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West Virginia Clinical Translational Science Institute:
Tracking and Evaluation Quarterly Report

4<sup>th</sup> Quarter of Fiscal Year 2017-2018

Reporting Period: April 1, 2018 – June 30, 2018

Report Prepared by:

Reagan Curtis, Amanda White, Taylor Mikalik, David Loomis, Abhik Roy, and Malayna Bernstein

## West Virginia Clinical Translational Science Institute Tracking and Evaluation Quarterly Report

(April 1, 2018 – June 30, 2018)

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#### **Executive Summary**

This is the quarterly tracking and evaluation report of the WV Clinical and Translational Science Institute (WVCTSI) for the 4th quarter (Q4) of fiscal year 2017/2018, which covers a reporting period from April 1, 2018 through June 30, 2018. The WVCTSI received notice of award for renewal funding dated June 20, 2017 with an initial award of \$4,000,000 for an initial budget period from July 1, 2017 through June 30, 2018 and a project period from August 15, 2012 through June 30, 2022.

This report was prepared by the Tracking and Evaluation Core and is organized by specific aim within each key component area/core plus information from partner institutions, Marshall University and WV School of Osteopathic Medicine. This report does not describe every tracking and evaluation metric in each core, rather key elements and recommendations are summarized and readers are referred to the Quarterly Data Sheet (Excel) distributed with this report for information on all metrics for all cores.

The Quarterly Data Sheet (Excel) includes 2 tabs where applicable for each core/partner: 1 with quantitative metrics and 1 with narrative metrics. The Technology and Resources for Core Laboratories core and Marshall University submitted only quantitative data. The Quarterly Data Sheet includes columns and tabs for each quarter of the current annual funding cycle as well as for annual targets where specified so that a view of change over time and progress toward targets is available.

This report constitutes the third quarterly tracking and evaluation report for the renewal funding cycle. While momentum from the previous funding cycle may be leveling off with 62 publications, 40 external funding proposals, and 31 funded awards this quarter, annual totals of 240 publications, 188 external funding proposals, and 135 funded awards demonstrate strong productivity and return on investment. Improved accuracy in tracking peer-reviewed publications, external funding proposals, and externally funded awards resulted in downward revisions of previously reported data on these metrics. Other notable accomplishments include:

- 326 Q4 iLab users requested 932 services through iLab Core Management System, more than tripling users and requests from Q2. 620 of those 932 services were for new investigator development, some of which are included in 264 proposal development services logged;
- 28 Q4 new custom IDR datasets created, 18 ongoing IDR projects, 47 new REDCap users, 42 new TriNetX users, and 130 BMIR-related inquiries;
- 86 Q4 WVPBRN sites and 62 ECHO sites exceeded annual goals of 74 and 42, respectively;
- 24 Q4 pilot applications including collaborative partners from WVSOM, NIOSH, and Marshall and 10 pilot applications with early stage investigator PI's;
- 297 Q4 samples were collected and 314 utilized from the biospecimen repository. There were 39 (11 WVU, 28 Marshall) Illumina genomics and 24 MicroCT projects Q1 through Q4;
- Partnership activity at WV School of Osteopathic Medicine and Marshal University continues to increase and includes funded Collaborative Pilot projects, utilization of iLab for requesting WVCTSI services, and cross-institution educational opportunities.

Overall recommendations from Tracking and Evaluation Core based on examination of 2017-2018 Q1-4 data and our interactions with core and partner personnel include the following:

- Improve efforts to ensure relevant partner activity is appropriately reported and credited because only 2 partners reported this quarter;
- Identify targets for all appropriate metrics on individual core reports and dashboards;
- Ensure transparent and consistent utilization of iLab across cores and partners;
- Continue to increase partner engagement outside of Morgantown; and
- Maintain focus on priority health areas when allocating resources and effort.

#### **Quarterly Reporting Annual Timeline**

#### 1<sup>st</sup> quarter Reporting Period = July 1 – Sept 30

Sept 18 1st quarter report task assigned to each KCA/Partner via email to key contacts

Oct 1 TEC begins data acquisition from repositories (e.g., iLab, OnCore)

Oct 7 Quarterly report data due to TEC from each core

Sept-Oct Pre/post submission meetings (TEC and key contacts)

Oct 28 1st quarter formative evaluation report and metric data distributed by TEC

Nov-Dec Steering Committee discusses 1<sup>st</sup> quarter formative evaluation

#### 2<sup>nd</sup> quarter Reporting Period = Oct 1 – Dec 31

Dec 18 2<sup>nd</sup> quarter report task assigned to each KCA/Partner via email to key contacts

Jan 1 TEC begins data acquisition from repositories (e.g., iLab, OnCore)

Jan 7 Quarterly data submission due from key contacts to TEC

Dec-Jan Pre/post submission meetings (TEC and key contacts)

Jan 28 2<sup>nd</sup> quarter formative evaluation report and metric data distributed by TEC

Feb-Mar Steering Committee discusses 2<sup>nd</sup> quarter formative evaluation

#### 3<sup>rd</sup> quarter Reporting Period = Jan 1 - Mar 31

Mar 18 3<sup>rd</sup> quarter report task assigned to each KCA/Partner via email to key contacts

Apr 1 TEC begins data acquisition from repositories (e.g., iLab, OnCore)

Apr 7 Quarterly data submission due from key contacts to TEC

Mar-Apr Pre/post submission meetings (TEC and key contacts)

Apr 28 3<sup>rd</sup> quarter formative evaluation report and metric data distributed by TEC

May-June Steering Committee discusses 3<sup>rd</sup> quarter formative evaluation

#### 4<sup>th</sup> quarter Reporting Period = Apr 1 – June 30

June 18 4<sup>th</sup> quarter report task assigned to each KCA/Partner via email to key contacts

July 1 TEC begins data acquisition from repositories (e.g., iLab, OnCore)

July 7 Quarterly report data due to TEC from each core

June-July Pre/post submission meetings (TEC and key contacts)

July 28 4<sup>th</sup> quarter formative evaluation report and metric data distributed by TEC

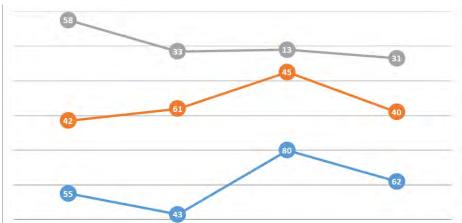
Aug-Sept Steering Committee discusses 4<sup>th</sup> quarter formative evaluation

#### **Administrative Core**

Specific Aim 1. Implement an effective operational structure that facilitates attainment of all proposed WVCTSI Specific Aims and projects.

WVCTSI researchers reported 240 linked publications, 188 external funding proposals, 135 externally funded awards, 31 presentations, and 18 provisional patents filed for 2017-2018. The WVCTSI added 15 new staff members during 2017-2018 for a total of 33.





	Q1	Q2	Q3	Q4	Total
Number of publications	55	43	80	62	240
Number of proposals	42	61	45	40	188
Number of funded awards	58	33	13	31	135

Figure 1. Trends across Year 6 in peer-reviewed publications, external funding proposals, and externally funded awards.

A new service request tool, iLab Core Management System intended to streamline service delivery across WVCTSI was launched during Q2. The number of iLab users increased from 110 (Q2) to 326 (Q4)

with an increase in services requested from 301 (Q2) to 932 (Q4). New investigator development services increased from 7 (Q2) to 620 (Q4). Of the 264 proposal development services provided to 37 members, 248 were provided to WVU, 12 to Marshall University, 3 to WVSOM, and 1 to other affiliates. Figures visualizing iLab service requests by service type and across time are provided within each relevant core. The Administrative Core provides investigator development services, which were the single largest contributor to growth in iLab activity. Investigator development service iLab activity is visualized in Figure 2 disaggregated by month and type of service.

### Administrative Core Key Recommendations

- Clarify consensus definition of policy/practice changes given that some reported "changes" may fall outside that definition
- Increase proposal and other services utilization across partners
- Work closely with Tracking and Evaluation core to ensure accuracy and timeliness of quarterly report data submissions

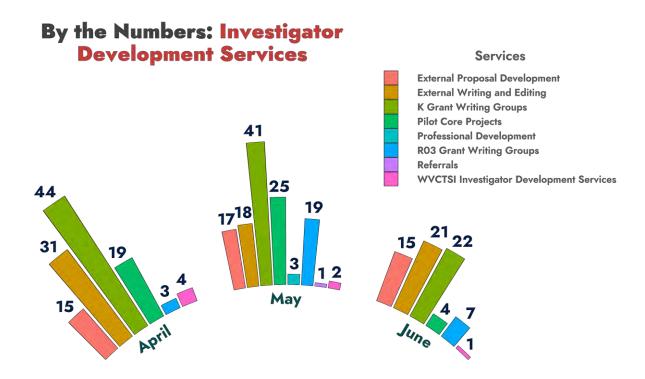


Figure 2. Q4 iLab Core Management System investigator development services logged by month and service type.

Specific Aim 2. Create policies and procedures to drive performance, transparency, constructive communication and collaboration among multiple, diverse stakeholders (i.e., investigators, rural providers, community members).

WVCTSI overall added 479 new members in 2017-2018 (total = 1,974). Most partners increased membership across the year: WVU Charleston/CAMC (56 in Q4, a decrease of 3 from Q1), Marshall University (27 in Q4, an increase of 11 from Q1), WVSOM (67 in Q4, an increase of 18 from Q1), VA (6, stable from Q1) and NIOSH (7, an increase of 4 from Q1). In Q4, the WVCTSI website averaged 235 hits per day with 2.1 page views per visitor. Users engaging with WVCTSI on Facebook (330 likes), Twitter (499 followers), and Listserv (1,841 subscribers) increased throughout the year.

Specific Aim 3. Provide sound fiscal and resource management, ensuring appropriate resourcing of cores, flexibility to meet changing needs and environments, and sustainability of services.

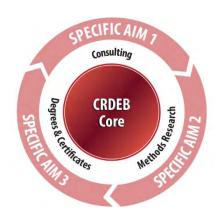
Securing external funding is vital to demonstrating fiscal management of the WVCTSI resources. In Q4, 40 proposals were supported by the CTR award with a total of 188 for the year. In Q4, there were 31 externally funded awards supported with a total of 135 for the year. The percentage of NIH award expended varied by core throughout the year, with some cores using 100% of their funds by Q3 (CRDEB and PD). Funds were allocated flexibly to allow successful operations of all cores throughout the fiscal year, bringing all cores' NIH award expenditures to 100% for Q4. There was a total of 7 cost transfers/corrections to ensure accounting standards were followed for 2017-2018.

Specific Aim 4. Recruit talented, committed investigators addressing research questions relevant to the WVCTSI priority health areas.

No new investigators were recruited in Q4 (2 were recruited across 2017-2018).

#### Clinical Research Design, Epidemiology & Biostatistics Core

Overall across cores, 326 Q4 iLab users requested 932 services through iLab Core Management System, more than tripling users and requests from Q2. CRDEB provides services directly to researchers and contributed significantly to this increase in service request and delivery through iLab. CRDEB iLab activity is visualized in Figure 3, where activity is disaggregated by month and type of service.



## By the Numbers: Clinical Research Design, Epidemiology and Biostatistics Core Services

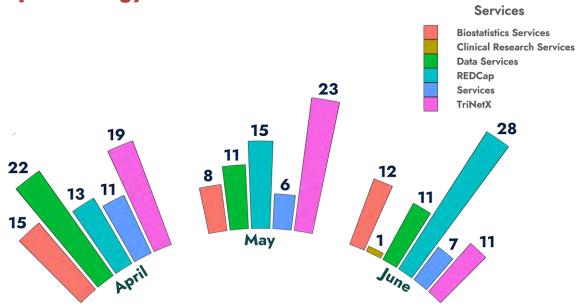


Figure 3. CRDEB Q4 iLab Core Management System services logged by month and service type.

Specific Aim 1. Effectively engage investigators throughout WV by providing traditional services in biostatistics and epidemiology.

The number of investigators actively engaged through the CRDEB core utilizing available resources

including the Integrated Data Repository (IDR), REDCap, and TriNetX are increasing. In Q4, there were 28 new custom IDR data set requests and 18 ongoing IDR projects. There were 47 new members utilizing REDCap in Q4, bringing the total number of REDCap users added in 2017-2018 to 326 and the grand total of users to 1,394. Of those, 33 new users added were

Clinical Research Design,
Epidemiology, & Biostatistics

- Continue to work toward increasing utilization at partner sites
- Clarify tracking and evaluation information needs relative to Specific Aims 3 and 4
- Identify targets for all appropriate metrics

affiliated with WVU, 12 from CAMC, and 9 from WVSOM. The total number of TriNetX users increased from 223 to 265 and there were 416 TriNetX inquiries in Q4. In Q4, there were 24 new data analysis consultations, 8 sample size/power consultations, 10 new study design consultations, and 7 other consultations.

Specific Aim 2. Implement cutting-edge tools and methods in biostatistics and epidemiology, with a particular focus on the needs of WV researchers.

The CRDEB core reported 130 BMIR-related inquiries for a total of 575 in 2017-2018. There were 10 new study design consultations, 4 new clinical design project consultations, and 7 other consultations. These include a project with Gordon Smith to develop methods for validating IDR data overall, Joint Replacement Registry, Head and Neck Registry, Pediatric Genetics Registry. There was no information reported for predictive modeling consultations or epidemiology consultations. Additionally, R Workshop Sessions were offered through the professional development core.

Specific Aim 3. Disseminate current and classical information in biostatistics and epidemiology.

There was no data provided that reflects any current dissemination information.

Specific Aim 4<sup>1</sup>. Leverage the newly enhanced Integrated Data Repository (IDR2) and partnership through the Appalachian Research Consortium (ARC) to facilitate outcomes research, predictive modeling, and geospatial analysis.

There was no data provided related to IDR2 or ARC.

<sup>&</sup>lt;sup>1</sup> CRDEB Specific Aim 4 was previously CRRF Specific Aim 2. This revision was specified by letter to NIH dated November 27, 2017 and subsequently approved.

ndease Clinical Trial Participation

Clinical Resources

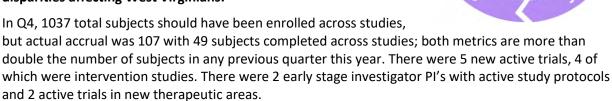
Core

e Asssessment

#### **Clinical Research Resources & Facilities Core**

CRRF provides services directly to researchers, but logged only a single instance of service delivery (accounting support ) through iLab during Q4.

Specific Aim 1. Create a Clinical Trials Center of Excellence (CTCOE) with connection to rural communities and practitioners, thereby providing access to cutting-edge trials addressing health disparities affecting West Virginians.



Also in Q4, the CTCOE assisted communities and practitioners by providing services for non-WVCTSI clinical studies including regulatory (26), study coordination (14), and accounting assistance (23). In Q4, TriNetX offered 14 studies to WVU, with 9 accepted by WVU researchers and 1 successfully activated. For the 2017-2018 year, 28 of 52 studies were accepted.

Specific Aim 2. Establish the Environmental Exposures Unit to stimulate environmental health research in collaboration with the National Institute for Occupational Safety and Health (NIOSH).

While there was no information reported in Q4 related to this specific aim, WVCTSI hosted 17 investigators from NIOSH in Q3 to foster collaboration opportunities between investigators at WVU and NIOSH. NIOSH investigators toured the new inhalation lab and networked with WVU Pulmonary researchers.

### Clinical Research Resources & Facilities Key Recommendations

- Clarify tracking and evaluation information needs relative to Specific Aim 2
- Identify targets for all appropriate metrics

#### **Community Engagement & Outreach Core**

Overall across cores, 326 Q4 iLab users requested 932 services through iLab Core Management System, more than tripling users and requests from Q2. CEO provides services directly to researchers and contributed to this increase in service request and delivery through iLab. CEO iLab activity is visualized in Figure 4, where activity is disaggregated by month and type of service.



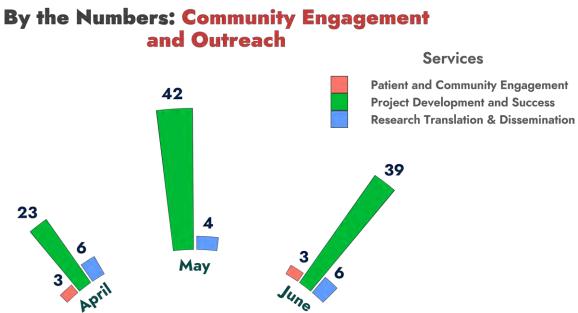


Figure 4. CEO Q4 iLab Core Management System services logged by month and service type.

Specific Aim 1. Actively engage patients and other community stakeholders as research partners.

In 2017-2018, growth was evident in CEO engagement of community stakeholders. WVPBRN maintained 86 Q4 sites (annual target = 74). Figure 5 shows the distribution of WVPBRN sites across the state. There were 62 Q4 ECHO sites, exceeding the annual goal of 42. 6 new ECHO sites were added including Marshall University, Bluegrass Regional Healthcare Inc., Jackson General Hospital, Harbor UCLA Medical

Center, Recovery Care LLC, and University of Illinois (Chicago) School of Public Health. 3 additional partner organizations came on board including Quebec PBRN, France PBRN (via Johann Laangry from Lorraine University, France), and John Campo. In Q4, there were 10 researchers connected to providers and lay partners. No mentored investigators were reported. There were 33 new services provided for Patient and Community Engagement bringing the total for 2017-2018 to 87.

## Community Engagement & Outreach Key Recommendations

- Set robust annual targets for next year where target was exceeded by Q3
- Consider whether 100% acceptance rate of PBRN projects is ideal
- Identify targets for all appropriate metrics

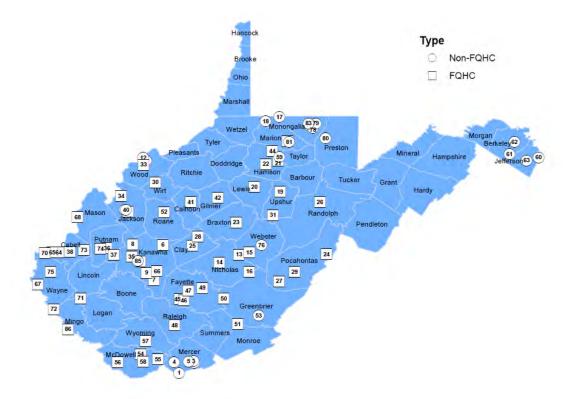


Figure 5. Geography of WV Practice-Based Research Network sites.

There was 1 Q4 networking opportunity (annual total = 8, double the target of 4). Additionally, there were 11 focus group sessions reported and 99 community concept maps completed. However, there were no advisory board meetings, BOTG training sessions, or community policy brief sessions reported. 1 policy change and 2 instances of policy and practice change guidance were reported.

### Specific Aim 2. Transform community-identified research questions into externally-funded projects that improve health outcomes in WVCTSI health priority areas.

There were no new ECHO projects or (non-ECHO) CEO projects reported in Q4. However, 9 PBRN projects were provided in the narrative including: (1) Review of General Practice Coordinated Research Networks; (2) MAT Predictive Analytics; (3) TED Audacious: Opioid; (4) WV Project ECHO Endocrine; (5) CAIPEC 2.0 ROPER; (6) Guidelines for Patient Activation; (7) CTR Sup: Cabin Creek Harm Reduction; (8) eCig Usage During Pregnancy; and (9) Community-Based Chronic Pain Self-Management Program. 5 PBRN projects were reviewed and accepted (100% approval rate). Services provided for Project Development and Success increased to 130 in Q4 from 84 in Q3, exceeding the 120 annual target. This may indicate that more people are aware of these services or service delivery is increasingly efficient. Additionally, there were 26 ongoing PBRN projects reported in Q4, as well as 2 ongoing CEO projects.

### Specific Aim 3. Translate and disseminate research results to inform West Virginia health policy and practice.

There were 13 Q4 services provided for Research Translation and Dissemination, for an annual total of 28.

#### **Pilot Projects Core**

Specific Aim 1. Provide infrastructure supporting competitive pilot funding opportunities for early stage (ESI) and new investigators (NI) with subsequent mentored progression to project completion, publication, and external funding application.

Of the 24 pilot project applications for Launch (4), Collaborative (5), and Small (15) grants, 10 were submitted by early stage investigators. PIs included collaborative partners from WVSOM, NIOSH, and Marshall. Although no pilot projects were funded in Q4, 19 were funded in 2017-2018. In Q4, no workshops or trainings



were provided but 7 were provided in 2017-2018. In Q4, 10 services or consultations including pilot kick-off meetings, application pre-reviews, and a clinical senior scientific advisor consultation were provided to potential applicants. Mentoring of ESIs was not reported and new investigators were not reported as a separate category of those funded.

Specific Aim 2. Advance collaborative research endeavors to address WVCTSI priority health areas within WV as well as throughout the Appalachian region.

The Pilot Projects Core reported several ongoing projects that address critical health issues within WV including obesity, respiratory disease, response training for first responders, safety education and treatment for opioid abuse.

Specific Aim 3. Implement the Launch Pad **Pilot Program to maximize opportunities** for commercialization of novel science.

4 Launch Pad grants were submitted, from 1 clinician PI, 3 non-ESI PIs. All of those hailed from WVU.

#### **Pilot Projects**

- Consider whether existing metrics adequately capture mentoring activity by the Pilot Core, and whether services to NIs and ESIs should be captured separately
- Increase participation in Launch Pad Pilots across partner sites
- Identify targets for all appropriate metrics

#### **Professional Development Core**

Specific Aim 1. Create the Scientific and Career Success (SACS) program to provide access to formal mentoring for C/T researchers of all career stages.

In Q4, no study section services were reported but 2 were provided in 2017-2018. WVCTSI-supported scientists mentored 14 students in the Initiation to Research Opportunities (INTRO) program, doubling those reported in Q3. Of the former INTRO students, 27 engaged in research within the past 12 months. There were 14



active members in the SACS program, 6 new mentoring teams, and 7 female clinician scientists being mentored.

Specific Aim 2. Develop formal programs that serve as "on-ramps" to introduce C/T research to early or new investigators and trainees at different career stages.

There are 27 medical students participating in the INTRO program. 12 students are enrolled in the MS in CTS programs at WVU and 3 are enrolled at Marshall University. For the WVU CTS Ph.D. program, there were 4 applicants. 2 of those applicants were accepted for a total of 10 students enrolled. 1 honor/award was reported, and no new degrees conferred. Additionally, no new Educational Programming academic courses were offered in Q4.

### Specific Aim 3. Develop educational opportunities to support and retain externally funded C/T researchers statewide.

4 research seminars were offered in Q4 including 1) Clinical Trial Data: Good Documentation Practices,

2) Navigating Your Mentor Relationships, 3) Role of the Research Coordinator, and 4) How to Be

Prepared for Your Next Audit: Regulatory
Expectations. Additionally, 3 research workshops
were offered including 1) Building Relationships with
Program Officers Workshop, 2) R Workshop Sessions,
and 3) Team Science Skills Development Workshop.
The R Workshop Sessions were provided in
collaboration with CRDEB core and the Team Science
Skills Development Workshop was provided through
Marshall University.

## Professional Development Key Recommendation

- Consider focused evaluation of mentoring, degree programs, and educational opportunities
- Continue to work to increase participation across partner sites
- Identify targets for all appropriate metrics

Biospecimen Repository

Technology

Core

informatics & Data Mana

#### **Technology and Resources for Core Laboratories**

Specific Aim 1. To establish a statewide biospecimen repository that collects patient and study participant samples in WVCTSI priority health areas (addiction and resultant emerging epidemics, cancer, cardiovascular disease, and chronic lung disease).

This is the first quarter in which samples were collected (297) and utilized (314). All sample activity occurred at WVU. 2 WVCTSI-supported biospecimen projects were reported.

Specific Aim 2. To establish a statewide West Virginia University
(WVU) - Marshall University (MU) genomics shared research facility
for the efficient generation of genomic and related data for C/T studies that addre

for the efficient generation of genomic and related data for C/T studies that address WVCTSI priority health areas.

In 2017-2018, 1 Marshall WVCTSI study and no WVU genomics studies were reported. There were 39 Illumina projects from WVU (11) and Marshall (28). Of the 81 runs, 23 were at WVU and 58 were at Marshall.

Specific Aim 3. To establish a statewide WVU-MU shared Bioinformatics and Data Management (BDM) Facility for C/T studies that address WVCTSI priority health areas.

7 educational sessions including Bioinformatics were provided to 24 participants from both WVU and Marshall.

Specific Aim 4. To establish state-of-the-art imaging in support of biologically relevant modeling of disease.

In Q4, 5 WVCTSI investigators were served related to imaging. In Q4, no clinical research projects were

reported but there were 3 in 2017-2018. A total of 24 MicroCT projects were reported for the year with 8 reported in Q4. For MRI, 4 projects were reported in Q4 bring the yearly total to 14. 11 educational sessions related to imaging were provided. In 2017-2018, 14 educational sessions were provided to 67 participants.

### Technology & Resources for Core Labs Key Recommendations

- Identify targets for all appropriate metrics
- Work with tracking and evaluation to develop metrics capturing progress on Bioinformatics and Data Management

#### **Tracking and Evaluation Core**

In Q4, the TEC Core continued to collaborate with all core key contacts to refine quarterly reporting metrics, processes, and procedures, with a focus this quarter on auditing accuracy of past data submissions, clarifying reporting processes, and streamlining TEC collection of data directly from iLab, OnCore, and other systems where possible. In addition to the Q3 tracking and evaluation report, TEC developed an annual meeting evaluation report, updated the WVPBRN statewide map, and created a WVCTSI



Partner map (see figure 6). Other TEC activities included assistance with an external funding proposal, RPPR / SIRS annual NIH reporting, the WVPBRN Baseline survey, a WVPBRN Collaboration survey, and 3 community engagement and outreach focus groups conducted in Bridgeport, Parkersburg, and Scarbro.

Specific Aim 1. Develop Investigator Tracking and Support System (ITSS) utilizing quantitative and qualitative approaches to identify factors contributing to success or providing barriers to productivity.

TEC worked with the Administration core team to improve methods related to reporting publications, proposals, and awards to avoid duplication. TEC also distributed tools to partner sites to improve tracking of WVCTSI core activities occurring at partner sites or involving partner personnel.

Specific Aim 2. Create and implement systematic set of tools and measurements to drive continuous quality improvement and demonstrate impact of community stakeholder participation and engagement.

TEC collaborated with CEO to a) develop and deploy a baseline survey of WVPBRN members and b) to develop a collaboration survey for social network analyses of WVPBRN member and site connectivity.

# Specific Aim 3. Build focused research and evaluation demonstrating WVCTSI impacts on health outcomes in West Virginia.

TEC personnel supported refinement of overall dashboard and drove development and refinement of partner dashboards for inclusion in future quarterly reports.

### Tracking & Evaluation

- Continue to streamline quarterly reporting data collection from cores, partners, iLab, and OnCore systems
- Identify next steps for utilization of iLab data to inform robust investigator tracking and support
- Develop and implement training for setting annual targets on evaluation metrics
- Support continued refinement of partner dashboards

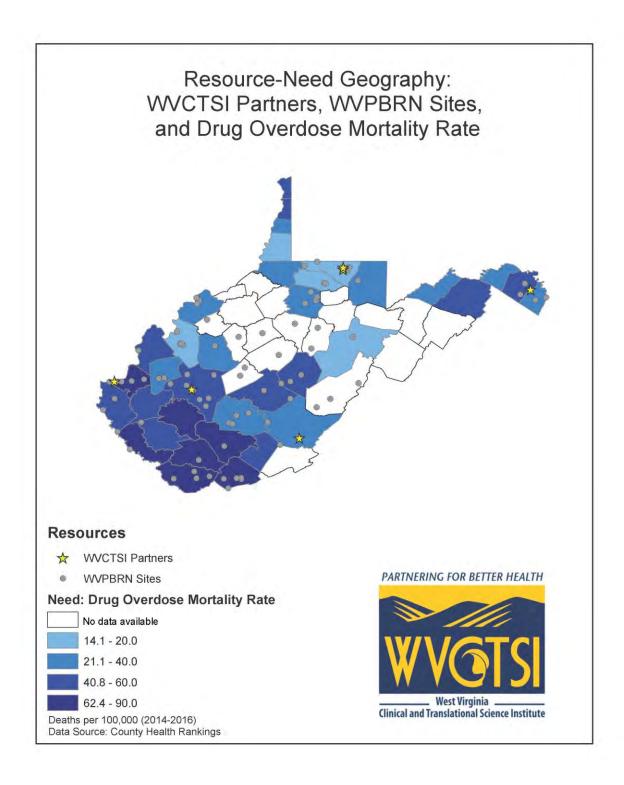


Figure 6. Resource-Need Geography: Distribution of WVCTSI Partners, WVPBRN Sites, and Drug Overdose Mortality Rate across West Virginia.

#### **Marshall University**

Marshall University, located in Huntington, WV in Cabell County, partners with the WVCTSI and is engaged in activities primarily related to research



and investigator development. The Joan C. Edwards School of Medicine at Marshall University is a community-based, Veterans Affairs-affiliated medical school dedicated to providing high quality medical education and postgraduate training programs to foster a skilled physician workforce to meet the unique healthcare needs of West Virginia and Central Appalachia. The Joan C. Edwards School of Medicine focuses on developing centers of excellence in clinical care, including primary care in rural underserved areas, focused and responsive programs of biomedical science graduate study, biomedical and clinical science research, academic scholarship, and public service outreach. Marshall University houses the WVCTSI's Associate Director, Dr. Gary Rankin.

For the 2017-2018 fiscal year, Marshall reported 9 peer-reviewed publications and 15 external funding proposals submitted (9 federal, 4 state, 2 other). Of those proposals, 8 were submitted by early stage investigators. Of 3 externally funded awards, 1 was submitted by an early stage investigator. Among the total 1,974 WVCTSI members, 27 are affiliated with Marshall University. There were 12 proposal development service requests from Marshall University using the iLab tracking system. There are 8 early stage investigators at Marshall University accessing WVCTSI services.

Marshall has continued to increase its partnership activity with WVCTSI. This included a new Project ECHO site with the CEO Core. WVCTSI hosted a Pilot Projects informational session at Marshall and 6 of the Collaborative Pilot projects funded included an investigator from Marshall. Related to professional development activities, a special FACTS Session with Commencement Speaker Dr. Nora Volkow and a Team Science Skills Development workshop were provided through Marshall. In the Technology &

Resources for Core Laboratories Core, efforts are increasing to establish a statewide West Virginia University (WVU) - Marshall University (MU) genomics shared research facility for the efficient generation of genomic and related data for C/T studies that address WVCTSI priority health areas with genomics projects and educational sessions related to bioinformatics.

#### **Marshall University**

- Work to increase utilization of iLab
- Continue efforts to increase WVCTSI membership

#### West Virginia School of Osteopathic Medicine (WVSOM)

WVSOM, located in Lewisburg, WV in Greenbrier County, partners with the WVCTSI and is engaged in activities related to research and community engagement. WVSOM focuses on educating students as lifelong learners in osteopathic medicine and complementary health related programs, supporting graduate medical education training, advancing scientific knowledge through academic, clinical, and basic science research, and promoting patient-centered, evidence-based medicine.



In the 2017-2018 year, WVSOM contributed 2 publications and had 2 Collaborative Pilot projects funded. Among the total 1,974 WVCTSI members, 67 are affiliated with WVSOM.

WVSOM investigators are beginning to utilize the iLab tracking system to access WVCTSI services. 3 proposal development services were reported in Q4.

Related to professional development opportunities, there were 12 opportunities for students to participate in clinical and translational research and 8 students are enrolled to participate in summer research projects. A total of 34 WVSOM faculty participated in 21 WVCTSI sponsored research training programs. There were 3 poster sessions held at WVSOM related to WVCTSI activities.

WVSOM staff also are involved in the CEO Core's WVPBRN project to empower communities to participate in community engagement activities including 7 focus groups related to community participatory research.

## WV School of Osteopathic Medicine Key Recommendations

- Identify targets for all appropriate metrics
- Work toward integration and utilization of iLab
- Continue efforts to increase WVCTSI membership