South Carolina's Child Care Data Bridge

Building a Data Infrastructure to Support Child Care Policy

Presentation to the Annual Meeting of the Child Care Policy Research Consortium (CCPRC) – July 2008

South Carolina's Team Presenters

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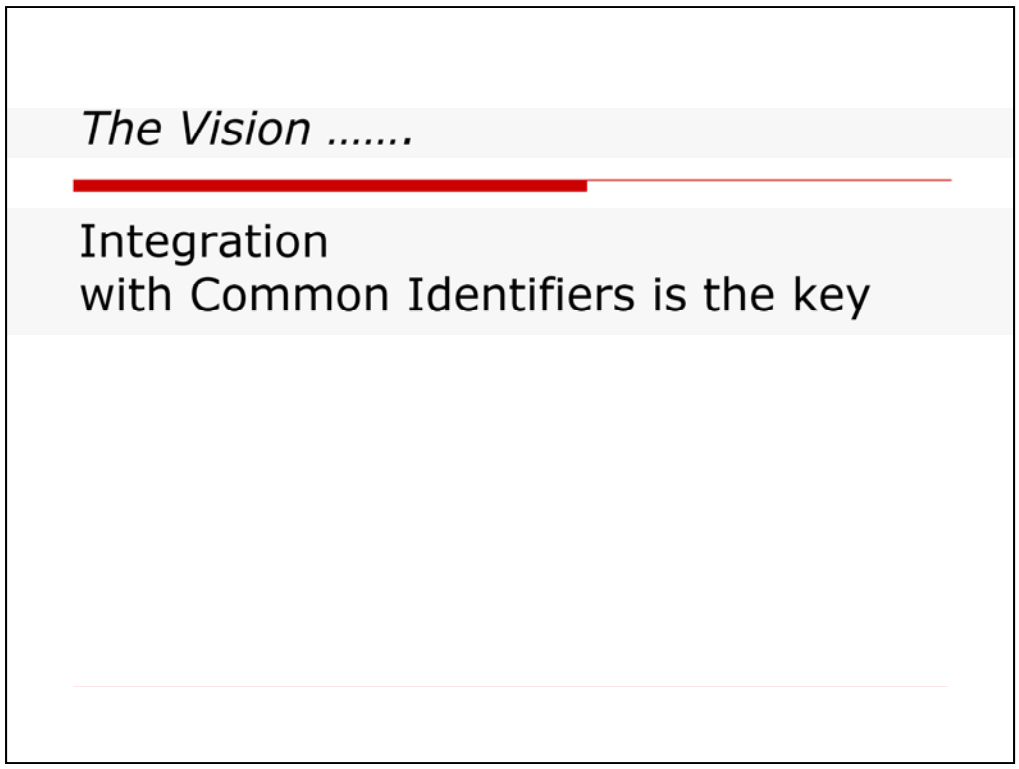


Systems must be integrated & share information

Reduce the burden and repetition in the collection of information

Locate discrepancies in information

Alert staff to critical key information quickly

Opportunity knocks …….

Child Care Research Capacity Grant provided an opportunity to increase resources & move at a faster pace

- Vision – Create web-based tools that access information from your PC
- Build upon the work at ORS with the integrated data warehouse and cubes
- BUT, before we do that – need a strong foundation

Working together ……

Objective: Stay focused on goal of building data capacity, using project's research question as guide:

What is the impact of CCDF on improving the quality of care available to and utilized by low-income working parents and at-risk families to support parental outcomes and child well-being?

1. Make the questions manageable & measurable

What is the relationship between CCDF quality enhancement funds/initiatives and the quality of care in ABC centers?

Dependent variables – quality of care
- Performance level of center from ERS = AA, A, BB, B, C
- Incremental score on ERS
- Level of personnel professional development
- Personnel turnover

Independent variables – CCDF funds/initiatives
- Professional Development
- Technical Assistance
- New awards/bonuses in ABC Program

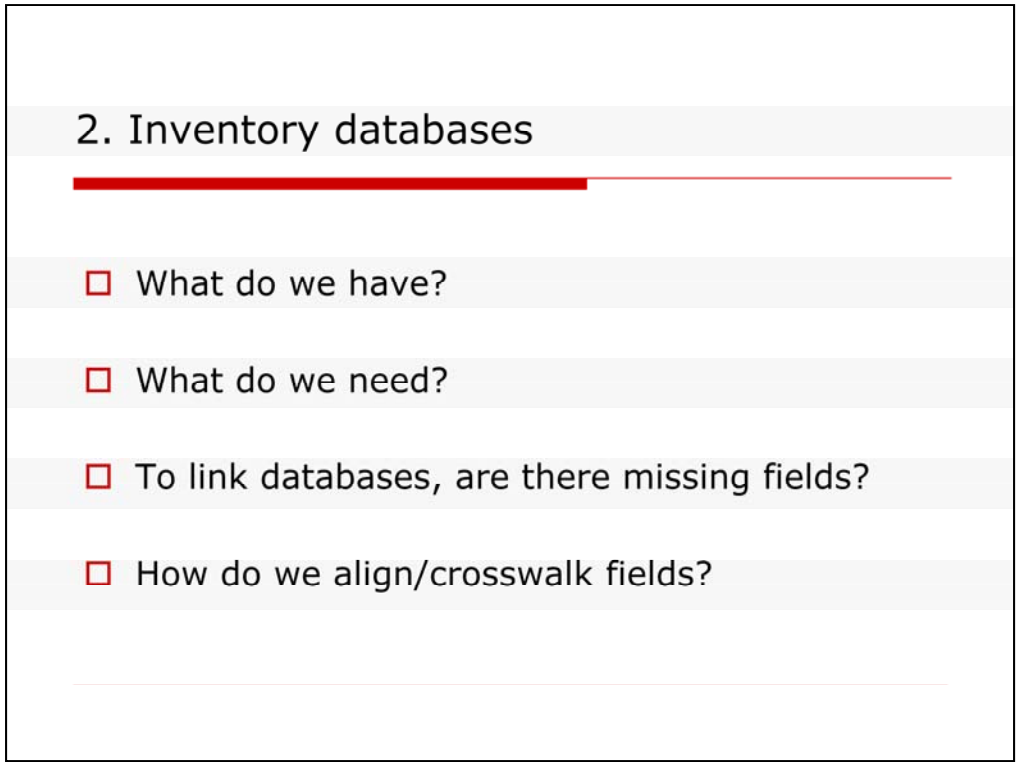
SC's Other question: Does the percentage of ABC voucher children in centers of higher levels of quality increase as the number of higher quality centers increases?

Dependent variable

% of ABC children in each ABC level

Independent variable

Performance level of center = AA, A, BB, B, C



Have

Regulatory

Need

ABC – building enhancements

ABC Client/Child – upgraded

TA – being built

TEACH – upgraded

Higher Ed – built

PITC – being built

Missing fields

FEIN, SSN

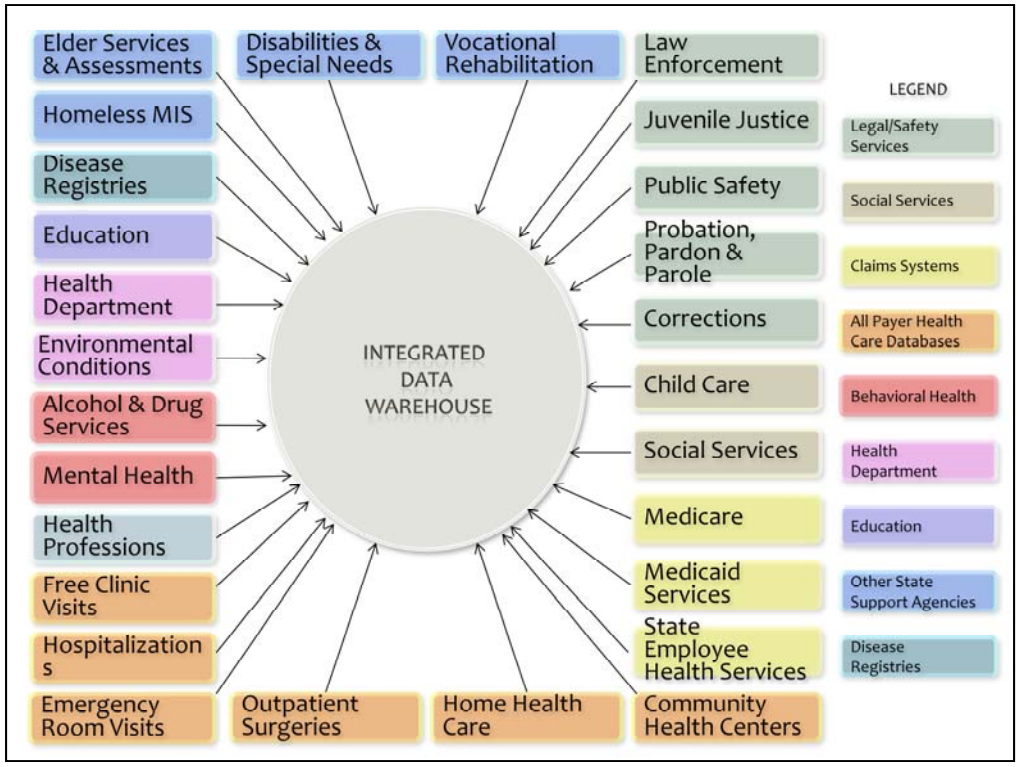
Align

Education level of caregivers

Databases: actual, partial, build

- State-regulated centers/providers
- ABC centers/providers
- ABC Voucher/client-child
- Professional development
  TEACH & other CCDF funded higher education
  Program for Infant/Toddler Care (PITC)
- Technical assistance (registry and reporting)

BUILDING TOOLS ON THAT FOUNDATION


Elder Services & Assessments
Disabilities & Special Needs
Vocational Rehabilitation
Law Enforcement
Homeless MIS
Juvenile Justice
Disease Registries
Public Safety
Education
Probation, Pardon & Parole
Health Department
Corrections
Environmental Conditions
INTEGRATED DATA WAREHOUSE
Child Care
Alcohol & Drug Services
Social Services
Mental Health
Medicare
Health Professions
Medicaid Services
Free Clinic Visits
State Employee Health Services
Hospitalizations
Emergency Room Visits
Outpatient Surgeries
Home Health Care
Community Health Centers
LEGEND
Legal/Safety Services
Social Services
Claims Systems
All Payer Health Care Databases
Behavioral Health
Health Department
Education
Other State Support Agencies
Disease Registries

SC's Integrated System

- Built using existing systems (legacy systems from state agencies and private sector)
- Create a Unique Tracking Number (not related to any other number)
- Identifiers are separated from the statistical data. Use only the statistical data
- Data always "owned" by the originating agency. Must have permissions to use and/or link any data
- Employ HIPPA Best practices and have extensive security measures.

Linking Data Sets

- Records are linked for the same individual using a unique tracking number
- Tracking number is random so cannot be unencrypted to identify the individual
- An individual is assigned the same number over time
- Rigorous security standards in place: policies, firewalls

Putting Data Into the Hands of the Users

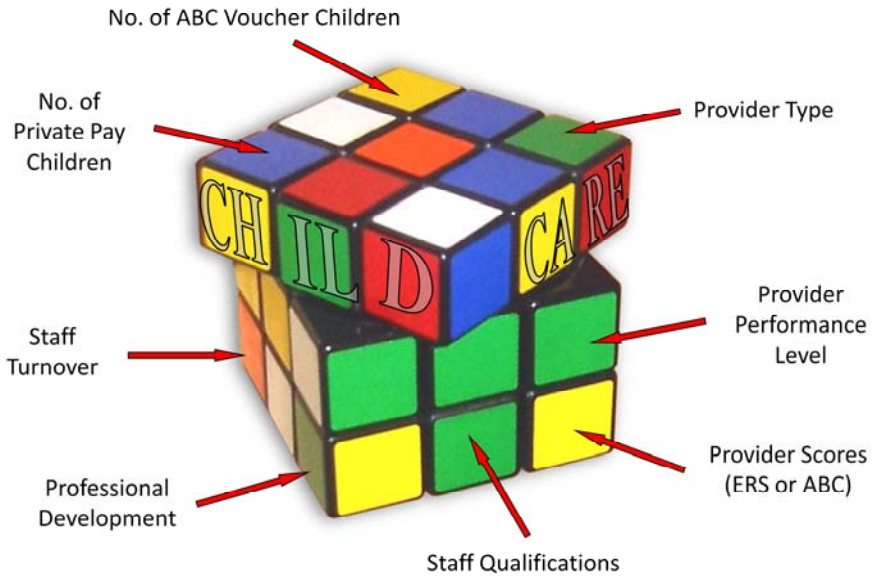
Evaluation of interventions and programs by:

- Understanding interaction with other programs and providers
- Analyzing aggregate data
- Accessing analytic data cubes
- Managing client care
- Creating a research capacity
- Assessing outcomes

What Is an Analytic Cube?

- Secure Web-based system that allows users to access large databases from their desks
- A way to "slice and dice" through large amounts of data
- Define "slicers," characteristics that are important to analyzing the subject population
- Pre-aggregate the linked data by all possible combinations of "slicers"

South Carolina's Proposed Child Care Provider Cube



Proposed Cubes for Child Care Services

- Cubes based on Provider Data
  - Licensing
  - ABC Quality Reviews
  - Information on ABC Voucher Providers
- Cubes based on Child Level Data
  - With agency permissions, use the Integrated Data Warehouse
  - ABC Voucher children, DSS TANF & Food Stamp children, Medicaid
  - Mental Health, Disabilities, & other issues
  - Eventually, would like to link to Education

Explore a bridge from Providers to Child

- Vision again!
- In a test environment, explore development of a bridge from the provider to all children served by provider