The Science of Good Policy

Integrated Data Systems
Pathways to Informed Decision-Making

Milbank Memorial Fund
Reforming States Group
Regional Meetings - Fall 2016

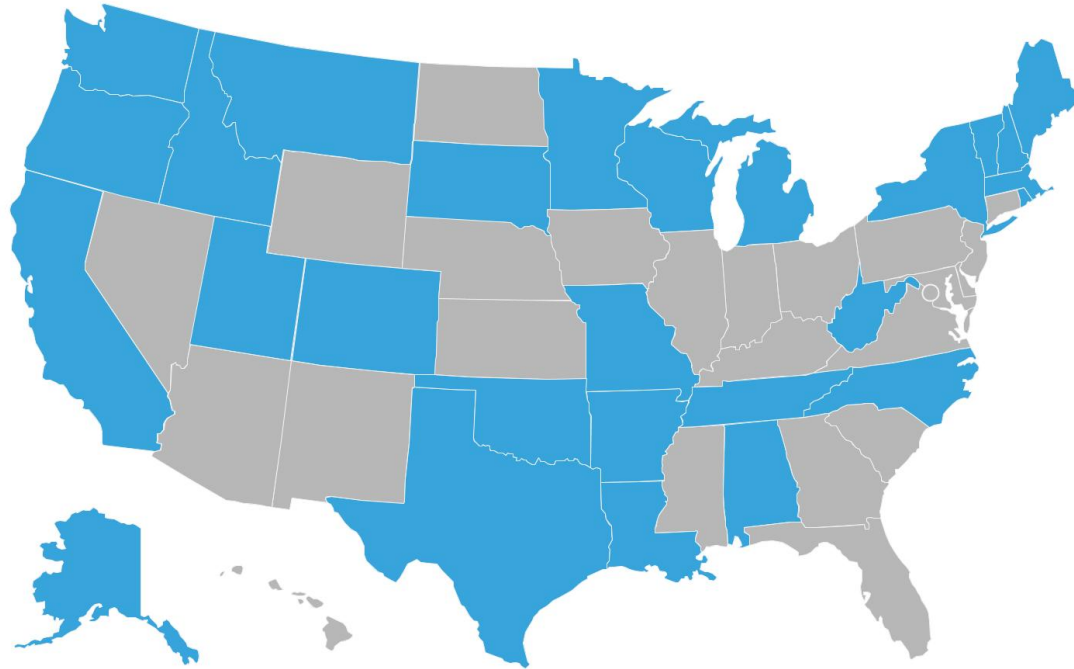Dan Vizzini | Center for Evidence-based Policy

Who are we?

Center for Evidence-based Policy

- Based at Oregon Health & Science University

- Established in 2003

- Address policy challenges by applying evidence and improving collaboration

- Convene research collaboratives to drive effective policy and program reforms with proven returns on investment

Who do we serve?

Integrated Datasets

Oregon Data Sources
Integrated from 2001 forward

Birth Record

Child Welfare

Human Services Programs

Self Sufficiency Payments

Addiction Treatment

Education

Juvenile Justice and Corrections

Home Visiting Programs

Integrated Datasets

Denominator
- All children born since 2001, matched to their parents
- Enables predictive modeling

Geographic Specificity
- Data coded at the census-block level

Longitudinal
- Tracing paths through the system over time

Agency Cost Structures
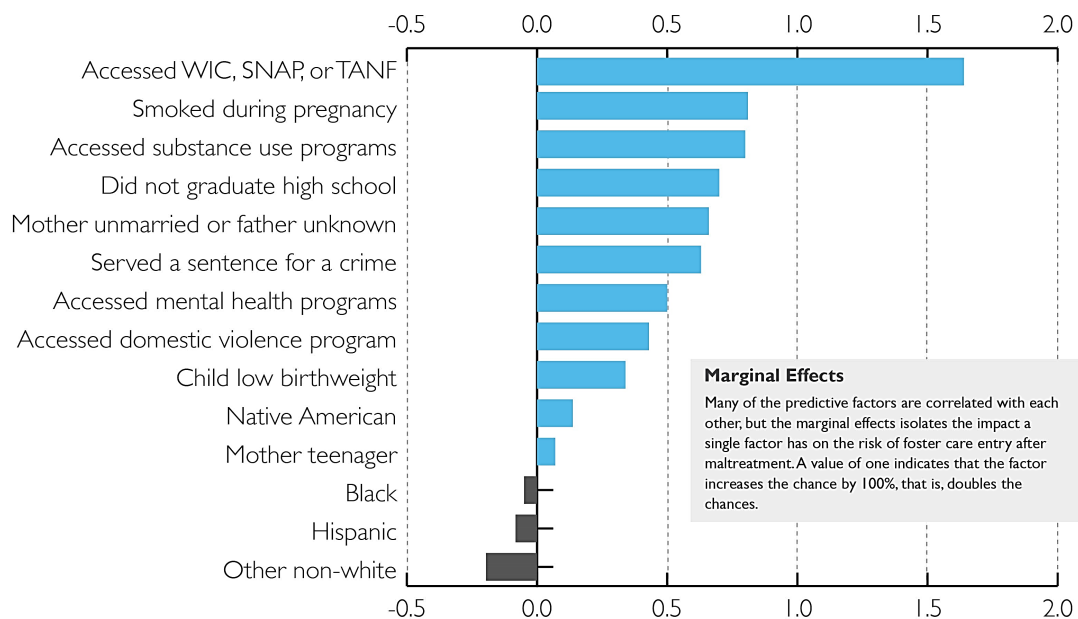- Supports modeling of cost avoidance scenarios

Why Integrated Data?

Marginal Effect on Risk of Maltreatment and Foster Care

Characteristics of the mother at time of child's birth

	-0.5	0.0	0.5	1.0	1.5	2.0

Accessed WIC, SNAP, or TANF
Smoked during pregnancy
Accessed substance use programs
Did not graduate high school
Mother unmarried or father unknown
Served a sentence for a crime
Accessed mental health programs
Accessed domestic violence program
Child low birthweight
Native American
Mother teenager
Black
Hispanic
Other non-white

Marginal Effects

Many of the predictive factors are correlated with each other, but the marginal effects isolates the impact a single factor has on the risk of foster care entry after maltreatment. A value of one indicates that the factor increases the chance by 100%, that is, doubles the chances.
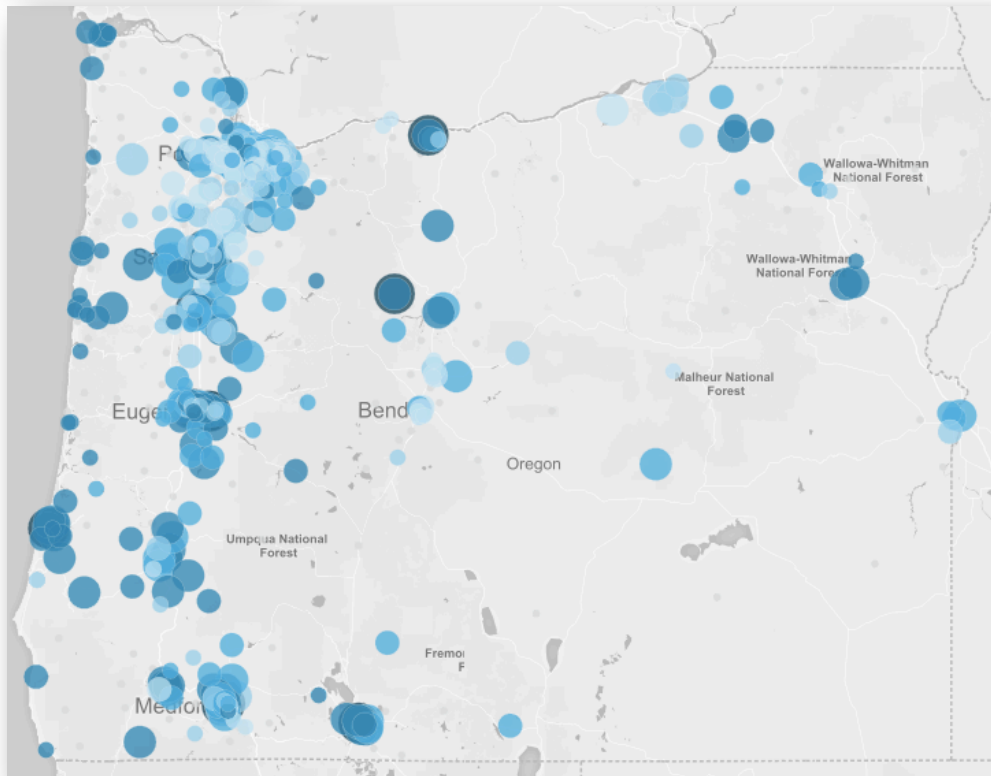
Identify risk factors for foster care placement

Source: ECONorthwest and Center for Evidence-based Policy analysis of Oregon Birth Records, Integrated Client Services records, and Child Welfare records.
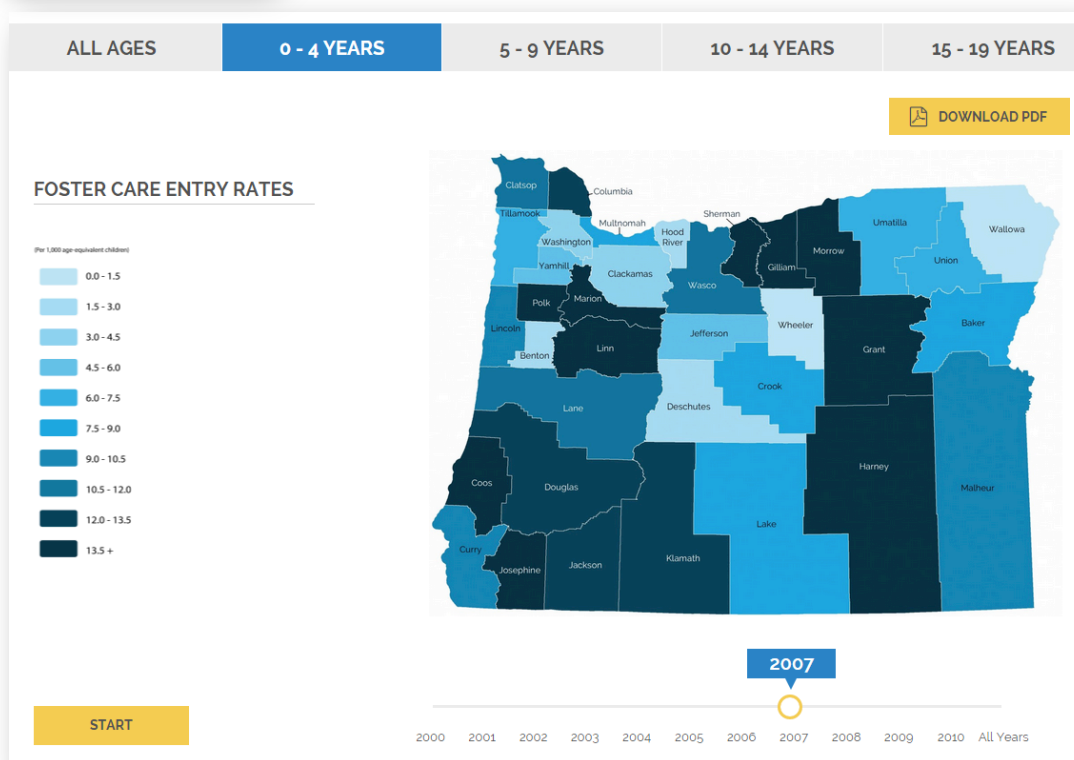
Why Integrated Data?

Visualize hotspots

Why Integrated Data?

ALL AGES	0 - 4 YEARS	5 - 9 YEARS	10 - 14 YEARS	15 - 19 YEARS

FOSTER CARE ENTRY RATES

(Per 1,000 age-equivalent children)

- 0.0 - 1.5
- 1.5 - 3.0
- 3.0 - 4.5
- 4.5 - 6.0
- 6.0 - 7.5
- 7.5 - 9.0
- 9.0 - 10.5
- 10.5 - 12.0
- 12.0 - 13.5
- 13.5 +

START

2007

2000   2001   2002   2003   2004   2005   2006   2007   2008   2009   2010   All Years

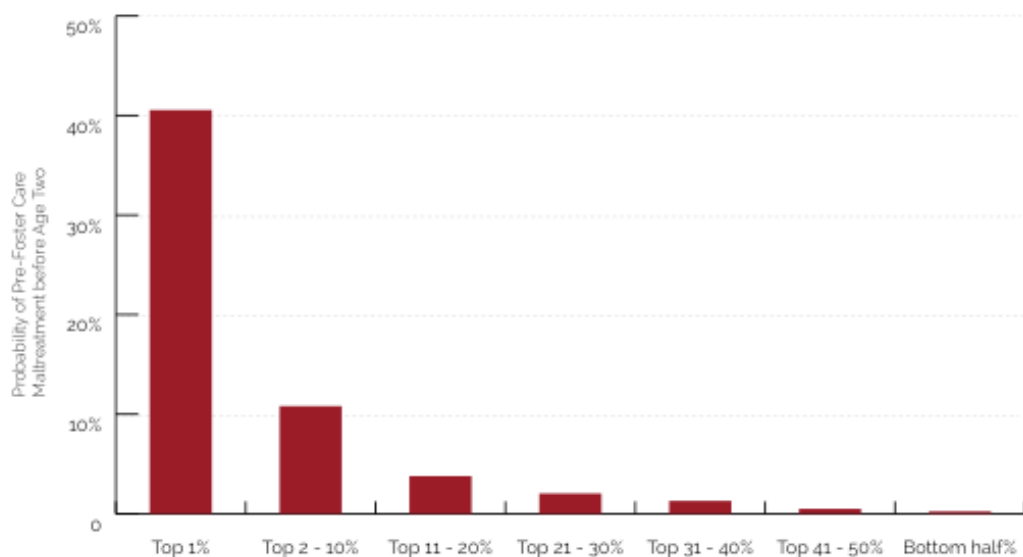Map changes over time, place, and subgroups

Why Integrated Data?

Oregon Children Born at Risk
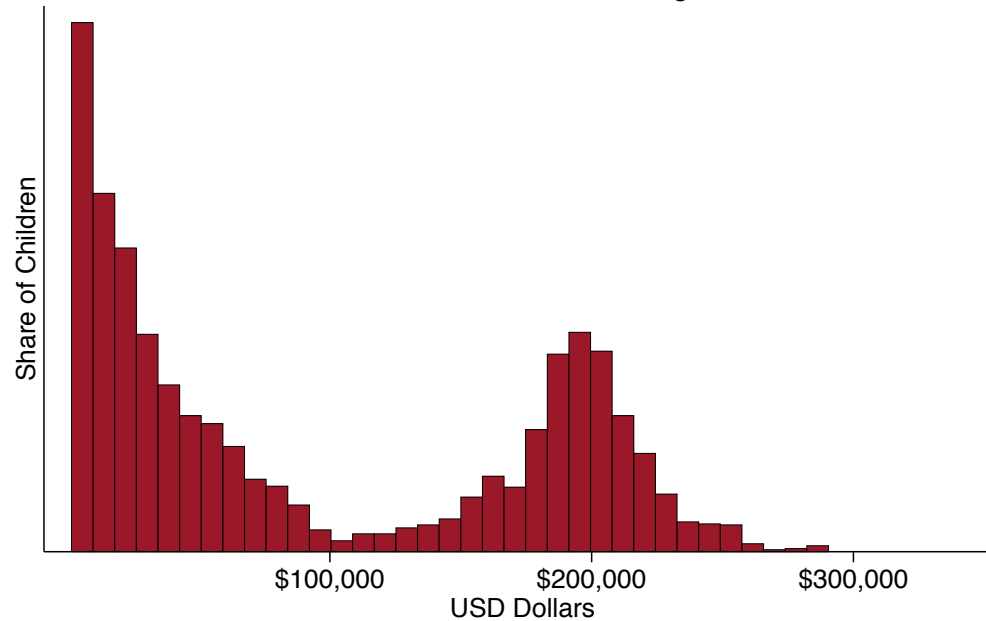
Probability of Maltreatment and Foster Care

Target interventions for the most at-risk children

Why Integrated Data?

Distribution of Child Welfare Costs
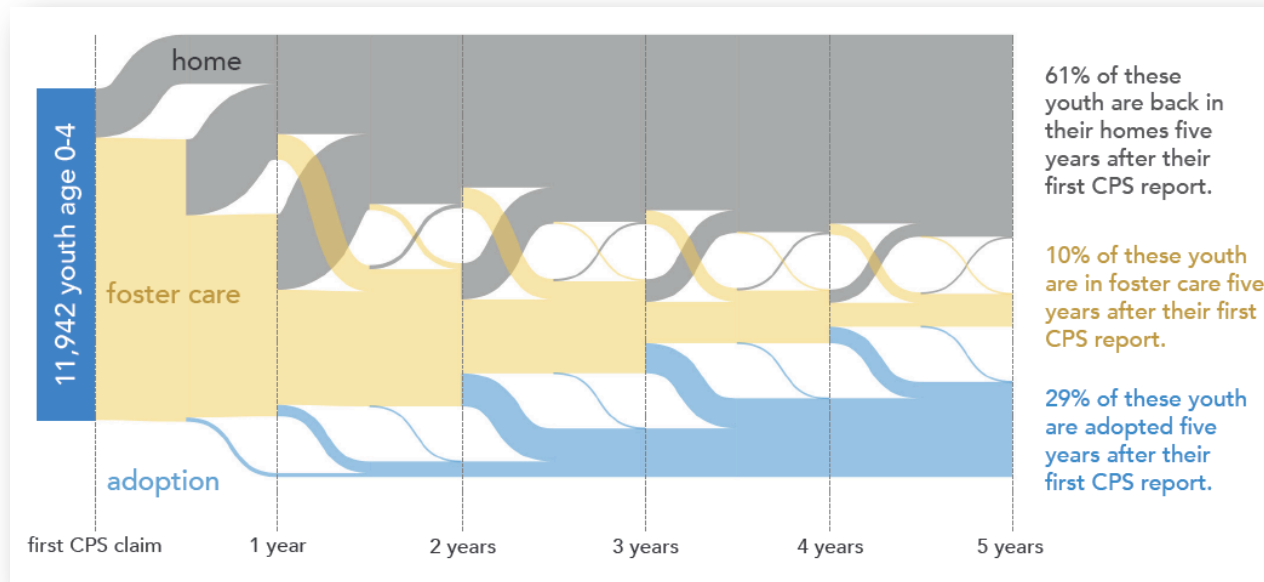### Per child who enters before age six

Share of Children

$100,000 $200,000 $300,000

USD Dollars

Understand service-demand patterns and program costs

Why Integrated Data?

61% of these youth are back in their homes five years after their first CPS report.

10% of these youth are in foster care five years after their first CPS report.

29% of these youth are adopted five years after their first CPS report.

11,942 youth age 0-4

home

foster care

adoption

first CPS claim | 1 year | 2 years | 3 years | 4 years | 5 years

Trace paths through the system

CENTER FOR EVIDENCE-BASED POLICY
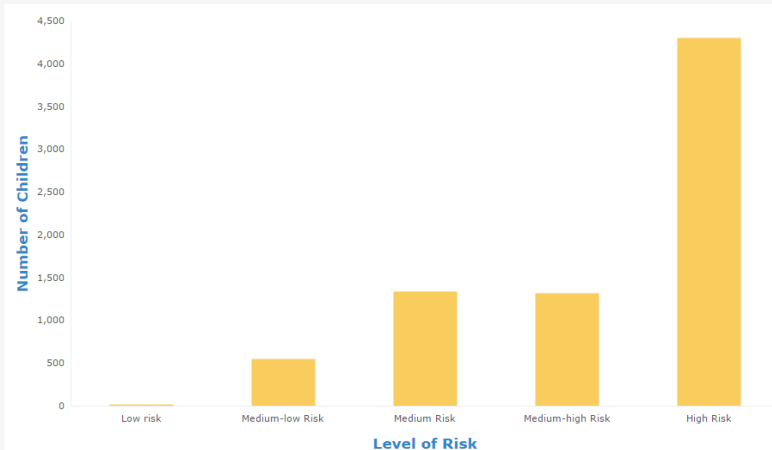
Why Integrated Data?

OREGON CHILDREN AT RISK

Between 2001 and 2010, almost half a million children were born in Oregon. Over 2% of these children entered the foster care system before age four. Many of these children were at foreseeable risk. P4P research and modeling has identified key characteristics of children and their families that predict the likelihood of childhood abuse and neglect. Children without these characteristics are at much lower risk.

These data show all children born in Oregon between 2001 and 2010. Children with predictive factors are at much higher risk of maltreatment and entering foster care than children with none of these factors.

Oregon Children   7,527

Select and unselect any combination of the following risk factors:

- ✔ Poverty
- ☐ Parental education
- ☐ Parental substance abuse
- ✔ Parental criminal activity
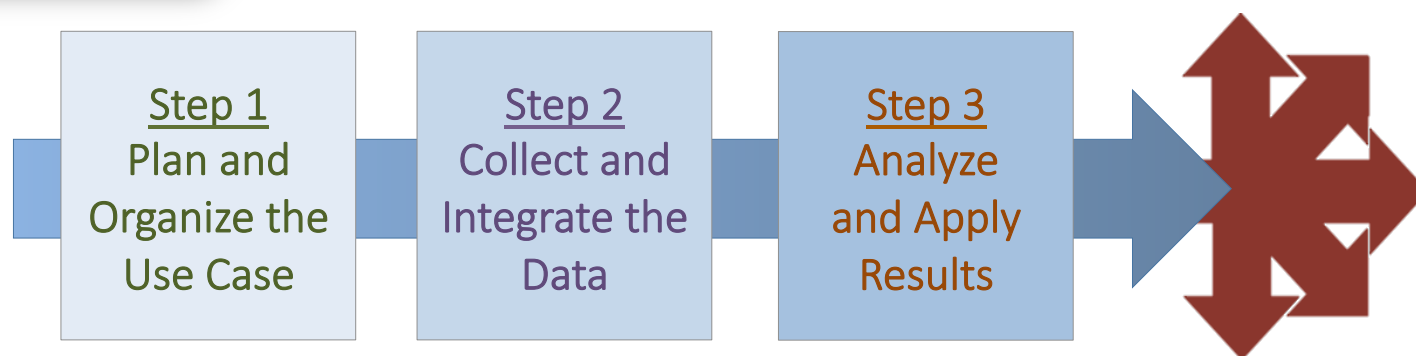- ☐ Parental mental health
- ☐ Family instability

Low Risk = x2 the chances of being maltreated and entering foster care relative to someone with no predictive factors. Medium-low = x10. Medium = x20. Medium-high = x40. High = x80.

Expand access to actionable information for public, private and community decision-makers

EVIDENCE-BASED POLICY CENTER FOR

The "Use Case" Pathway

Step 1
Plan and Organize the Use Case

Step 2
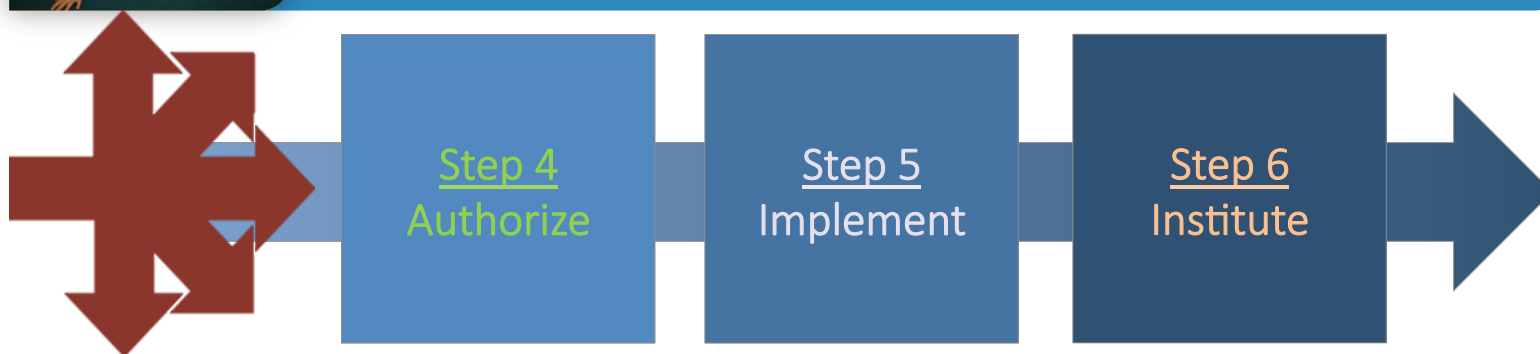Collect and Integrate the Data

Step 3
Analyze and Apply Results

1.1. Identify a real-world research or policy question
1.2. Engage partners to collect, integrate, and analyze data

2.1. Identify data required to answer the research or policy question
2.2. Match identifiers across datasets

3.1. Analyze integrated data to answer research questions
3.2. Capture learning to build a business case for a full IDS

The "IDS" Pathway

Step 4 Authorize	Step 5 Implement	Step 6 Institute

4. Secure executive authorization for a project charter and governance structure

5.1. Identify datasets and acquire data use agreements from data partners

5.2. Build data collection, processing, and integration infrastructure

5.3. Incorporate analysis, modeling, and decision-support capabilities

6. Institutionalize IDS as a tool for planning and policy-making

EVIDENCE-BASED POLICY CENTER FOR

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