

Advanced Techniques for Inter-Agency Data Sharing

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center
for health
information
and analysis

Presentation Overview

About the Center for Health Information and Analysis (CHIA)

Two major drivers for CHIA's approach to inter-agency data sharing:

- Chapter 55 Opioid Legislation
- 42 CFR Part 2 and CHIA's all-payer claims database (APCD)

The Evolution of CHIA's data collection and sharing methodology

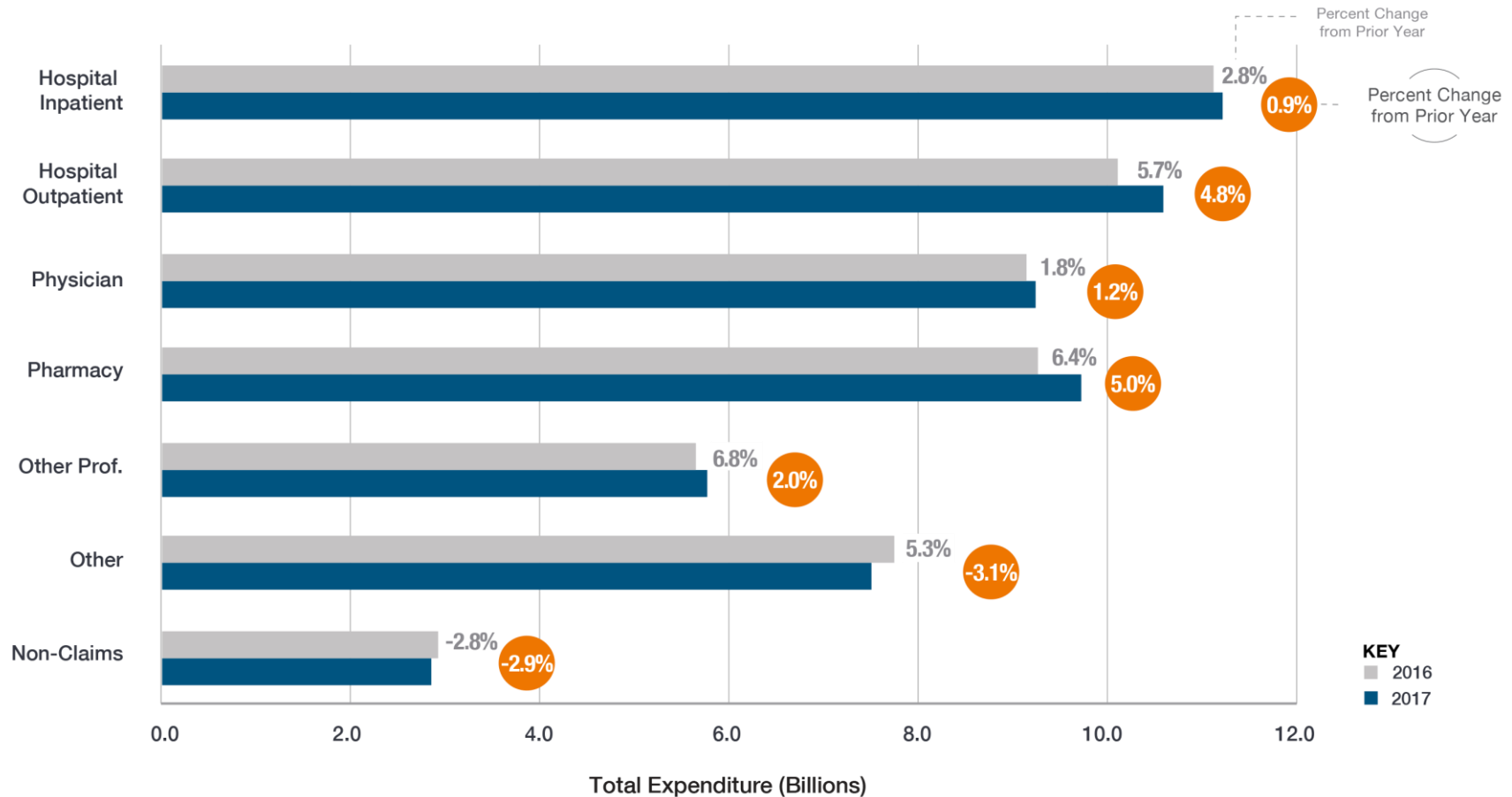
The future potential for de-identified data matching

About the Center for Health Information and Analysis

CHIA is a “multi-tool” health data agency, using multiple types of data to support data-driven healthcare policy making and service delivery. CHIA’s core data assets are:

- All Payer Claims Database
- Hospital Case Mix Database
- Provider Financial and Cost Reports
- Employer, Household, and Patient Surveys
- Health Plan Expenditure Reports
- Quality Data
- Registered Provider Organizations

Sample CHIA Report - Total Health Care Expenditures by Service Categories, 2016-2017



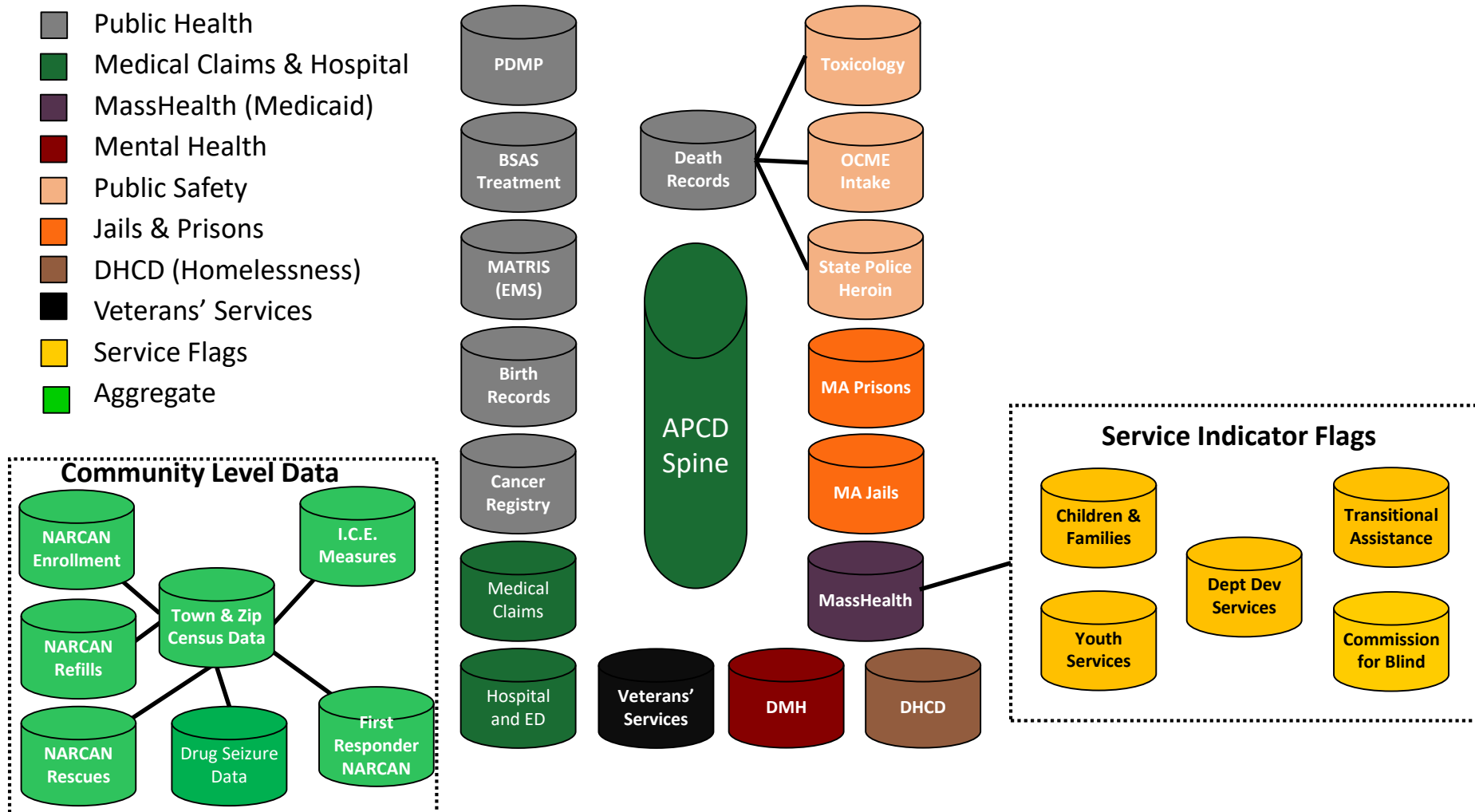
HEALTH CARE SPENDING DECELERATED ACROSS ALL SERVICE CATEGORIES, WITH THE HIGHEST GROWTH IN PHARMACY AND OUTPATIENT SPENDING.

Chapter 55 Opioid Study – Massive Inter-Agency Data Sharing

Data Sources

- Public Health
- Medical Claims & Hospital
- MassHealth (Medicaid)
- Mental Health
- Public Safety
- Jails & Prisons
- DHCD (Homelessness)
- Veterans' Services
- Service Flags
- Aggregate

Chapter 55 Data Structure



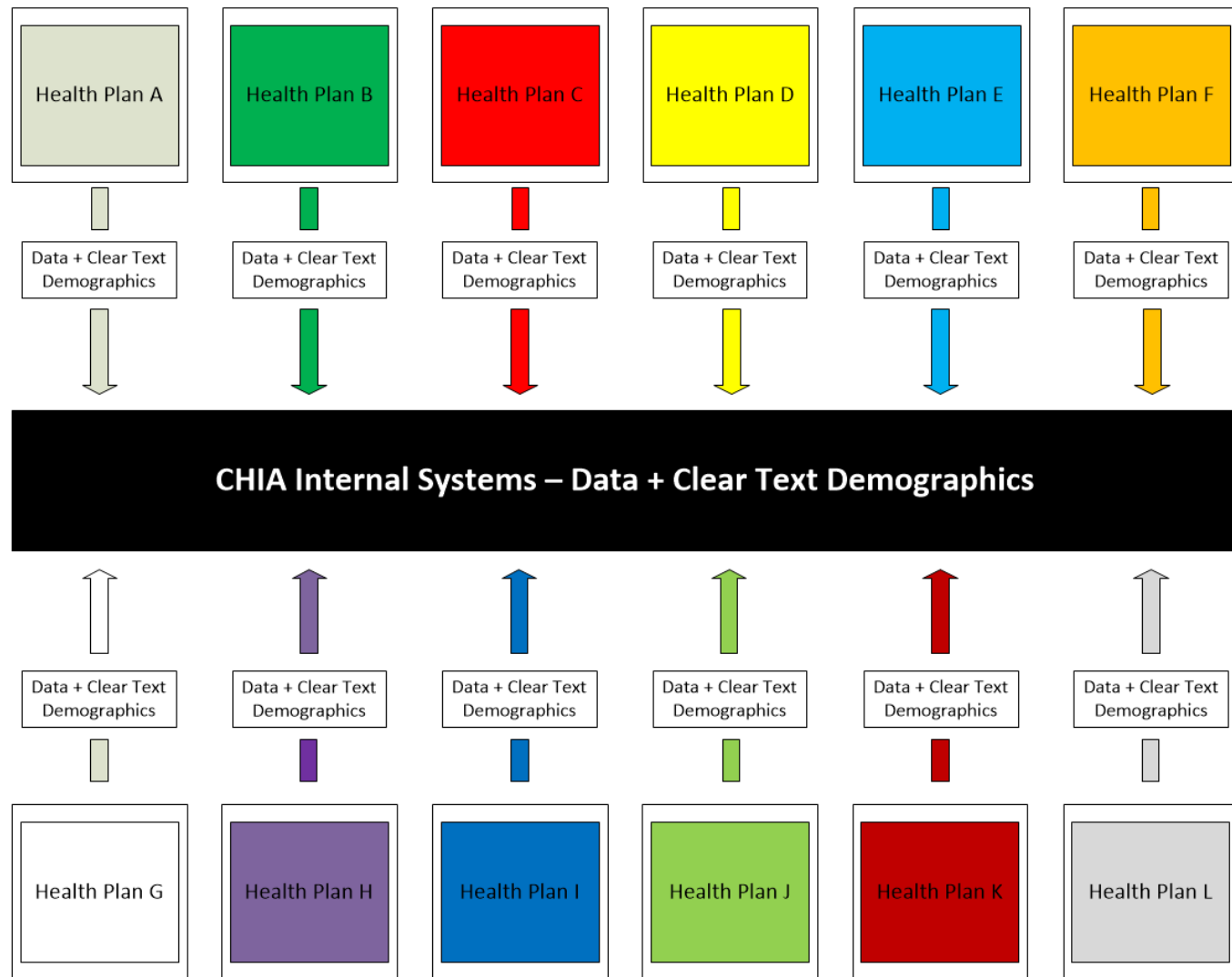
A New Imperative From 42 CFR Part 2

In recent years, increased awareness and new federal rules have made it harder for CHIA to collect claims data relating to substance use disorder services and about people who receive such services.

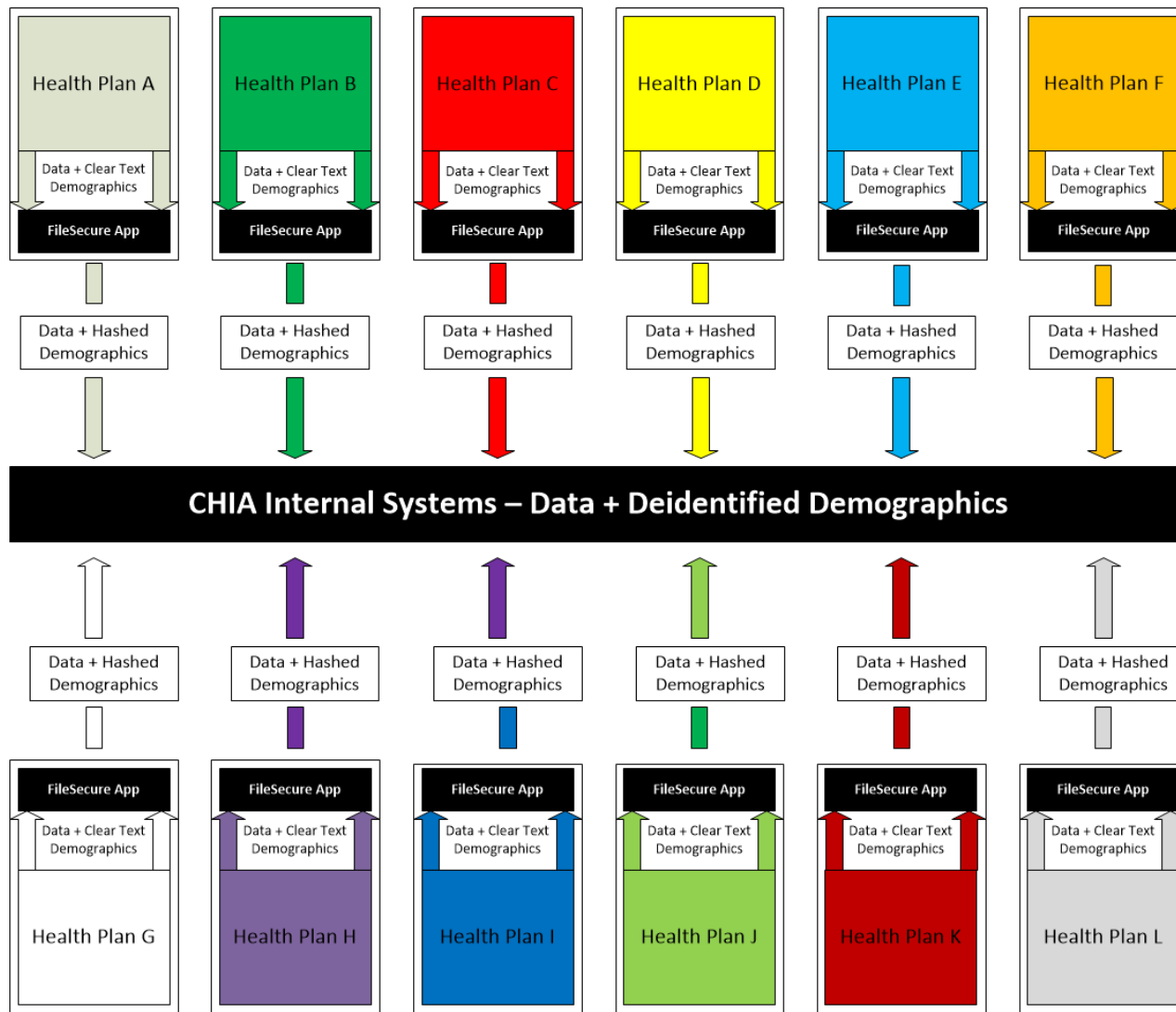
CHIA worked with its health plan data submitters to develop a new methodology to remove demographic information so that they could continue submitting full claims data.

CHIA has taken the capabilities developed for these purposes and built an automated platform that supports inter-agency member matching and data sharing.

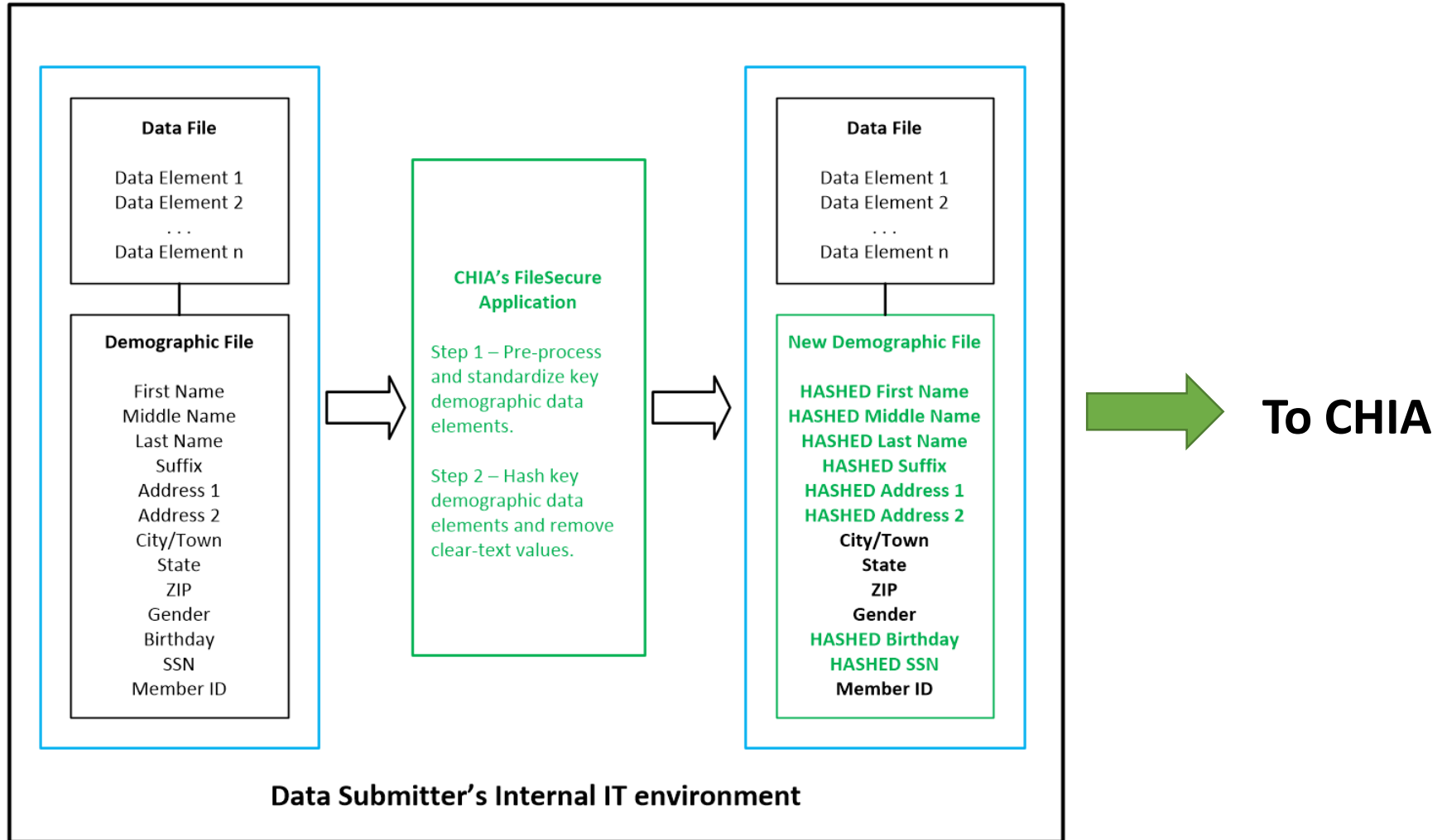
CHIA's Data Collection Methodology – 1970s-2016



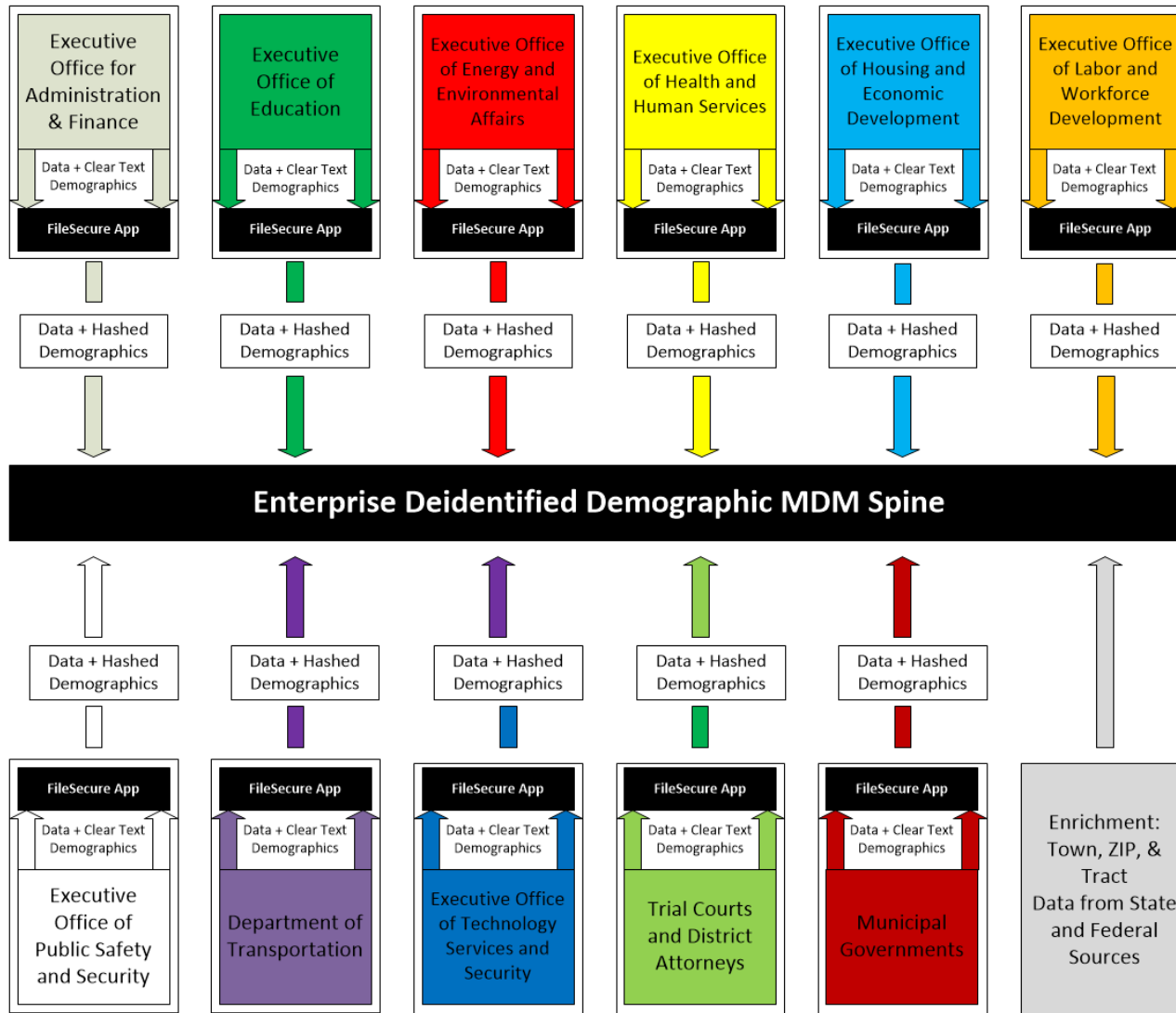
CHIA's Data Collection Methodology – 42 CFR Part 2 Compliant



CHIA's FileSecure – A Closer Look



CHIA's Methodology Applied to Inter-Agency Data Sharing



The Future – “Reality Mining” in State Government

The de-identified data sharing methods developed by CHIA can be used to dramatically reduce or eliminate privacy issues that arise in the context of inter-agency data sharing.

The same methods can also be applied more broadly to bring predictive analytics, AI, and reality mining insights to policy making and service delivery across the enterprise of state government.

