

COMET: an Integrated Data Platform to Help Kids

Pediatric Academic Societies Meeting

April 27, 2019

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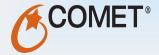
Founding Director, The Children's Agenda

MEDICINE of
THE HIGHEST ORDER



DISCLOSURE

I have no financial interests or conflicts of interest to disclose.





What is COMET?

COMET LLC, partnered with the not for profit Children's Institute, works with people who are looking to improve outcomes for kids, whether it's in school, out of school, early education providers or community advocates. COMET's <u>web-based system is used for data collection and reporting to support informed decision-making and raise organizational quality</u>. COMET provides immediate, easy access for authorized users <u>by linking new and existing data systems</u>.

- -- Over one million children and youth since started in 2009
- -- 340 clients who have used COMET to improve outcomes
- --More than 60,000 users registered from all across the U.S.





Sample Community Initiatives Using COMET

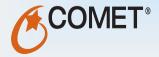


- Primary Mental Health Project (PMHP), 1957-present
 - An early intervention for children at risk. CI has collaborated with school districts across NY and the USA to develop, evaluate, and disseminate both primary and secondary prevention programs that enhance children's social and emotional well being.
- Rochester Early Childhood Assessment Partnership (RECAP), 1992-present

 Provides a comprehensive continuous improvement assessment system for preK programs in Rochester and schools in Monroe and Chemung Counties.
- ROC the Future, 2011-present
 Collectively organizes and promotes cradle to career services for the children in the City of Rochester so as to improve their academic and life outcomes.
- GROW-Rochester (GROW), 2015-present
 A community effort initiated by the ROC the Future School Readiness Outcome Team to provide comprehensive developmental screening and follow-up coordination for 3-year-old children.
- East High School Partnership Organization
 - The organizational goals for EPO in using the COMET system are to <u>leverage a comprehensive</u> <u>database to capture student demographics and academic/behavioral performance, as well as vision screening (pass, rescreen, refer) and subsequent follow-up to the next level of care needed (glasses exam, full exam, etc.) to track outcomes of vision health screening, meeting FERPA and HIPAA data system guidelines. \COMET is to serve as a vehicle to monitor student progress as well as monitor outcomes moving forward.</u>

Goal:

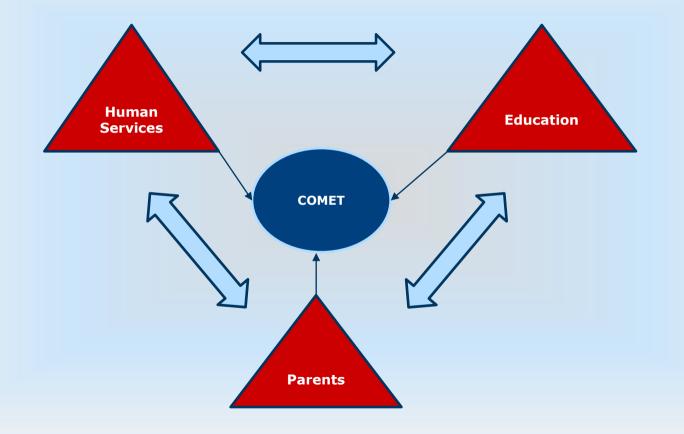
COMET works with <u>educators</u>, <u>parents</u>, <u>program providers</u>, <u>policy makers</u>, <u>and researchers</u> to support informed decision-making, raise organizational quality and <u>improve outcomes for kids</u>.







COMET Components- missing Health







How can we leverage these data to improve outcomes in a meaningful way?



HEALTH AFFAIRS BLOG

RELATED TOPICS:

SOCIAL DETERMINANTS OF HEALTH | ACCESS TO CARE | COSTS AND SPENDING | SYSTEMS OF CARE

Meeting Individual Social Needs Falls Short Of Addressing Social Determinants Of Health

Brian Castrucci, John Auerbach

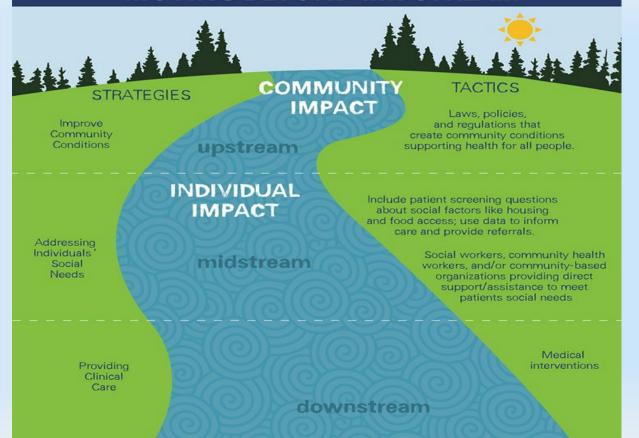
JANUARY 16, 2019

10.1377/hblog20190115.234942

COMET can be used to address both Social Needs and Social Determinants/Factors of Health...



SOCIAL DETERMINANTS AND SOCIAL NEEDS: MOVING BEYOND MIDSTREAM



GROW-Rochester: Developmental Screening in **COMET 7** Domains and Support for 3 year olds in City of Rochester

- COMET's case management and assessment features track full process data from screening, to evaluation, to referral and follow-up
- Highly vulnerable population
- Done in community-based organizations/pre K and primary care practices and
- Case management activities are handled by case managers
- Parents informed of all results and given support through the referral and the COMET parent portal
- Case followed until the referred services have been acted upon; then marked as completed/closed in COMET
- Referrals:
 - Hearing, vision and dental needs are referred to appropriate medical providers
 - Developmental, speech and language and social-emotional needs are referred to Early
 Intervention or to school district's Special Education Services Office for full evaluations

GROW-Rochester

Screenings:

- BMI
- Hearing
- Vision
- Dental
- Development: ASQ scores
- SEL: ASQ-SE scores

Export Files

ABC Headstart, Ibero

CBOs: RCN, Asbury, Lakeside, Baden, Ibero, ...

Association for the Blind and Visually Impaired (ABVI)

Rochester Hearing and Speech

St. John Fisher Nurses / GROW Navigators / Admin

Roster Attendance Screenings:

Import

- Vision
- Hearing
- Speech
- BMI
- Dental
- Development (ASQ by paper)
- SEL (ASQ-SE by paper)

Screenings:

- 1. BMI
- 2. Vision
- 2. VISIOI
- Dental
- 4. Hearing
- 5. Speech: Language, Communication
- S. SEL: T-CRS or ASQ-SE
- 7. Development: ASQ or Brigance
- 8. SDH *new: WE-CARE
- 9. ACES *new

Consent Management Case Management Referral Management

Parent Portal

- Nightly
- Data

Interface

- Screenings:
- Development: Brigance
- SEL: T-CRS

Rochester City School District (RCSD) – PRE K

Children's Institute

GROW-Rochester Initiative

GROW-

Rochester

COMET

CBOs: RCN, Asbury, Lakeside, Baden, Ibero,

- Roster
- Demographics
- Vision Screenings
- Teachers
- Parents

RCSD Data Warehouse

RCSD PowerSchool

RCSD Welligent

COMET



Newborn

DRAMATIC GROWTH OF NEURONAL ARCHITECTURE FROM BIRTH TO 2 YRS

More than 1,000,000 new synapses created each second in the early years!!



6 month

2 years

1 month

"Having received and carefully evaluated data from a range of sources new to us, we believe that our previous estimate that the brain makes 700-1000 new neural connections in the early years of life was an underestimation. As a result, we are now updating all of our materials to say "more than 1 million new connections per second."" Harvard Center on the Developing Child

Meeting Individual Social Needs: 3 year old Vision

February 1, 2019

Early Vision Screening Program ABVI-Goodwill 422 South Clinton Avenue Rochester, NY 14620

To Whom It May Concern:

My name is Shaneese Canty. I am the parent of Gabriella Brown who was helped greatly by the Early Vision Screening program. My initial thought when I found out that Gabby did not pass her vision screening was worry and fear that my daughter would have damaged eye sight for life. Her pediatrician has not provided any vision screening.

The eye exam examination by the eye doctor helped pinpoint exactly what was wrong with Gabby's vision. I did not know that she had an astigmatism and that she needed glasses to correct it. When she wears her glasses her behavior seems to be more focused, now she does not need to sit so close to the television, and she seems more interested in school work.

I am very thankful for the Early Vision Screening program. Without it my daughter's vision would not have been corrected. Thank you! We appreciate all the funding provided by grants and private donations that support this program. You've changed our lives!

Yours Truly,

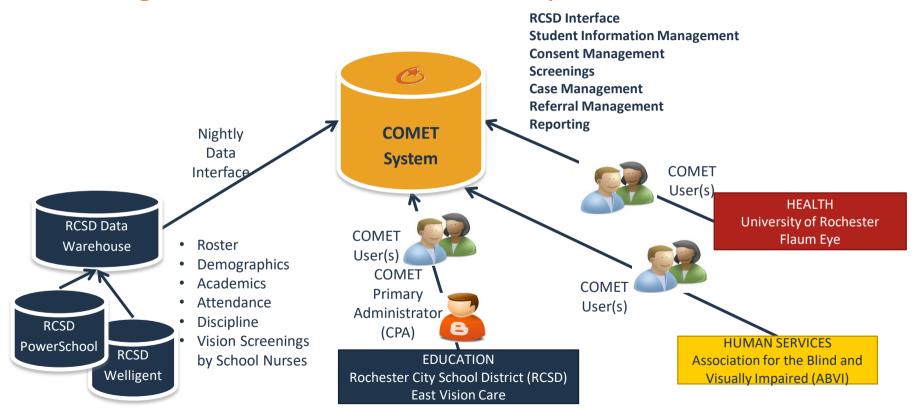
Shaneese Canty







East High School Vision Partnership



Meeting Individual Social Needs: 3rd Grader

https://youtu.be/c8k8Djn1p5o



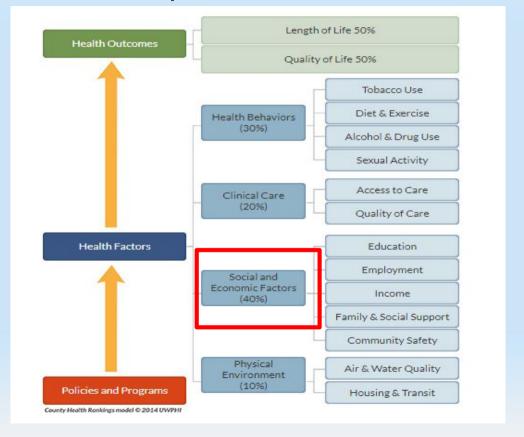


BIG QUESTIONS





Can we do this work on a systems level to effect Social Determinants/Factors of Health??

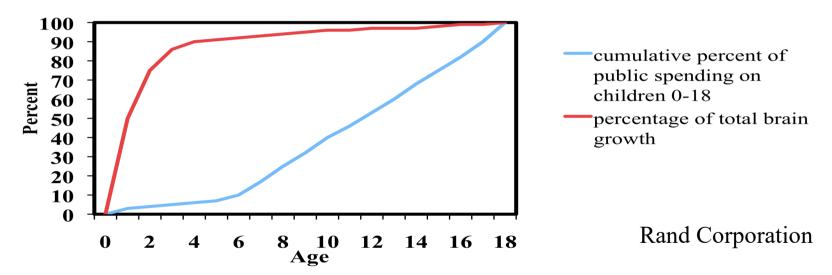






POLICY IS LAGGING BEHIND RESEARCH

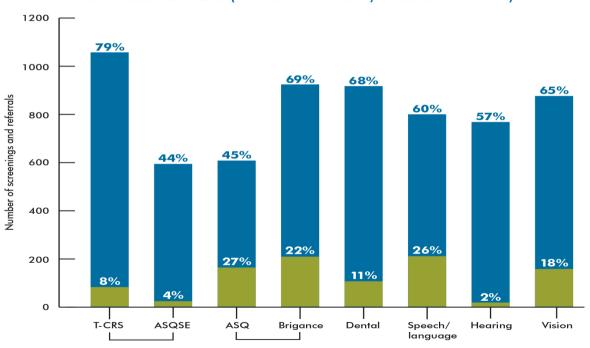
Brain growth versus public expenditures on children ages 0-18



90% of public expenditures occur after age five, after up to 90% of brain development has occurred.

GROW Screening and Support Project

GROW-Rochester 2017-2018 (% of children screened by domain and % referred)



GROW Rochester 2017-2018

Service Type	Number Screened		Referrals		Closed OK		Closed Not OK		Not Closed		Avg. Duration (days)
Developmental	416	35%	175	42.1%	2	1.1%	0	0%	173	99%	423
Vision	876	74%	159	18.2%	91	57.2%	45	28%	23	14%	344
Total											
Total screened	1188	3								Average Days	384

LEGEND

Created: Closed OK: Closed Not OK: Avg. Duration (days): Avg. Services per Case: Cases that were opened during the period.

Cases that were closed with a successful status during the period. Cases that were closed with an unsuccessful status during the period.

The average number of days that cases had been active during the period. The average number of service transactions per case.

Monroe County to increase pre-K special ed funding

Justin MurphyUpdated 8:34 p.m. ET March 13, 2019

Monroe County Executive Cheryl Dinolfo on Tuesday **proposed a 15 percent rate hike for preschool special education providers,** a
welcome boost that could have significant practical and political implications
for other parts of the deeply flawed system for providing services to young
children.









Plax K, Kaczorowski JM Academic Pediatrics 2016

NEW YORK STATE BUDGET RESULTS: APRIL 1, 2019

New York State Early Intervention reimbursement rates were increased for the first time in over 15 years. The 5% rate boost goes to Physical Therapists, Occupational Therapists, and Speech-Language Pathologists who work with children birth to age 3 who have developmental delays or special needs. Many years of stagnant low rates have led to a severe shortage of El therapists and teachers. This resulted in long waiting times for children who need help as soon as possible. While higher rates for more providers are still needed, the 5% increase will help keep some of these dedicated professionals working with young children.

Key Points:

- 1. Integrated Data Platforms like COMET can be used to share data across the education and human service sectors and with parents.
- 2. In our community, Health data interfaces and sharing have been lagging and are now just beginning to be incorporated. There is still much work to do to improve sharing and integration with health data.
- 3. Integrated Data Platforms like COMET can be used to address individual social needs and improve outcomes.
- 4. Integrated Data Platforms like COMET can provide data to help create policy change to address social determinants/factors of health.





Thanks

COMET and Childrens' Institute

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