Population Science and Community Engagement

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Key Initiatives

- Cancer Prevention & Implementation Science
 - o Tobacco
 - Tobacco and nicotine product cessation interventions in primary care and oncology practices and among those with serious mental illness
 - Improving the uptake of evidence-based best practices
 - Adolescent tobacco and nicotine product cessation
 - HPV vaccine uptake
 - o Hepatitis C
 - Comparative effectiveness of treatment regimens



Stakeholder Engagement & Infrastructure

- OneFlorida Clinical Research Consortium
 - Scientists
 - Health Systems
 - Clinicians
 - Patient and Citizen Scientist Program
 - County Extension & Our Community Our Health
- Patient/Community
 - Our Community Our Health
 - HealthStreet
 - Citizen Scientist Program



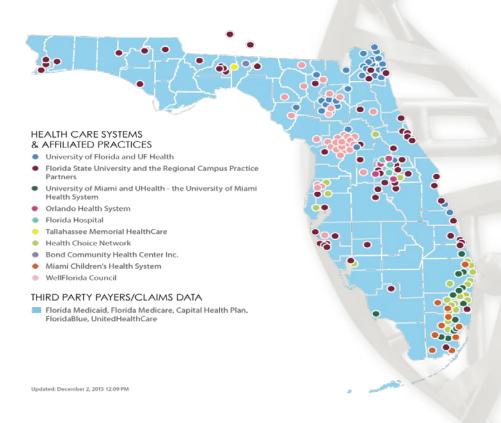
OneFlorida

- **Pragmatic clinical trials** designed to estimate intervention effects under usual conditions in health settings
- Implementation science studies focused on the adoption, implementation, and sustainability of evidence-based interventions
- Examination of treatment effects among diverse populations; requires the power of large numbers and variation



OneFlorida Partners and Collaborators

- 9 million patients ٠
- All 67 counties
- 1,240 practices
- More than 4,000 physician providers
- **22** hospitals
- **Cancer Center Partners &** Collaborators
 - University of Miami 0
 - Orlando Health \circ
 - Tallahassee Memorial 0
 - Moffitt \cap



HBCU Partners

- Florida A & M • University
- Edward Waters College
- Bethune-Cookman

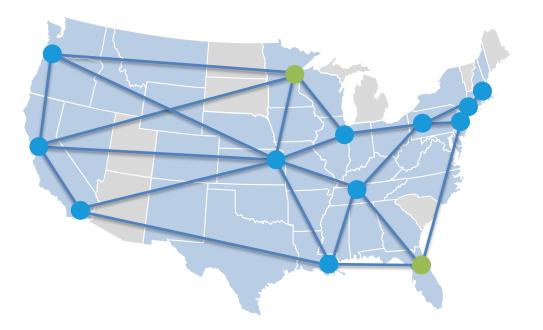
Funded by the James and Esther King **Biomedical Research Foundation**, PCORI, IGNITE, NCATS 5



National Partners

PCORnet Partners

- Accelerating Data Value Across a National Community Health Center Network (ADVANCE)
- University of Chicago: Chicago Area Patient Centered Outcomes Research Network (CAPriCORN)
- Greater Plains Collaborative (GPS)
- Kaiser Permanente & Strategic Partners Patient Outcomes Research To Advance Learning (PORTAL) Network Mid-South CDRN
- PaTH: Towards a Learning Health System
- Louisiana CDRN (LACDRN)
- National Pediatric Health Learning System (PEDSnet)
- New York City Clinical Data Research Network (NYC-CDRN)
- Scalable Collaborative Infrastructure for a Learning Healthcare System (SCILHS)





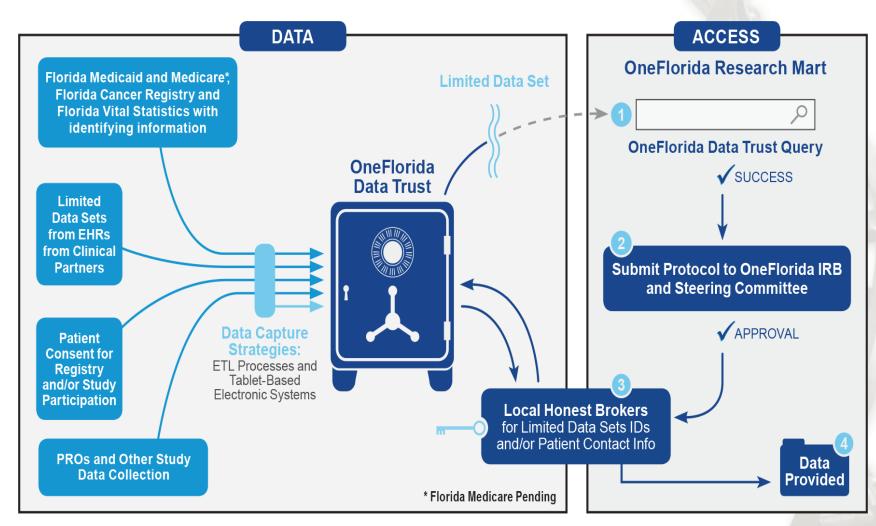
Patient-oriented SCAlable National Network for Effectiveness Research (pSCANNER)

- Patient-Centered Network of Learning Health Systems (LHSNet)
- OneFlorida Clinical Data Research Network

10 MILLION PATIENTS • 4,100 PHYSICIAN PROVIDERS • 1,240 PRACTICES/CLINICS • 22 HOSPITALS • 67 COUNTIES



OneFlorida Data Trust Model





Clinical Data & National Networks

Cohort Discovery

- Population studies
- Heterogeneity of populations
- Diverse practice settings

Study Optimization

- Approaches
- Specification of study variables

Augmenting Data Streams

- Data from electronic health records
- Health care claims and encounter data

Links to NIH

- NCATS funding announcements link to PCORnet
- Query funds
- NCI

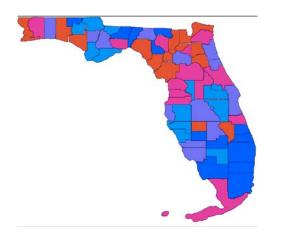


Programmatic Alignment with State and UF Catchment Area: Current Study Examples

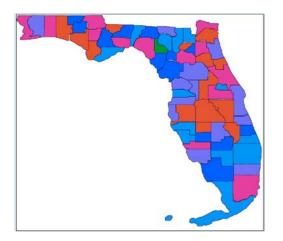


Florida Cancer Incidence by Sites 2014

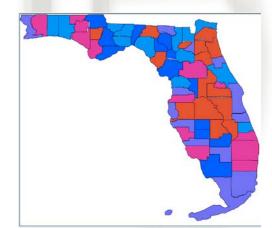
Lung + Head and Neck



All GI Cancers

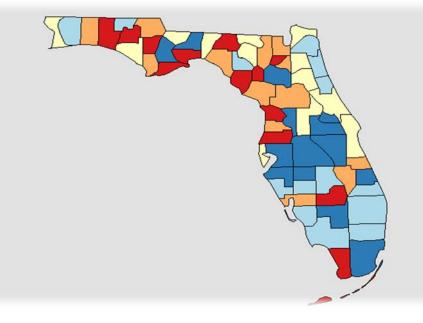


Hematological





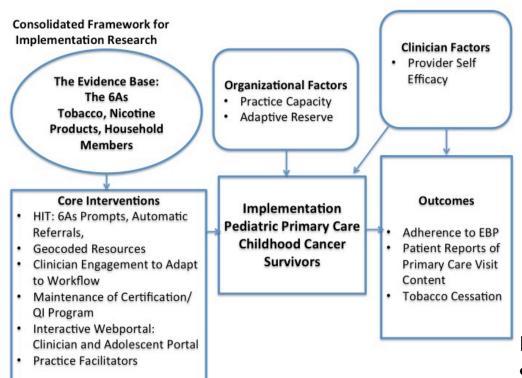
Tobacco and Nicotine Use



- Florida ranks 18th among states in adult and 13th among adolescent tobacco users
- e-cigarette use in Florida increasing among teens from 5% in 2013 to 9.6% in 2014
- Highest "ever smoked" in UF catchment area



Tobacco and Nicotine Studies



Primary Care Pilot

- 30% increase in PCP adherence
- 100% participation in MOC
- Significant increase in adolescent report of confidentiality and counseling

Next Steps: Sites

- Pediatric practice site expansion
- 5As for in Adult Oncology
- Measure cessation

Next Steps: Linkages & Interventions

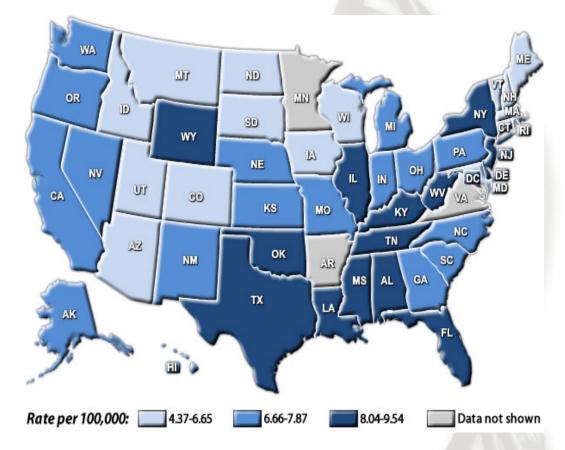
- Nixon: Effects of GTS-21 on Smoking Behavior and Neurocognitive Function (NIH)
- McDaniel: Enhanced Quitline Interventions



Funded: James and Esther King Biomedical Research Foundation

HPV-Related Cancers: US and Florida

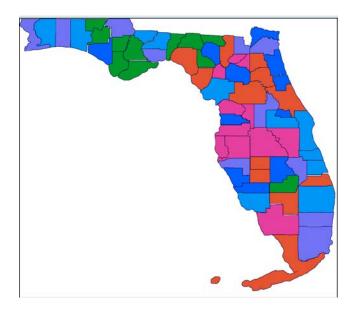
- HPV
 - 50 to 59 % of girls and
 40 to 49% of boys in
 Florida are unvaccinated
 - Florida has one of the highest HPV cervical cancer rates in the US





HPV-Related Cancers: UF Catchment Area

Cervix



ELSEVIER

Journal of Adolescent Health 56 (2015) S40-S46



Original article

Increasing Human Papillomavirus Vaccine Initiation Among Publicly Insured Florida Adolescents



Stephanie A. S. Staras, Ph.D. ^{a,b,*}, Susan T. Vadaparampil, Ph.D. ^c, Melvin D. Livingston, Ph.D. ^{a,b}, Lindsay A. Thompson, M.D., M.S. ^{a,b,d}, Ashley H. Sanders, M.S. ^{a,b}, and Elizabeth A. Shenkman, Ph.D. ^{a,b,d}

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^d Department of Pediatrics, University of Horida, Gainesville, Florida



Table 4

Among users of the health information technology (HIT) system, HIT demonstrated potential to increase vaccine initiation

	Control group		Intervention group		Crude OR (95% CI)	Adjusted OR (95% CI)
	Number who had a regular clinic visit	Initiation rate (%)	Number who used the HIT system	Initiation rate (%)		
HIT						
Girls	652	9.8	21	28.6	3.3 (1.2-8.8) ^a	3.2 (1.3-8.5)
Boys	775	12.9	37	32.4	3.2 (1.5-6.6) ^a	2.9 (1.3-6.3)
HIT and p	ostcards					
Girls	320	7.8	11	36.4	5.9 (1.6-21.8) ^a	7.2 (1.6-31.5)*
Boys	405	12.1	22	27.3	2.8 (1.0-7.7) ^a	2.8 (1.0-8.2)

Adjusted for age, race/ethnicity, and program type.

CI = confidence interval; OR = odds ratio.

^a 95% CI indicates statistically significant differences between intervention arms.



Expanded Study Funded: Staras; NCI:1R21CA202011-01

Community Engagement Programs: Two Examples



The Citizen Scientist Program

Recruitment

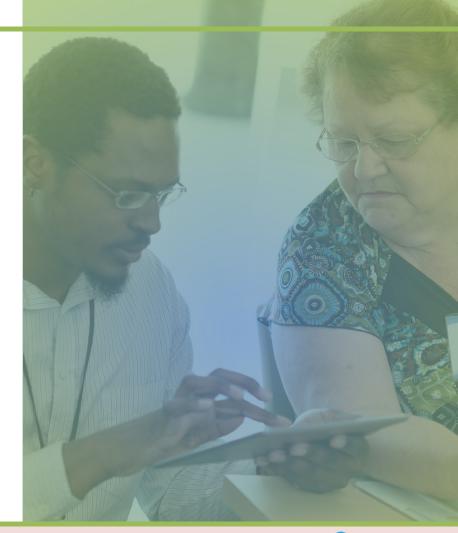
The team has grown from six community members to 11, ranging in age from early 20s to mid-80s and representing a variety of cultural perspectives.

Involvement

The Citizen Scientists are fully integrated into the consortium's infrastructure and have served on a variety of work groups and provided community member feedback on more than five proposals since September.

Expansion

Plans are in place to expand community engagement across the state and infrastructure support to partner institutions.



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Integrated Clinical Research Program

Recruitment

Health care settings, clinicians, community settings

Involvement

Community clinicians On the Road Design Studios Translational and Implementation Science Studios

The Learning Health System

Maintenance of Certification Integration into Workflow Engagement

Expansion

Plans are in place to expand clinician engagement across the state and infrastructure support to partner institutions.





Questions?





Supplemental Slides



Scientific Advisory Committee



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JOE NADGLOWSKI **Obesity Action Coalition**



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TEMPLE ROBINSON Bond Community Health Center Inc.



DAVE NELSON University of Florida



THOMAS GEORGE University of Florida

RHONDA COOPER-DeHOFF STEVEN SMITH University of Florida Florida Hospital















MICHAEL WEAVER

University of Florida

2.4. Overview Diagram

DEMOGRAPHIC PATID	PCORne	t Common Data Moo	del v3.0 New to v3.0	PCORNET_TRIAL PATID
BIRTH DATE				TRIALID
BIRTH TIME	VITAL			PARTICIPANTID
SEX	VITALID	ENCOUNTER	LAB RESULT CM	TRIAL SITEID
HISPANIC	PATID			TRIAL ENROLL DATE
RACE	ENCOUNTERID (optional)	ENCOUNTERID	LAB RESULT CM ID	TRIAL END DATE
BIOBANK FLAG	MEASURE DATE	PATID	PATID	TRIAL WITHDRAW DATE
-	MEASURE TIME	ADMIT_DATE	ENCOUNTERID (optional)	TRIAL INVITE CODE
Fundamental basis	VITAL SOURCE	ADMIT_TIME	LAB_NAME	INDRE_EVVILE_CODE
r and american basis	HT	DISCHARGE DATE	SPECIMEN SOURCE	
	WT	DISCHARGE_TIME	LAB_LOINC	Associations with
	DIASTOLIC	PROVIDERID	PRIORITY	PCORnet clinical trials
ENROLLMENT	SYSTOLIC	FACILITY_LOCATION	RESULT_LOC	PCOKnet clinical thats
	ORIGINAL BMI	ENC_TYPE	LAB_PX	
PATID	BP POSITION	FACILITYID	LAB_PX_TYPE	
ENR START DATE	SMOKING	DISCHARGE DISPOSITION	LAB ORDER DATE	HARVEST
ENR END DATE	TOBACCO	DISCHARGE STATUS	SPECIMEN_DATE	NETWORKID
CHART	TOBACCO TYPE	DRG -	SPECIMEN_TIME	NETWORK NAME
ENR BASIS	TOBACCO TIPE	DRG TYPE	RESULT DATE	DATAMARTID
_	CONDITION	ADMITTING SOURCE	RESULT TIME	DATAMART NAME DATAMART PLATFORM
DISPENSING	CONTRACTO		RESULT QUAL	CDM VERSION
DISPENSINGID			RESULT NUM	DATAMART CLAIMS
	PATID	DIAGNOSIS	RESULT MODIFIER	DATAMARTER
PATID	ENCOUNTERID (optional)	DIAGNOSISID	RESULT UNIT	INRTH DATE MONT
PRESCRIBINGID (optional)	REPORT_DATE	PATID	NORM RANGE LOW	ENR END DATE MOMT
DISPENSE_DATE	RESOLVE DATE	ENCOUNTERID	NORM MODIFIER LOW	ADMIT_DATE_MONT
NDC	ONSET_DATE	ENC TYPE (replicated)	NORM RANGE HIGH	DISCHARGE DATE MOMT
DISPENSE_SUP	CONDITION STATUS	ADMIT DATE (replicated)	NORM MODIFIER HIGH	EX ORDER DATE MONT
DISPENSE_AMT	CONDITION	PROVIDERID (replicated)	ABN IND	EX START DATE MOMT
	CONDITION_TYPE	DX		RX END DATE MOMT DISPENSE DATE MOMT
DEATH	CONDITION_SOURCE	DX TYPE		LAB ORDER DATE MONT
PATID		DX SOURCE	PRESCRIBING	SPECIMEN DATE MONT
DEATH DATE	PRO_CM	PDX		RESULT_DATE_MONT MEASURE_DATE_MONT
DEATH DATE IMPUTE	PRO_CM_ID	104	PRESCRIBINGID	ONSET DATE MONT
DEATH SOURCE	PATID		PATID	REPORT_DATE_MONT
-	ENCOUNTERID (optional)	PROCEDURES	ENCOUNTERID (optional)	RESOLVE_DATE_MOMT
DEATH_MATCH_CONFIDENCE	PRO_ITEM	PROCEDURESID	RX_PROVIDERID	PRO_DATE_MONT REFRESE DEMOGRAPHIC DATE
DEATH CONDITION	PROLOINC	PATID	RX_ORDER_DATE	REFRESH ENROLLMENT DATE
-	PRO DATE	ENCOUNTERID	RX_ORDER_TIME	REFRESE ENCOUNTER DATE REFRESE DIACNOSIS DATE
PATID	PROTIME		RX_START_DATE	REFRESE PROCEDURES DATE
DEATH_CAUSE	PRO RESPONSE	ENC_TYPE (replicated)	RX_END_DATE	REFRESH VITAL DATE
DEATH CAUSE CODE	PROMETHOD	ADMIT_DATE (replicated)	RX_QUANTITY	REFRESH DESPENSING DATE REFRESH LAB RESULT OM DATE
DEATH_CAUSE_TYPE	PRO_MODE	PROVIDERID (replicated)	RX_REFILLS	REFRESH CONDITION DATE
DEATH_CAUSE_SOURCE	PRO_CAT	PX_DATE PX	RX_DAYS_SUPPLY	REFRESH PRO CM DATE
DEATH_CAUSE_CONFIDENCE	Date conturned with the muchtede		RX_FREQUENCY	REFRESH PRESCRIMING DATE
	Data captured within multiple	PX_TYPE	RX_BASIS	REFRESSI PCORNET_TRIAL_DATE REFRESSI DEATH DATE
	contexts: healthcare delivery,	PX_SOURCE	RXNORM_CUI	REFRESH DEATH CAUSE DATE
Data captured from processes	registry activity,			
ociated with healthcare delivery	or directly from patients	Data captured from healthcare	delivery, direct encounter basis	Process-related data
	and an and a second production			ue to primary key definitions or record-level constraints