

Improving Service Delivery for High Need Medicaid Clients in Washington State Through Data Integration and Predictive Modeling

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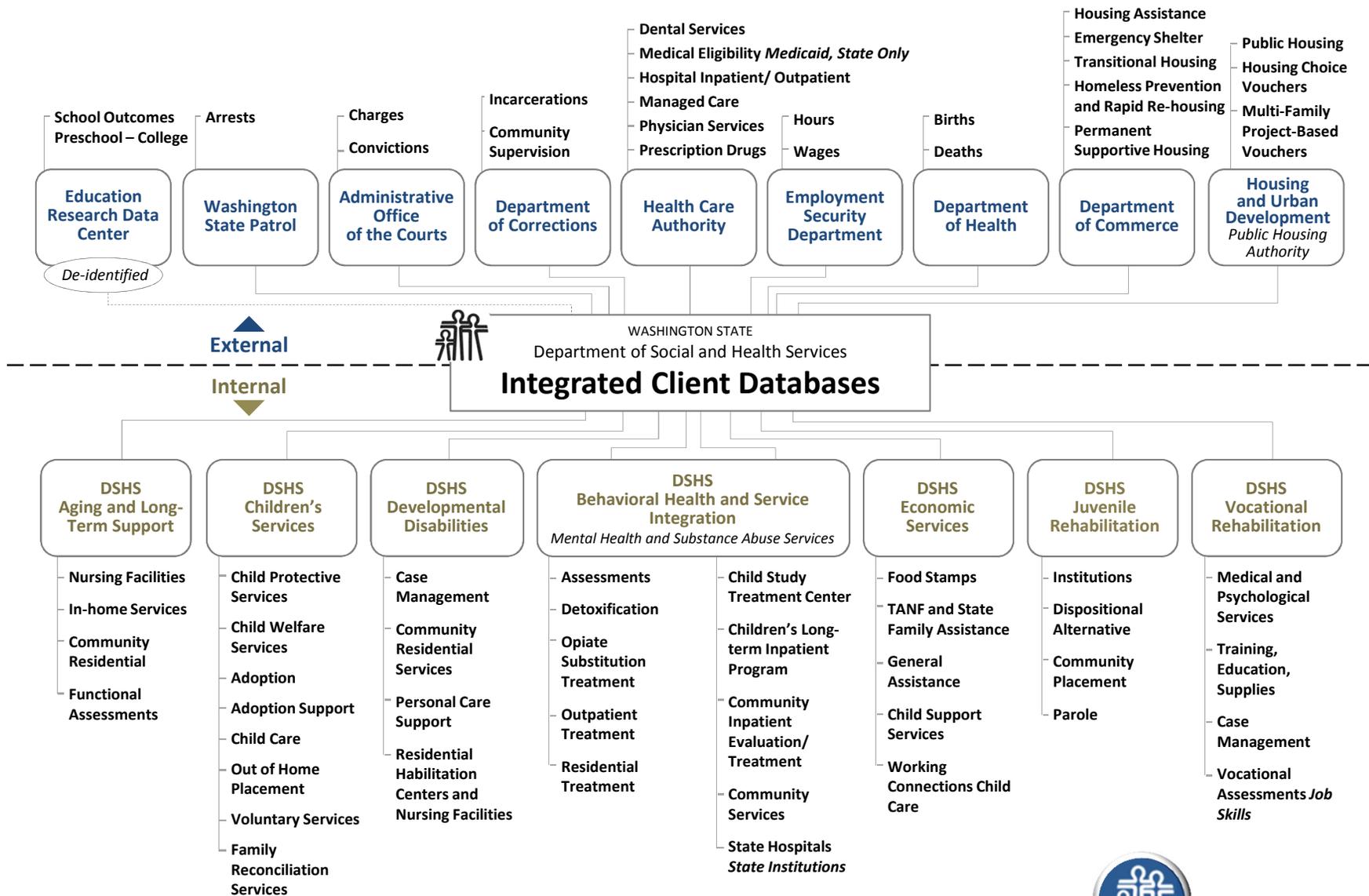


Analytics in the Social and Health Service Environment

- ▶ **Program costs are often driven by a small proportion of patients with multiple health conditions**, often exacerbated by mental illness, substance use disorders, cognitive limitations or functional impairments
- ▶ **High-cost clients are often served in multiple Medicaid-funded delivery systems** (medical, long-term care, mental health, substance abuse, developmental disabilities)
- ▶ **High-cost clients often have significant social support needs** such as the need for housing or employment support, or interventions to reduce the risk of criminal justice involvement
- ▶ **Persons dually eligible for Medicare and Medicaid comprise a disproportionate share** of high-risk, high-cost Medicaid beneficiaries
- ▶ **Increased emphasis on quality/outcome measurement and performance-based payment structures**
- ▶ **States need analytic capability that goes beyond traditional data warehousing and business intelligence applications**



Washington's RDA Integrated Client Databases





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Using integrated data in predictive modeling for care management

PRISM



PRISM Screens

Risk Factors	Key medical and behavioral health risk factors
IP Risk Model	Prospective hospital admission risk model
Adherence	Medication adherence dashboard
Eligibility	Detailed eligibility and demographic data
Claims	All medical claims and encounters
Office	Office visits
Rx	Prescriptions filled
IP	Inpatient admissions
ER	Outpatient emergency room visits
LTC	Long term care services
SNF	Skilled nursing facility services
Lab	Laboratory
Providers	Provider list with links to contact information
SUD	Substance use disorder treatment
MH	Mental health services



Uses of PRISM

Triaging high-risk populations to more efficiently allocate scarce care management resources

Intuitive and easily accessible source of patient health and social service data for clinicians and case managers

Informing care planning and care coordination for clinically and socially complex persons

Identification of child health risk indicators for high-risk children (mental health crisis, substance abuse, ED use, nutrition or feeding problems)

Identification of behavioral health needs (redacting information where required by state or federal law)



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Uses of PRISM *continued*

Identification of other potential barriers to care:

- Patient's housing status (e.g., whether they are homeless)
- Hearing impairment
- Non-English primary language

Access to treating and prescribing provider contact information for care coordination

Creation of child health summary reports for foster parents and pediatricians

A source of regularly updated contact information from the medical eligibility determination process to support patient outreach and engagement efforts



Uses of PRISM *continued*

Medication adherence monitoring

Identification of potential narcotic drug-seeking behavior

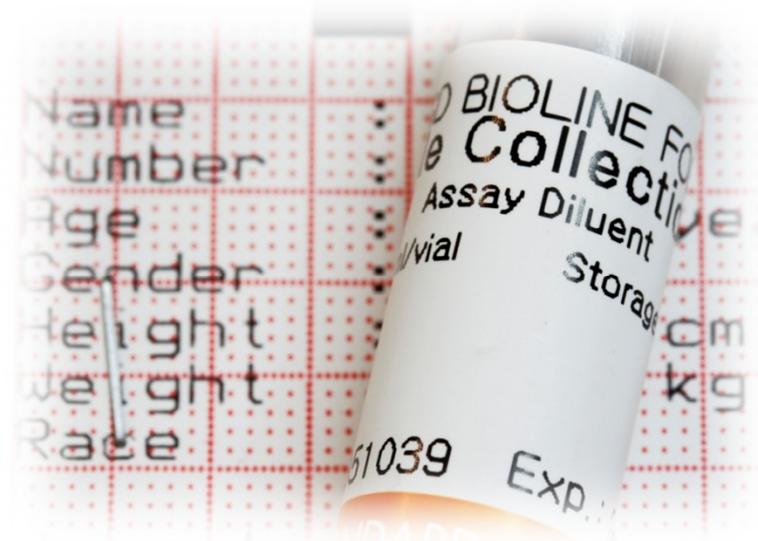
Identification of psychotropic medication polypharmacy patterns associated with overdose risk

Monitoring health plan compliance

Plan- and provider-level quality improvement program support

Service authorization and utilization review

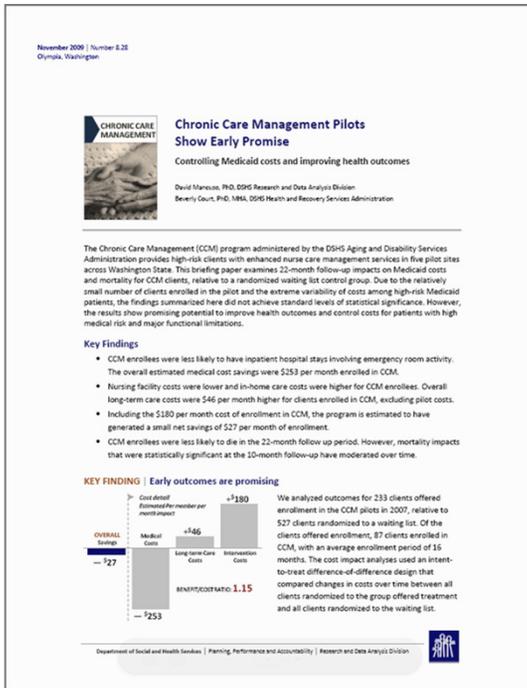
Medical evidence gathering for determining eligibility for disability programs



Early returns show promise

Chronic Care Management evaluation

- Modest net savings
- Driven by reduced Hospital IP and SNF costs
- Reduced mortality
- Increased patient satisfaction



<http://publications.rda.dshs.wa.gov/1396/>

Cost Detail

Estimated per member per month impact

OVERALL Savings

– \$27

