

#### Challenges they face

- Incomplete data
- Stakeholder disagreements
- Maintaining participation
- Balancing welfare and diversity

#### What supports better decisions

- Health questionnaires
- Biobanking initiatives
- Open communication
- Evidence-based breeding frameworks

### Veterinarians

#### What they contribute

- Clinical examinations
- Early disease recognition
- Health screening
- Client communication

#### Challenges they face

- Limited time
- Rapidly evolving genetics field
- Variable DNA test quality
- Limited genetics training
- Conflict-sensitive conversations

#### What supports better decisions

- Continuing education
- Referral pathways
- Access to genetics expertise
- Standardized interpretation support

### Researchers & Labs

#### What they contribute

- Routine testing
- Variant discovery
- Validation studies
- Statistical analyses
- Development of new tools

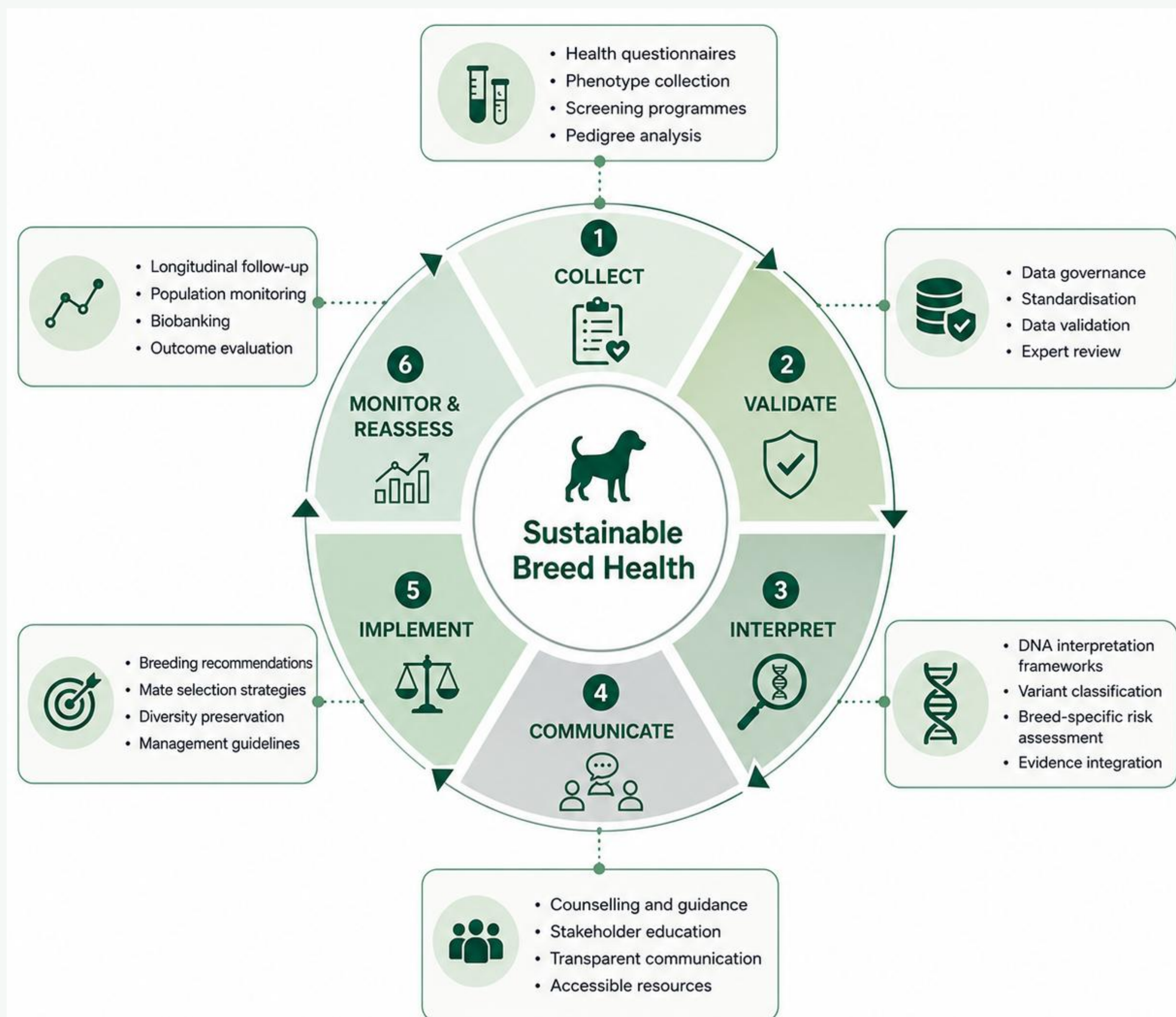
#### Challenges they face

- Translation to practical use
- Communication consistency
- Variable interpretation standards
- Clinical context gaps

#### What supports better decisions

- Cross-disciplinary collaboration
- Reporting standards
- Transparent limitations
- Clinical integration

## Turning Genetic Information Into Coordinated Action



## Key Take-Home Messages

- Genetic testing is a tool — not a breeding strategy
- Genetic information requires interpretation within clinical, breed-specific, and population-level context
- Sustainable breed health depends on structured data, informed interpretation, transparent communication, and collaborative decision-making

## Selected references

Adant et al. BMC Veterinary Research (2025)  
Adant et al. Journal of Small Animal Practice (2025)  
Proschowsky et al. Dansk Veterinærtidsskrift (2026)