CTC BREAKFAST OF CHAMPIONS

DATA ECOSYSTEM + CURRENTCARE

Warm up

1. What information are you missing that would have the most positive impact on your patients' health outcomes?

2. How would you need to receive it to make the best use of it?

3. What's holding us back?

HOW CAN STATE HEALTH INFORMATION TECHNOLOGY IMPROVE PATIENT CARE?

Holistic picture of the family: data-driven program and policy evaluation

1. What happens outside the clinician's office?
2. Example: Child maltreatment
3. Example: Opioids / Medication Assisted Treatment & Employment

DATA ECOSYSTEM GUIDEPOSTS

MISSION

Use integrated data to…

- Develop programs that meet people where they are
- Help Rhode Islanders fulfill their potential
- Responsibly steward state resources

PRINCIPLES

- Integrated at the person-level
- Informs agency operations
- State-owned and directed
- Self-service analytics available
- Agile, project-focused design
- Uncluttered, cleaned data
- Builds on existing assets
- Security best practices

The Ecosystem is not…

- Case management system
- Source for real-time data or truth on a specific individual
- Advanced data science shop
- Connected to non state data
- An on-demand platform for the public or widespread state government users, to protect data security and privacy.

RESULTS TO DATE: CHILD MALTREATMENT PREVENTION

What are **common characteristics** of the children, families who experience maltreatment?

What do we know about **how the state interacted** with these families before maltreatment occurred?

How can we **improve how we support** families, communities?

RESULTS TO DATE: CHILD MALTREATMENT PREVENTION

WE DID

WHAT

- Built an integrated data model and performed analysis on Medicaid children under 7 who had an indicated investigation, along with their parents.
- Partnered with experts in state agencies and in the community to guide our analysis and help us interpret results.
- Coordinated with other projects: KIDSCOUNT, Hassenfeld, RIIPL, Children's Cabinet, working on related questions.

WE FOUND

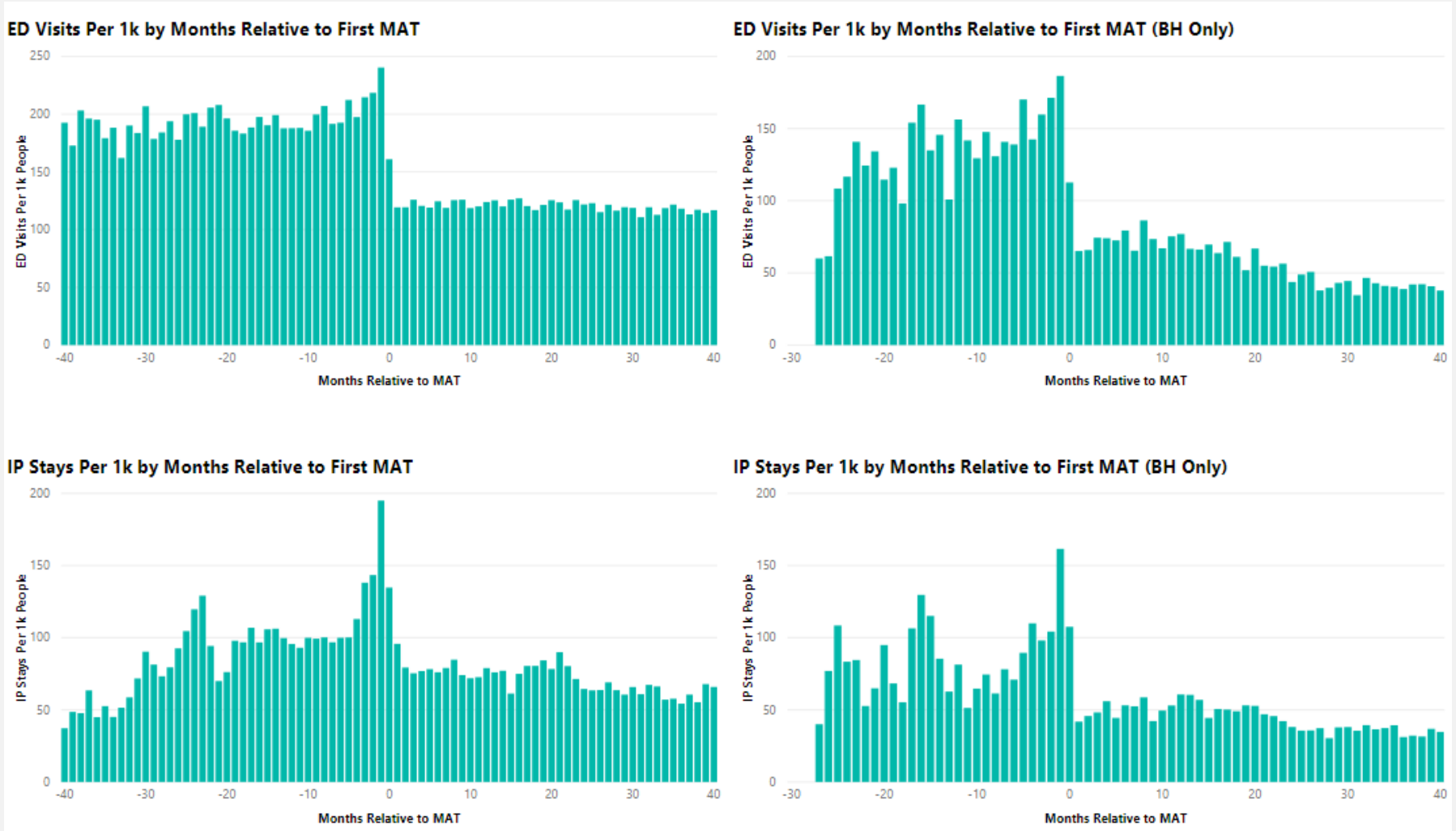
WHAT

- The number of indicated investigations in a census block + the level of cash assistance (TANF) strongly predict future maltreatment.
- The strongest single factors associated with child maltreatment were parental substance use and severe mental illness.
- "Missing" children may be isolated + at high risk of maltreatment:
  - children who do not complete their well-visits
  - families without childcare support
  - families who are referred to services but do not enroll

insights + recommendations

- **Prevention begins in the community**: strong, healthy neighborhoods are a primary defense against child maltreatment. We recommend building "prevention zones" with community members.
- **A coordinated, family-based approach** to child safety, well-being is needed. We recommend coordinating contracted, state services to ensure such an approach is taken.
- **Integrated data + targeted questions** can help us better identify and serve our highest risk families. We recommend using data, improving outreach, and empowering staff with relevant data.

MEDICATION ASSISTED TREATMENT (MAT) LOWERS ER AND IP RATES PER 1,000

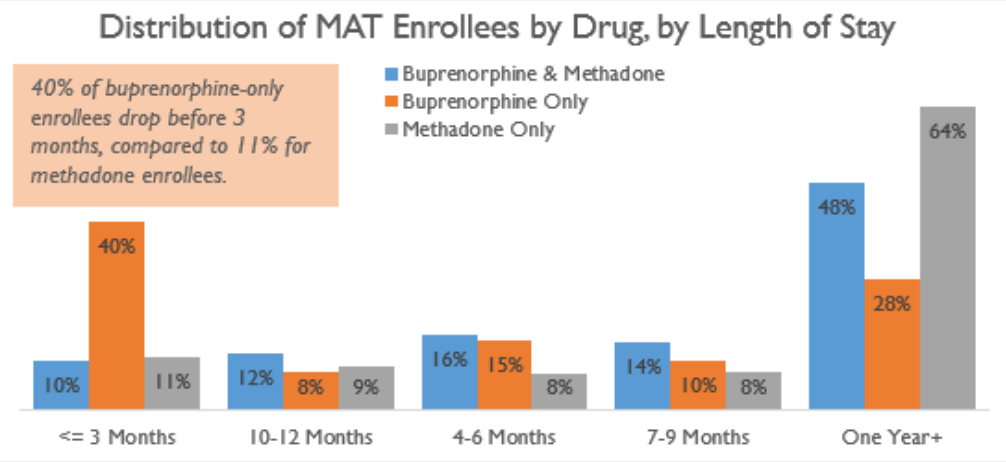


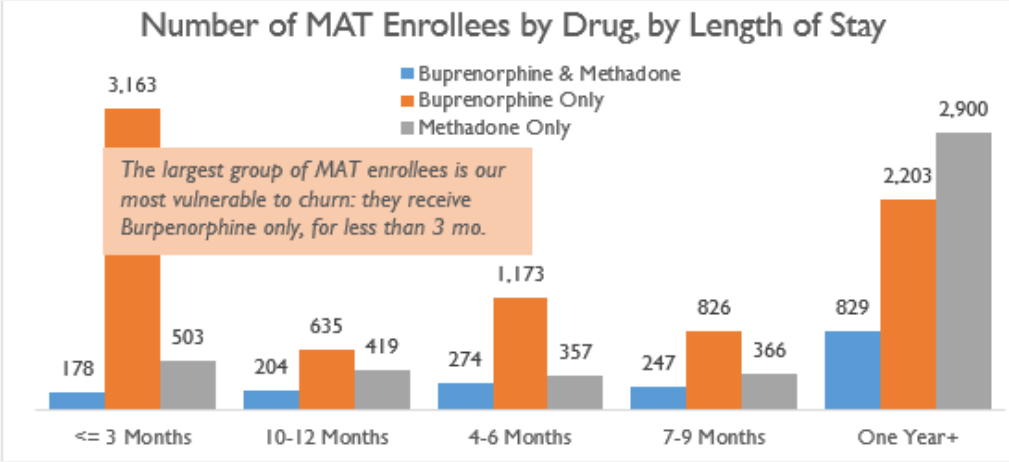
MAT: MANY BUPRENORPHINE PATIENTS DROP AFTER JUST 3 MONTHS

We know that those who are in treatment for 12 months or more are most likely to see a substantial decrease in ER visits, inpatients stays and non-MAT PMPM. And the data show that those on methadone are most likely to stay on MAT for the year (64% vs. 28% for buprenorphine).

40% of buprenorphine enrollees drop within three months, a timeframe that leads to very little positive benefit on medical utilization and spending. This group is also our largest cohort *overall* - among all drugs, and all lengths of stay.

Note that buprenorphine and methadone are different drugs, used for different purposes with different intended lengths of stay. However, anything under 3 months and without appropriate tapering is likely to be an ineffective treatment period.





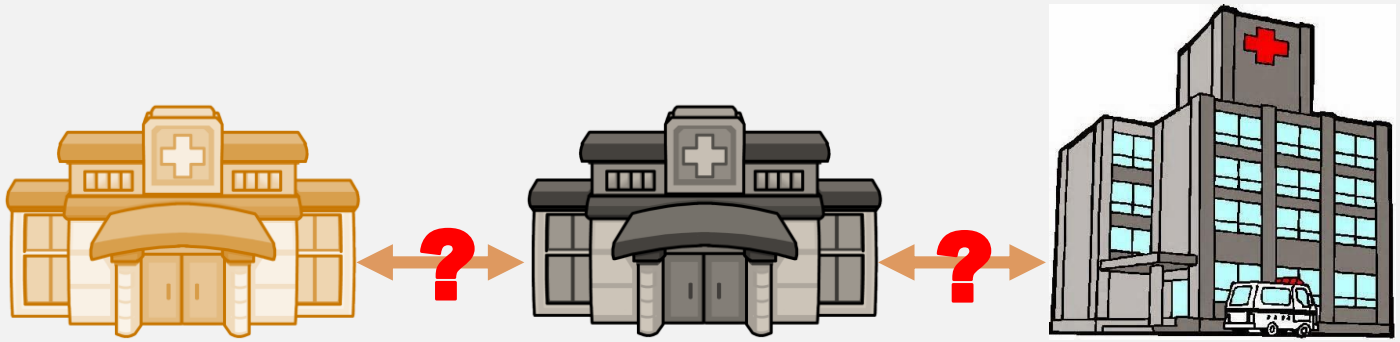
HOW CAN STATE HEALTH INFORMATION TECHNOLOGY IMPROVE PATIENT CARE?

Opportunities for partnership

1. **Leverage CurrentCare, our state health information exchange**
2. Expand limited data sharing with treating providers
3. Unexpected provider partners: Connecting families, referral tracking
4. No wrong door for good ideas: What can we do better right now, within our current payment arrangements? What are the highest and best uses of additional funds?

Challenges: Ethical and legal limits of data sharing, funding to support analysts and integrative / family care managers, payment reform

Although data is shared among health care organizations many times every day, sometimes the information does not get shared, which puts patients at risk for medical errors, duplicate diagnostic tests, or unnecessary treatment



Primary Care Provider

Specialist

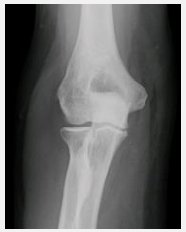
Hospital

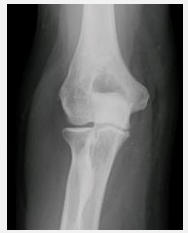
Patient has a complaint

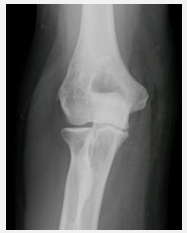
Initial X-ray ordered

Same X-ray reordered

Same X-ray reordered







Patient frustration

Detrimental impact on health

Unnecessary healthcare spending

Lost time

CurrentCare consolidates data from multiple healthcare sources to make it easier to share patient information and to provide valuable services

More than **500** data sources

Consolidated Patient Records

currentcare

Secure repository containing clinical data across geographic, propriety and payer boundaries

Alerts and Notifications

Comprehensive patient record lookup (through web or EHR)

Analytics, public health, and quality measurement

Patient access through CurrentCare For Me

Under the current model CurrentCare can only support patients who have enrolled by signing an authorization form (i.e. opted-in).

49%

About 49% of Rhode Islanders are enrolled, most likely because they were offered enrollment at their doctor's office.

51%

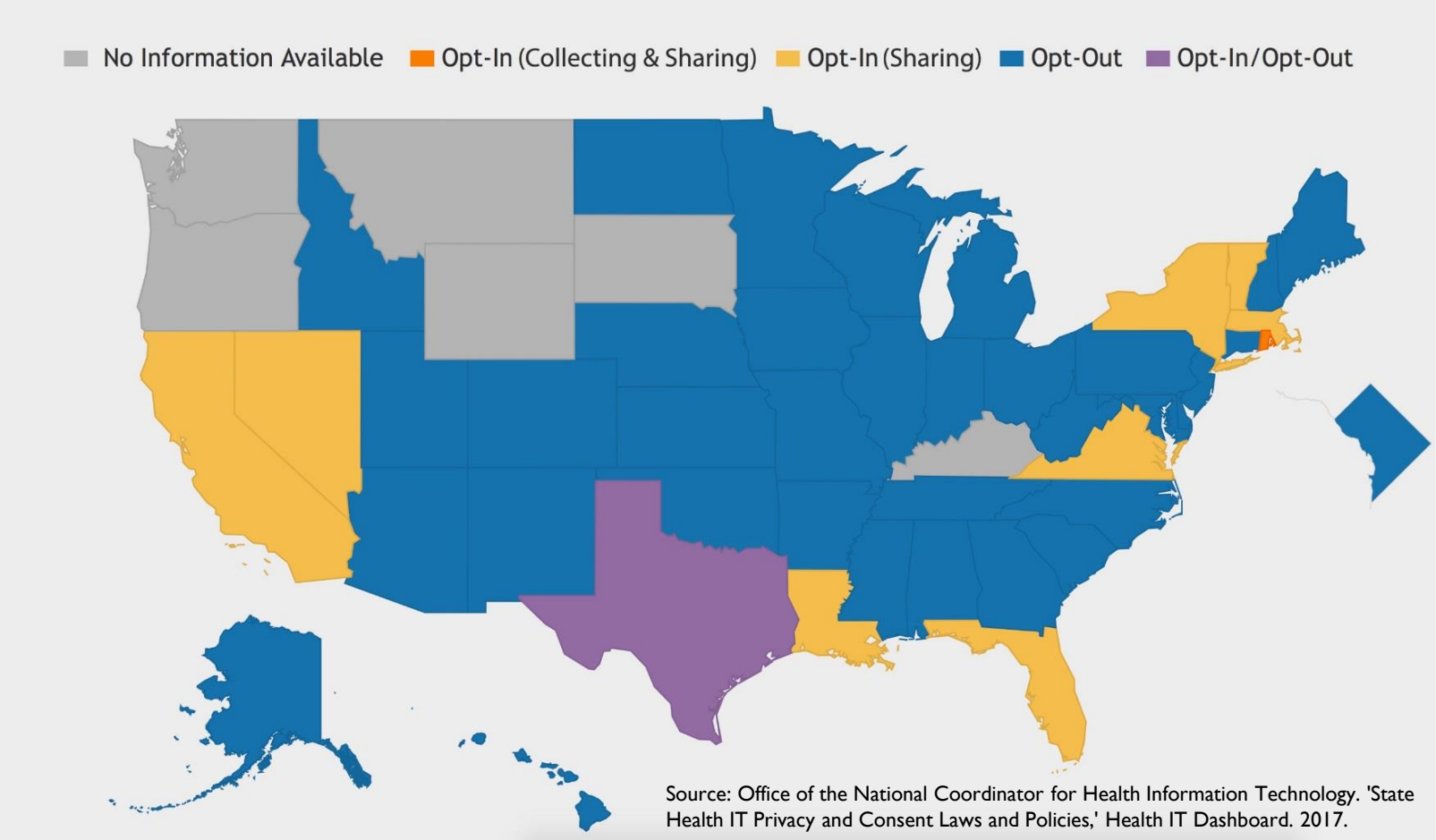
Most of the remaining 51% of Rhode Islanders are likely not enrolled because they were either never offered enrollment, didn't understand the value of the service, or may have chosen not to enroll

Vermont Experience

Vermont has had similar experiences with opting into the VT HIE, and found that about 95% of people who were asked to enroll in Vermont's HIE did enroll.

They attribute their low enrollment rate to a low number of Vermonters being asked given the cumbersome nature of enrolling.

Rhode Island has the most restrictive HIE consent model in the country



Source: Office of the National Coordinator for Health Information Technology. 'State Health IT Privacy and Consent Laws and Policies,' Health IT Dashboard. 2017.

- 36 state sponsored HIEs have policies for **a variety of opt-out**
- 8 state sponsored HIEs have policies for **a variety of opt-in**
- We have the **only** state sponsored HIE requiring opt-in to ***collect*** data

There are also many other private HIEs external to states with their own policies

Healthcare delivery has changed since the law was originally passed

In 2008	Now
Patients often had to determine how to coordinate their own care, including transporting their own health records among their treating providers	To improve outcomes, healthcare organizations provide more care coordination, which relies on sharing a patient's health information across treating providers
Healthcare delivery was very individual provider-focused, with many providers working in silos	Healthcare delivery is much more comprehensive and team-based, in an effort to provide better outcomes, e.g. integrating physical and behavioral healthcare

Electronic Health Record (EHR) use and interoperability has changed since the law was originally passed

In 2008	Now
Adoption of rudimentary EHRs was about 67% among physicians and much less among other health professionals	Adoption of EHRs that are certified to perform advanced functions is now 91% among physicians and growing steadily among other health professionals
The process for sharing health information was mostly done on paper and by fax (such as required public health reporting)	EHRs and healthcare systems, including public health, can now send and receive health information electronically

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