COMMUNITYVIEWER

Integrated Data System

March 2014

CI:NOW

WHY?

Integrated Data Needs

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Need	Examples
Identify **people or households needing specific interventions**	• Identify schoolchildren who have just missed the third school day in a row • Public housing households generating multiple emergency room visits and school absences for respiratory problems
Identify **locations needing specific interventions**	• Site early childhood programs in block groups with high density of young children • Target financial literacy programs to areas with a few banks and a high density of payday and title lenders
Track individual, family, or HH progress on measures of success	• Change in EPN student math grade after four weeks of tutoring • Change in child's behavioral issues after non-custodial father secures and retains employment • Change in child's absences as Wheatley family moves to Sutton Oaks and back to redeveloped Wheatley Courts

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Need	Examples
Track population progress on measures of success	• Change in percent of EPN students missing 10% of more of school instruction days • Change in percent of EPN students transitioning on time from 8th to 9th grade
Conduct formative and summative **evaluation**	• Implementation fidelity: Determine the percent of EPN students needing at least 20 hours of math tutoring over eight weeks who actually received at least that dosage • Outcome measurement: Four-year graduation rate for kids who attended Pre-K vs. those who did not
Determine **effectiveness** and **dose-response relationships**	• Quantify the intensity of grades K-2 out-of-school time learning needed to preserve the protective effects of pre-K through third grade • Determine the optimal tutoring dosage (session length, frequency, duration) by subject, age, race/ethnicity, and gender

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WHAT?

CommunityViewer Integrated Data System (IDS)

What SA Chose NOT to Do

- **Import to warehouse**
  - Cons: Service providers can't see individual person/family/HH record, high risk to agency with movement of lots of raw identified data, public usually can't see aggregate reports
- **Data entry into single db**: require partner agencies to key client data into single db
  - Cons: duplicate data entry, ↑ errors , public can't see aggregate reports
- **Import to single client db**: agencies' raw data are imported/passed into single client mgmt db
  - Cons: high risk to agency with movement of lots of raw identified data, ongoing manual process, public can't see aggregate reports

None of these solutions integrates person-data with place-data

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What SA Chose to Do: CommunityViewer

- Purpose-built for broad long-term use across region
- Intended to maximize power, minimize agency risk and effort
- Scalable at low cost once core is built
- Aggregate data freely available; identified data highly secure and private

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What It integrates

- Person-to-person
  - Links and de-duplicates people, families, and households across datasets using record-matching algorithms and defined attributes
  - Early-warning dashboard and longitudinal tracking
- Person-to-place
  - Geocodes person-level records
  - Enables use of place-based data (neighborhood and environmental influences)
- Place-to-place
  - Aggregate up across datasets (e.g., tract to zip code)

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Features & Functionality

- Data in: DTI server and/or DropPHI/SFTP; direct data entry under consideration
- Controlling data view/use:
  - User management module
  - Consent module
- Accessing data
  - Person Viewer
  - Private Reports
  - Public Reports

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How?

Using Data Without Moving Data

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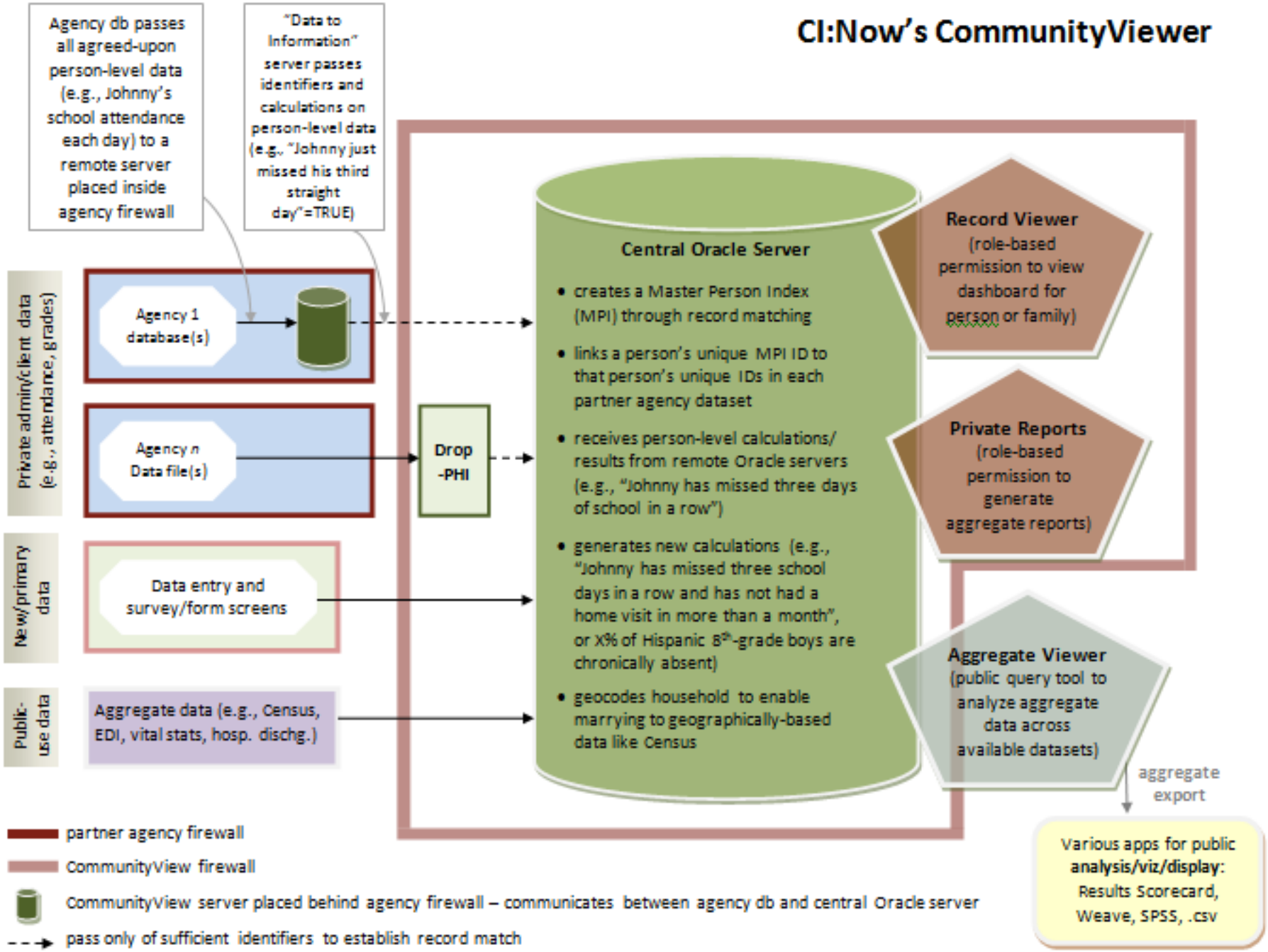
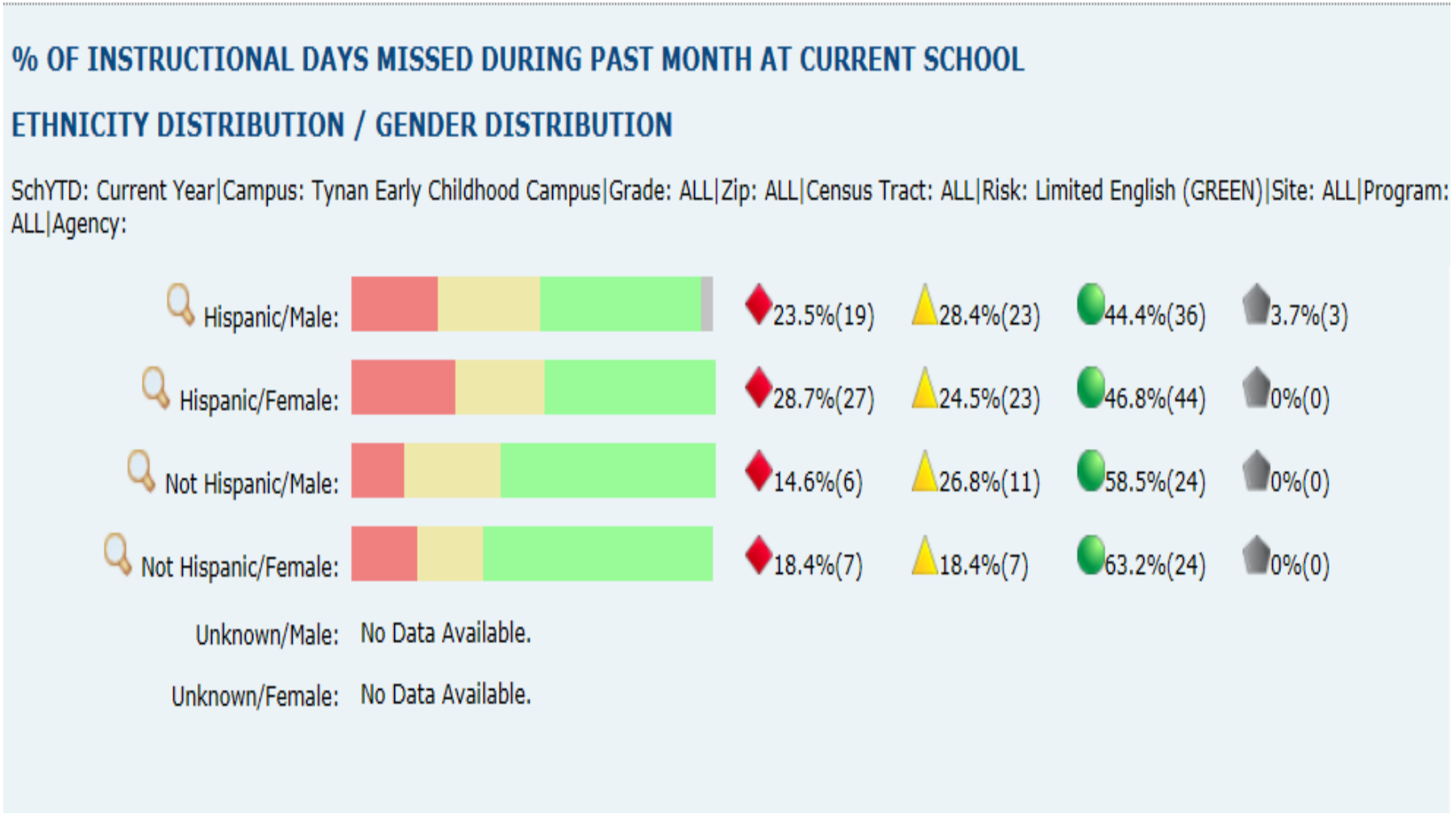
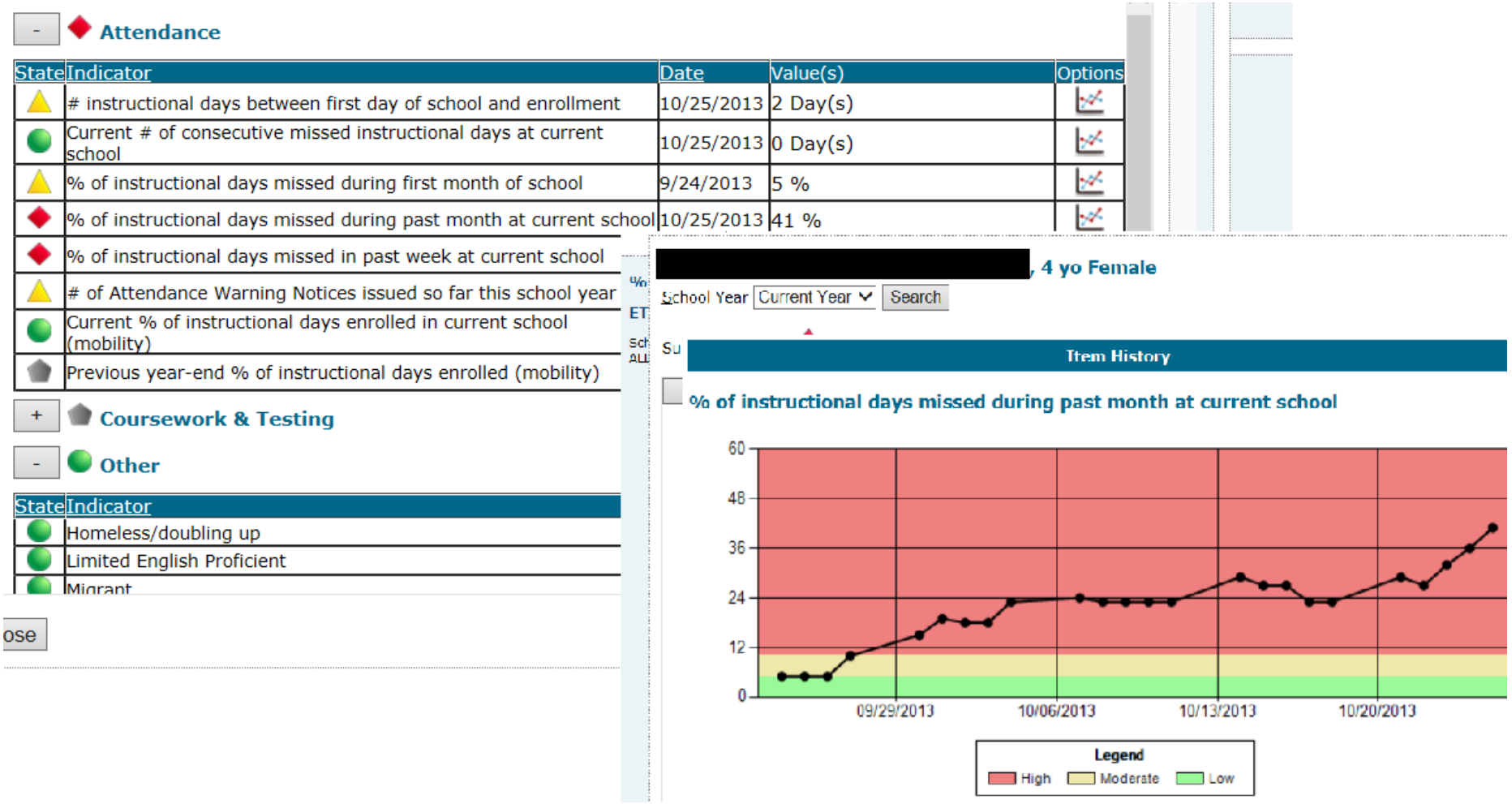
CI:Now's CommunityViewer



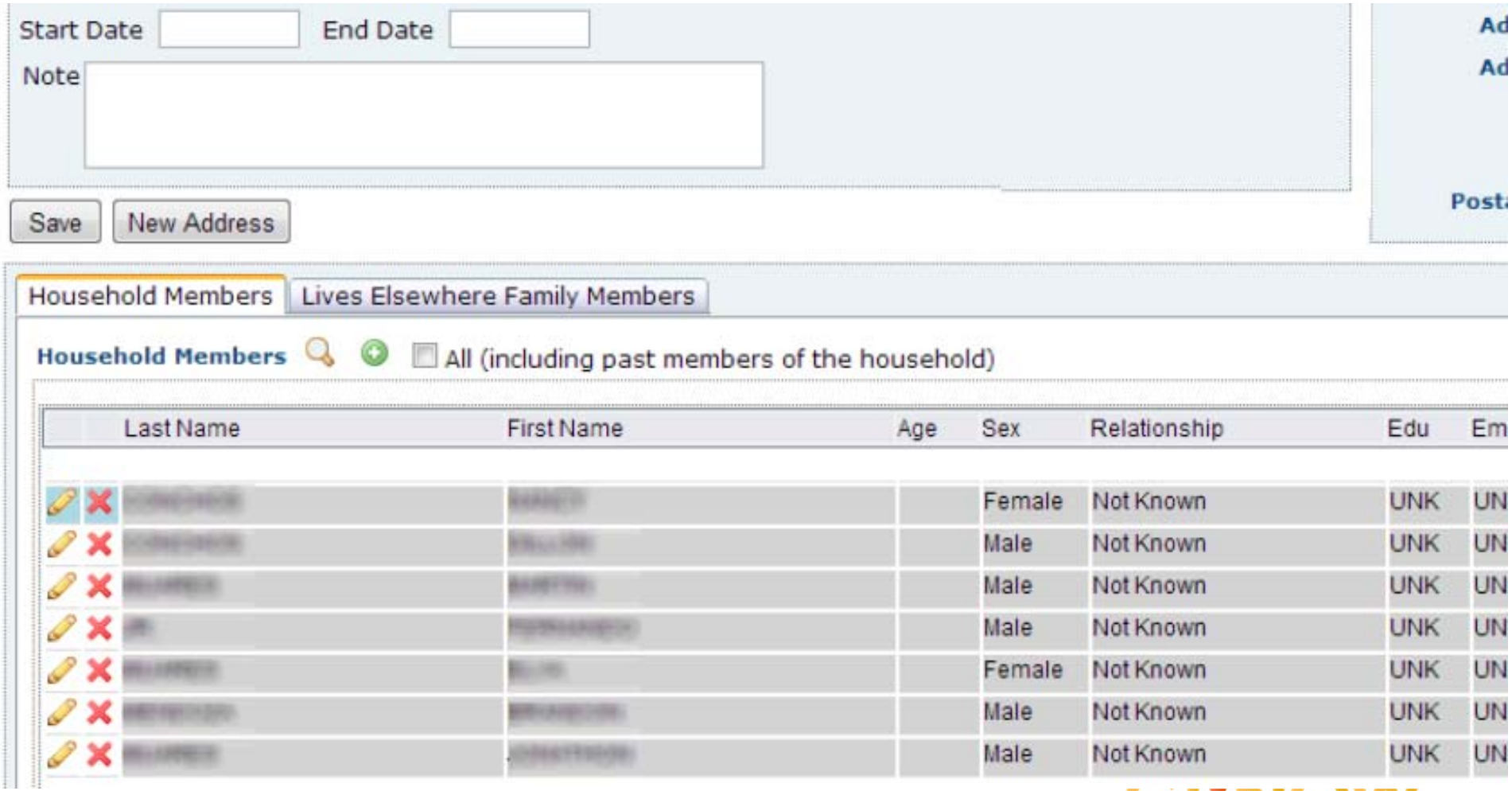
Custom and “canned” reports



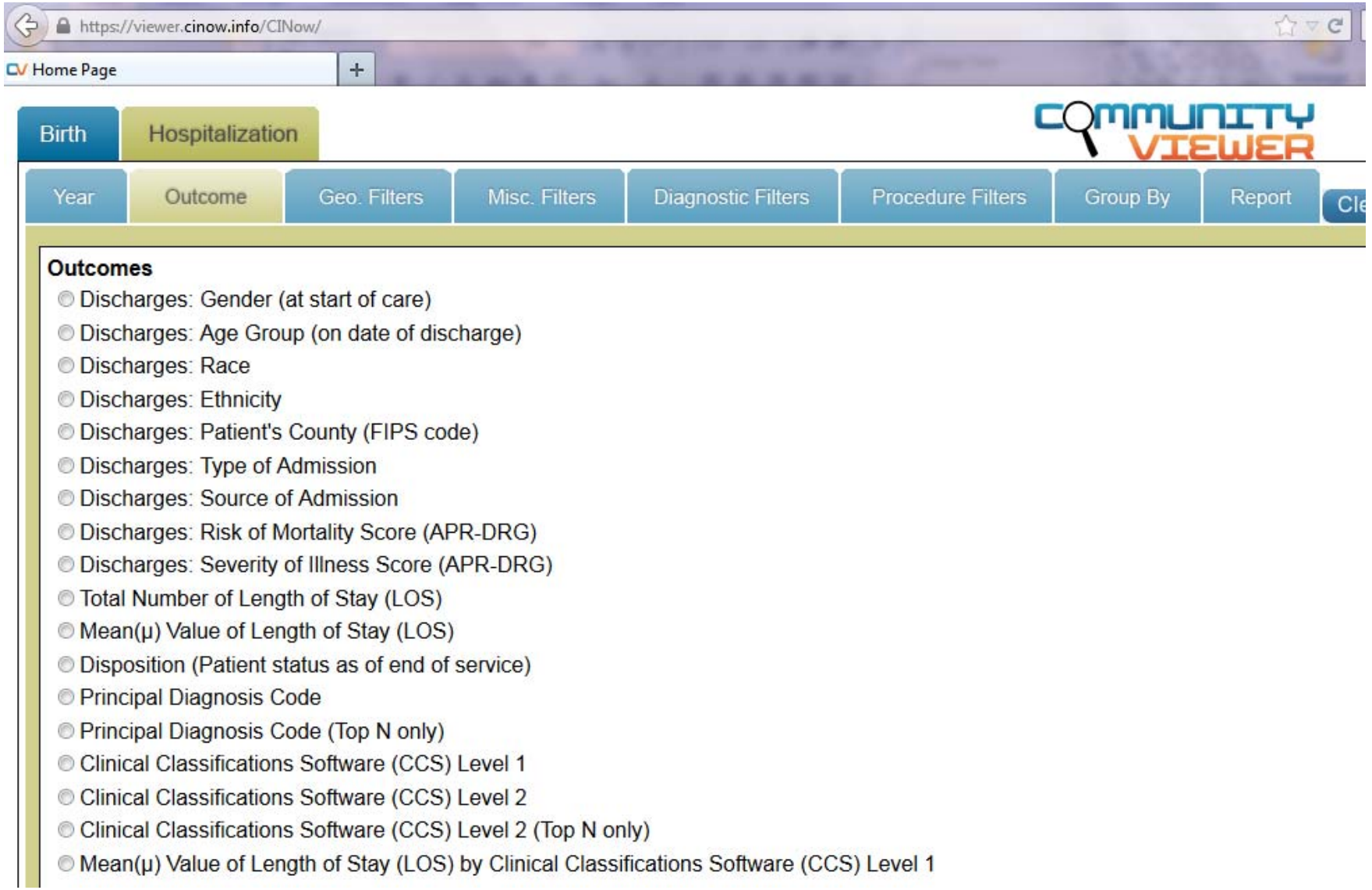
Person-level dashboard



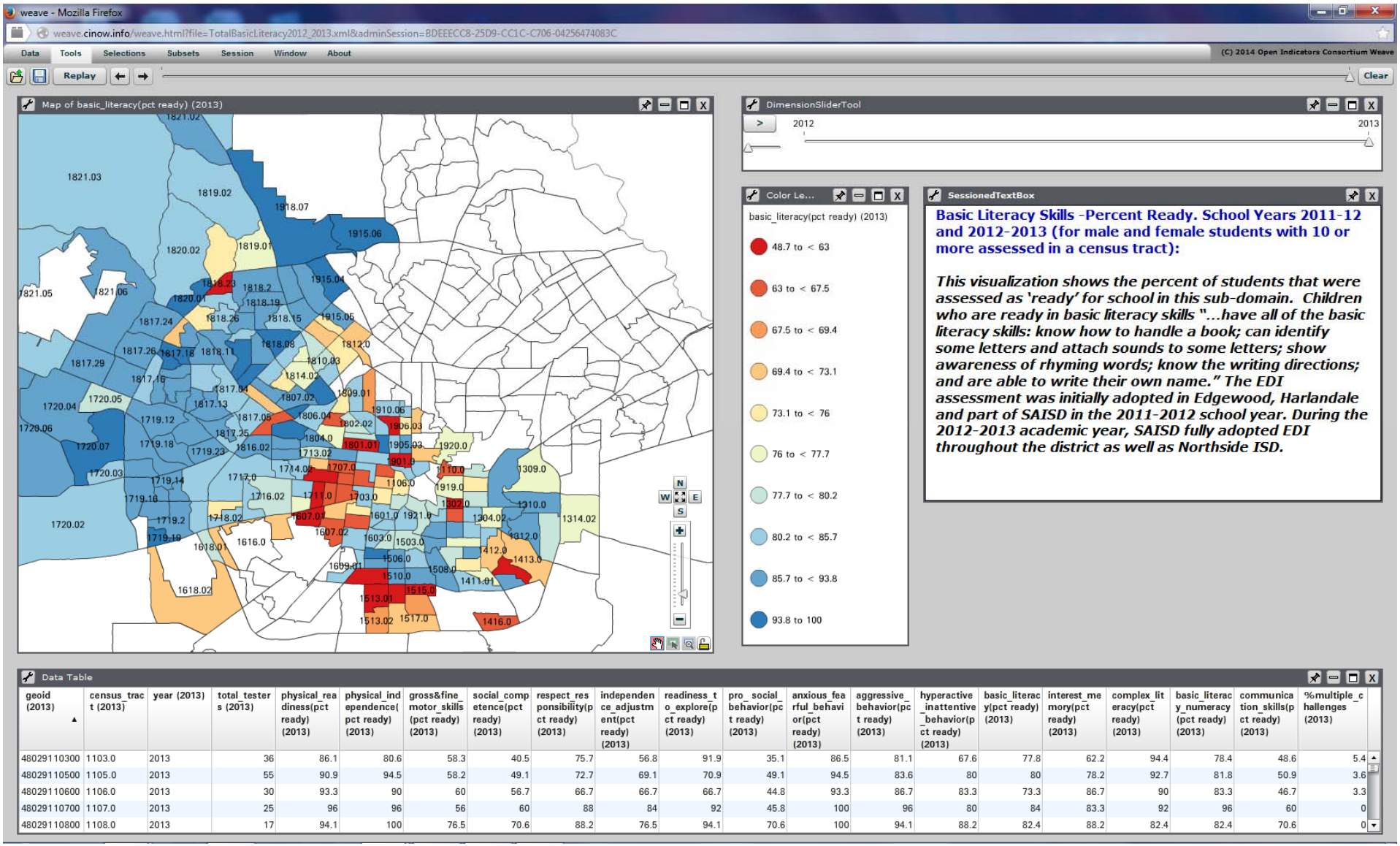
Household and family dashboards



Public reports



Further analysis & visualization



geoid (2013)	census_tract (2013)	year (2013)	total_testers (2013)	physical_readiness(pct ready) (2013)	physical_independence(pct ready) (2013)	gross&fine_motor_skills (pct ready) (2013)	social_competence(pct ready) (2013)	respect_responsibility(pct ready) (2013)	independence_adjustment(pct ready) (2013)	readiness_to_explore(pct ready) (2013)	pro_social_behavior(pct ready) (2013)	anxious_fearful_behavior(pct ready) (2013)	aggressive_behavior(pct ready) (2013)	hyperactive_inattentive_behavior(pct ready) (2013)	basic_literacy(pct ready) (2013)	interest_memory(pct ready) (2013)	complex_literacy(pct ready) (2013)	basic_literacy_numeracy (pct ready) (2013)	communication_skills(pct ready) (2013)	%multiple_challenges (2013)
48029110300	1103.0	2013	36	86.1	80.6	58.3	40.5	75.7	56.8	91.9	35.1	86.5	81.1	67.6	77.8	62.2	94.4	78.4	48.6	5.4
48029110500	1105.0	2013	55	90.9	94.5	58.2	49.1	72.7	69.1	70.9	49.1	94.5	83.6	80	80	78.2	92.7	81.8	50.9	3.6
48029110600	1106.0	2013	30	93.3	90	60	56.7	66.7	66.7	66.7	44.8	93.3	86.7	83.3	73.3	86.7	90	83.3	46.7	3.3
48029110700	1107.0	2013	25	96	96	56	60	88	84	92	45.8	100	96	80	84	83.3	92	96	60	0
48029110800	1108.0	2013	17	94.1	100	76.5	70.6	88.2	76.5	94.1	70.6	100	94.1	88.2	82.4	88.2	82.4	82.4	70.6	0