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Ministry of Health and Welfare

Ethical, Legal and Social Implications of Health Databases

- The experience of Taiwan National Health Insurance Research Database

Ministry of Health and Welfare, Taiwan

Dr. Min-Huei Hsu



Features of Taiwan's Health System

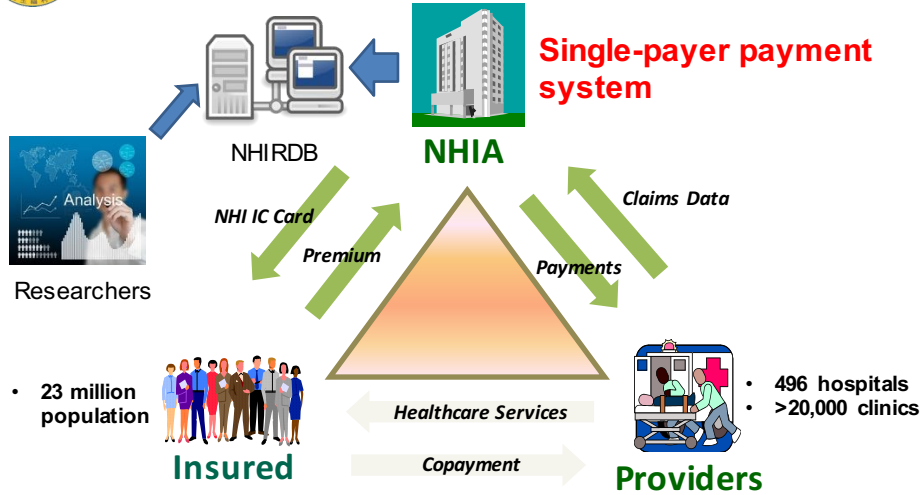
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- Universal health coverage provided by a single payer
- Robust Health IT infrastructure
- National electronic medical records exchange system

Taiwan National Health Insurance



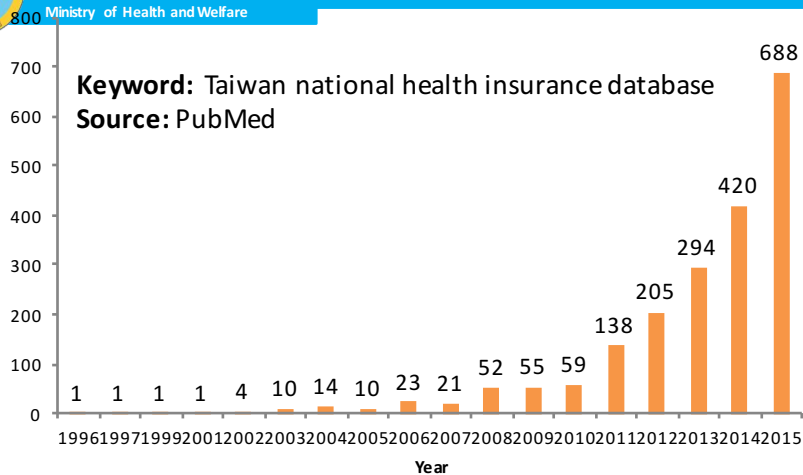
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Papers Published by Using NHI Research Database (1996-2015)



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Taiwan NHI Research Database



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- Claims database
- De-identified
- Non-commercial Utilization

Disputes of NHI Research Database



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- Privacy Protection
- Data Ownership
- Self-Determination
- Research Ethics
- Commercial Utilization

NHI Research Database Related Acts



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- The Freedom of Government Information Law
- Medical Care Act (medical record management, privacy protection)
- Physicians Act and Other Acts Regarding Medical Personnel
- Human Subjects Research Act
- National Health Insurance Act
- Personal Information Protection Act
- Statistics Act
- Human Biobank Management Act

NHI Research Database Involving Agencies



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- Ministry of Health and Welfare
- Ministry of Science and Technology
- Ministry of Justice(Personal Information Protection Act)
- National Development Council(open data)
- Directorate-General Budget, Accounting and Statistics

Renewed Plans



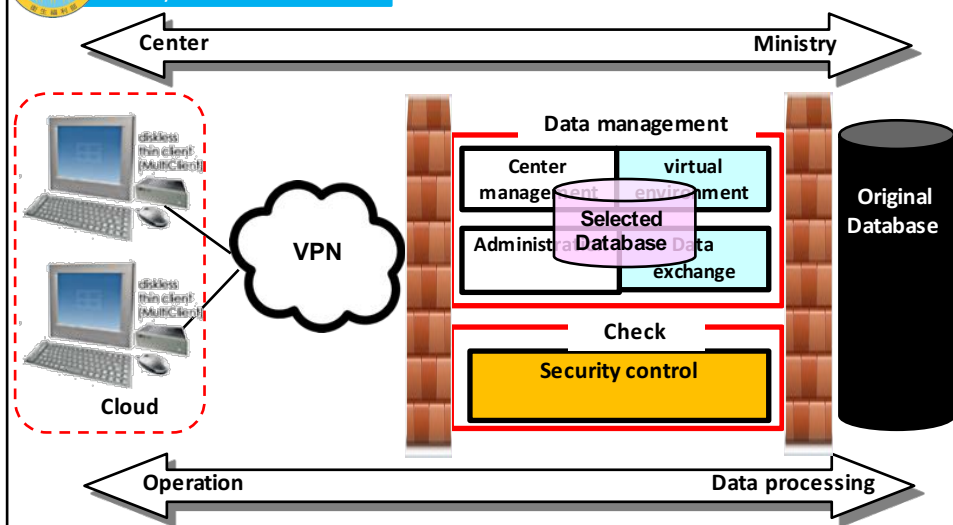
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- Managerial
 - National Steering Committee in charge of dataset application
- Technical
 - Use cloud-based architecture to centralize dataset
 - Use VPN for all remote access sites
 - Log all query activities for audit trail

Applying VPN on Health database



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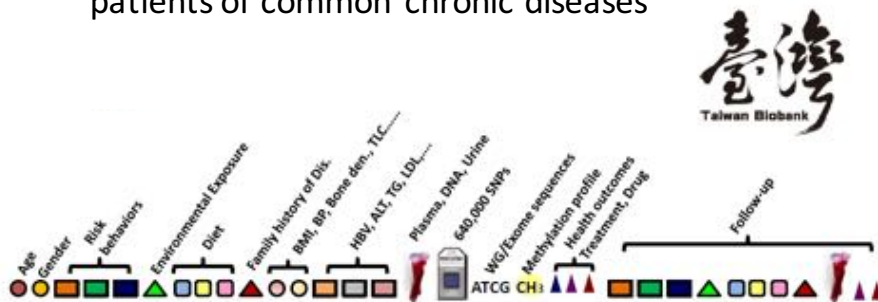


Taiwan Biobank



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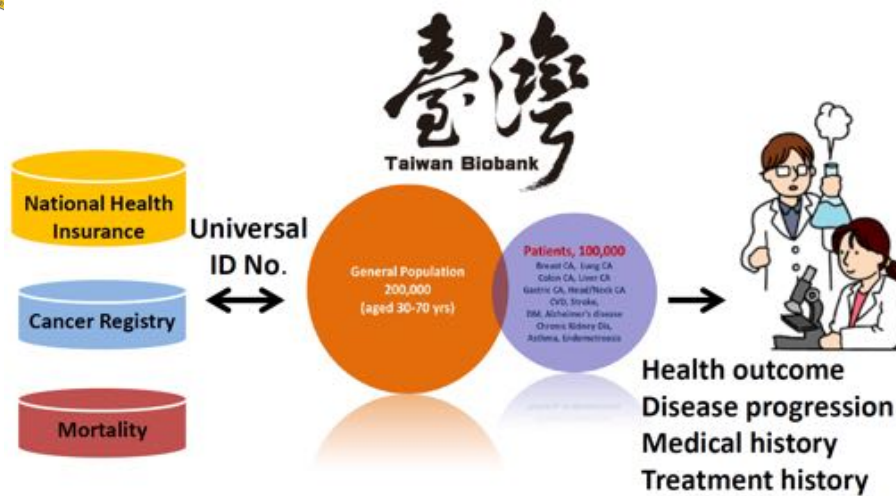
- Purpose: to construct cohorts for disease incidence and progression
- 200,000 subjects from communities + 100,000 patients of common chronic diseases




Next step...




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 **Thank you.**

