

Funders: Currently seeking funding for the program described above; the ROAR Center is funded by the Governor's Office of Crime Prevention, Youth, and Victim Services

Project Name: L&HCP Roundtables, Symposia, Conferences

Summary: In 2010, L&HCP hosted a roundtable on telemedicine/telehealth, examining laws that were obstacles to robust implementation of telemedicine. At the time, the group determined that some of the obstacles had been adequately dealt with and some had not. The Carey School of Law devoted an issue of its [*Journal of Health Care Law & Policy*](#) to the topic. More recently, the program, along with the American Health Lawyers Association and the American Society for Health Care Risk Management, hosted "Hot Topics for In-House Counsel." Telemedicine was not discussed but could be included in future discussions. The program routinely hosts roundtables, symposia, and conferences and would welcome the opportunity to be involved with a cross-disciplinary discussion of this topic, bringing expertise from the legal perspective.



SCHOOL OF MEDICINE

The University of Maryland School of Medicine expands its reach, patient care, and education of the next generation of physicians and health care providers through its far-reaching and established telemedicine and telehealth programs. These programs connect rural patients and physicians from the mountains of Garrett County to Maryland's Eastern Shore with experts and resources from the main campus in Baltimore. Existing programs expand access to care and consultation for rural and underserved communities through innovative service models, tele-consultation, and unique programs that address specific patient/provider needs.

Project Name: DJS: Telepsychiatry to Western Maryland Youth Centers

PIs: [Debbie Brooks, MD](#), Associate Program Director, Child and Adolescent Psychiatry; [Sarah Edwards, MD](#), Medical Director, Child and Adolescent Psychiatry Services

Summary: This project offers telepsychiatry services across six Maryland Department of Juvenile Services (DJS) youth centers. Telepsychiatry services provided to DJS sites include initial evaluation, medication management, ongoing treatment, and bridge services as youth transition into the community. Services are provided in Allegany, Frederick, and Garrett counties.

Funders: Maryland Department of Juvenile Services

Project Name: Maryland Behavioral Health Integration in Pediatric Primary Care (BHIPP)

PI: [Kelly Coble, LCSW-C](#), MACS Program Director

Summary: This project supports the efforts of pediatric primary care clinicians to assess and manage the mental health needs of their patients from infancy through the transition to young adulthood through phone consultation, training, resource and referral identification, and regionally specific co-location. BHIPP began pilot operations in fall 2012 in the western and eastern regions of the state. In July 2013, the program expanded statewide. BHIPP is available free of charge to any pediatric primary care provider.

Funders: Maryland Department of Health, Behavioral Health Administration

Project Name: Maryland Behavioral Health Integration in Pediatric Primary Care Telepsychiatry Access Program (BHIPP TAP)

PI: Kelly Coble, LCSW-C, MACS Program Director

Summary: In 2019, BHIPP received a supplemental Health Resources & Services Administration (HRSA) grant to expand BHIPP services to further support the efforts of primary care clinicians through the provision of tele-mental health services including telepsychiatry, telecounseling, telecare coordination, and Project ECHO. This expanded array of services aims to increase access to child and adolescent behavioral health services. Services initially will be provided in pilot regions: the Lower Eastern Shore, Western Maryland, and Southern Maryland, and then be expanded statewide.

A project advisory committee has been assembled, composed of pediatricians, behavioral health providers, state and local leaders, parents, and others, to help guide the implementation and plan for sustainability. This project is active in Allegany, Calvert, Charles, Garrett, Somerset, St. Mary's Washington, Wicomico, and Worcester counties.

Funders: HRSA

Project Name: Partnership with Garrett County Health Department

PI: [Sarah Edwards, MD](#), Medical Director, Child and Adolescent Psychiatry Services

Summary: This project offers pediatric telepsychiatry services through the Garrett County Health Department. Services are provided in the context of a weekly clinic. Psychiatric assessment, evaluation, and ongoing treatment is provided by fellows in the Department of Psychiatry under the supervision of faculty.

Funders: Garrett County Health Department

Project Name: Partnership with Caroline County Health Department

PI: [Aaron Greenblatt, MD](#), Medical Director, University of Maryland Drug Treatment Center

Summary: In the Caroline County Health Department, individuals in need of addiction treatment can receive Medication Assisted Treatment (MAT) through a telemedicine appointment. Caroline County is the only county in Maryland that does not have a physician with their buprenorphine waiver. This program (along with the mobile van) provides access to life-saving MAT treatment.

Funders: Caroline County Health Department

Project Name: Skilled Nursing Facilities: Medication Assisted Treatment

PI: [Aaron Greenblatt, MD](#), Medical Director, University of Maryland Drug Treatment Center

Summary: This program aims to increase the initiation of medication for opioid use disorder (OUD) for hospitalized patients being discharged to skilled nursing facilities (SNF) through expanding capacity to provide care for patients with OUD. The program aims to expand the capacity of SNF to provide care for patients with OUD, create systems to enroll patients in the outpatient setting, create linkage across medical and treatment settings, and decrease emergency visits and hospital readmissions.

Funders: Maryland Department of Health, Behavioral Health Administration

Project Name: Advancing Telemental Health in Schools: Enhancing Access to Mental Health Care for Youth and Families

PIs: [Nancy Lever, PhD](#), Associate Professor and Co-Director, Center for School Mental Health; Executive Director, University of Maryland School Mental Health Program; [Elizabeth Connors, PhD](#), Adjunct Assistant Professor, Psychiatry

Summary: For over 30 years, the Center for Infant Study/School Mental Health Program (CIS/SMHP) has offered a full continuum of high-quality, evidence-based mental health services to approximately 500 infants, toddlers, preschoolers, and youth through age 21 and their families, and mental health promotion and prevention to thousands of students through classroom and school-wide activities. Clients are predominantly African Americans (more than 90 percent) living in low-income, highly stressed communities, often with a single mother or grandparent as the primary caregiver. Over 80 percent of clients had experienced a traumatic event prior to COVID-19. The pandemic has impacted the ability to work for many caregivers. Food, transportation, housing, and other basic needs have been challenging to meet, and approximately 20 percent of families do not have adequate digital technology including computers, headphones, broadband internet access, and phones needed to participate in online school lessons and mental health supports through telehealth.

Funding is needed to provide telehealth equipment to 10 school mental health clinicians and five clinical information system (CIS) clinicians in need of technology to provide services offsite during school and community program closures. Chromebooks and headphones will be provided to 60 families in need of resources to access telehealth. In addition, wireless hotspots and six months of internet access will be provided to 20 families that lack the resources to secure this service. Eight Head Start sites will be provided Chromebooks and headphones. Specialized mental health services (individual, family, and group therapy; mental health promotion and prevention activities for students;

and professional development and consultation sessions with school and community staff) through telehealth technology would be provided weekly with opportunities for greater frequency each week as needed. Services will be provided by telehealth to support newborns and children up to 6 years of age who are at risk for or already experiencing social, emotional, or behavioral challenges, and prevention and treatment services will be offered to children and adolescents ages 5-21 from 23 Baltimore City Public Schools. In addition, significant psychoeducation resources related to mental health and well-being will be developed and shared with youth, families, and school and community staff through digital technology.

Project Name: PEARLS: Geriatrics

PI: [Chris Marano, MD](#), Director, Division of Geriatric Psychiatry and Adult Acute Care

Summary: The Program to Encourage Active, Rewarding Lives (PEARLS) is a national evidence-based program for late-life depression. Supervision and consultation is provided via video by a department psychiatrist to social workers delivering PEARLS.

Project Name: Continued Growth in Skilled Nursing Facilities

PIs: [Chris Marano, MD](#), Director, Division of Geriatric Psychiatry and Adult Acute Care; [Aaron Greenblatt, MD](#), Medical Director, University of Maryland Drug Treatment Center; [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; Co-Director of Adult Psychiatry

Summary: This project offers telepsychiatry services to skilled nursing facilities — based on the department's experience providing MAT services into skilled nursing facilities — and looks forward to future opportunities to support geriatric patients via telemedicine.

Project Name: Early Intervention Program (EIP)

PI: [Gloria Reeves, MD](#), Associate Professor and Vice Chair of Research Services

Summary: This project offers specialized programs with expertise in the early identification, evaluation, and comprehensive psychiatric treatment of adolescents and young adults at risk for, or in the early stages of, a mental illness with psychosis. Consultation and evaluation are available via video connection to assist with the early identification of youth with possible first episode of psychosis. EIP can assist with the identification of high-risk symptoms and assist with appropriate treatment.

Funders: Maryland Department of Health, Behavioral Health Administration

Project Name: Telehealth Network Expansion Program

PI: [Anthony Roggio, MD](#), Assistant Professor, Emergency Medicine

Summary: This funding opportunity is aimed at expanding rural tele-emergency services with an emphasis on tele-stroke, tele-behavioral health, and tele-emergency medical services (teleEMS), all of which are currently offered through existing telehealth programs through the University of Maryland School of Medicine's Departments of Emergency Medicine and Psychiatry and the University of Maryland Medical Center. The goals of the Telehealth Network Grant Program are to expand access to, coordinate, and improve the quality of health care services; improve and expand the training of health care providers; and expand and improve the quality of health information available to health care providers, patients, and their families for decision-making.

Funder: HRSA

Project Name: Partnership with Life Energy Wellness Center (LEWC) Adult

PI: [Eric Weintraub, MD](#), Division Head, Alcohol and Drug Abuse; Acting Division Head, Adult Psychiatry

Summary: Telepsychiatry to adult patients is provided to an all-ages outpatient behavioral health clinic on the Eastern Shore. Collaboration with clinic counselors facilitates the treatment. This project is active in Easton, Cambridge, and Salisbury, Md.

Funders: Life Energy Wellness Center

Project Name: Maryland Addiction Consultation Service (MACS)

PIs: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry; [Kelly Coble, LCSW-C](#), MACS Program Director

Summary: MACS provides support to prescribers and their practices in addressing the needs of their patients with substance use disorders and chronic pain management through phone consultation, training, technical assistance, and resource and referral identification. MACS launched its statewide service in October 2017 and has served over 700 prescribers statewide.

Funders: Maryland Department of Health, Behavioral Health Administration

Project Name: The Eastern Shore Mobile Care Collaborative at the Caroline County Health Department (ESMCC)

PI: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry

Summary: This project provides telepsychiatry services through a mobile van for patients across Caroline County in need of addiction treatment. The van visits four towns in Caroline County where MAT is provided via secure video connection to a telemedicine provider at the University of Maryland. The van is staffed with a peer recovery coach, a nurse, and a counselor. On the van, patients can be seen in a private room, observed urines can be collected, and patients can wait in a waiting room before their appointment.

Funders: HRSA and Maryland Department of Health, Behavioral Health Administration

Project Name: Expanding Access to Medication-Assisted Treatment in Rural Areas with the Use of Telemedicine

PIs: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry; [Annabelle Belcher, PhD](#), Assistant Professor, Department of Psychiatry

Summary: This project is designed to increase access to Medication Assisted Treatment (MAT) in rural areas in Maryland, using the successful telehealth model piloted at Wells House, a drug treatment program that primarily treats people living in rural communities. To achieve this goal, the School of Medicine's Division of Addiction Research and Treatment in the Department of Psychiatry has created a diverse team of clinical practitioners with a wealth of experience working in multidisciplinary substance use settings to lead this project, which seeks to (1) increase the number of clinical staff who are trained in the delivery of telemedicine MAT services to meet the patient need in existing remote sites in Garrett and Caroline counties, and (2) purchase telemedicine equipment to establish services in Talbot and Dorchester counties.

Funders: CareFirst until Sept. 30, 2020

Outstanding Needs/Areas for Growth: Training for telemedicine staff; training for telemedicine physicians.

Project Name: Treatment with Buprenorphine through Telemedicine in a Rural Criminal Justice Setting

PIs: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry; [Annabelle Belcher, PhD](#), Assistant Professor, Department of Psychiatry

Summary: The overall goal of this proposal is to provide an immediate solution to the critical need for access to life-saving medication-based treatment for incarcerated individuals with opioid use disorder (OUD). Engaging and retaining inmate-patients in care has the potential to reduce relapse, fatal overdoses, and re-entry into the criminal justice setting. The program expands the School of Medicine's existing network of tele-MAT and tele-behavioral health established on Maryland's Eastern Shore to bring OUD treatment services to rural detention centers in Caroline, Cambridge, and Dorchester counties *before discharge*, in a controlled and safe environment.

Funder: FORE Foundation

Outstanding Needs/Areas for Growth: Training for telemedicine staff; training for telemedicine physicians.

Project Name: MAT to Detention Centers: FORE Foundation

PI: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry

Summary: This project offers telepsychiatry and addiction treatment services to five detention centers across the rural Eastern Shore.

Funders: FORE Foundation

Project name: Suboxone Treatment – Wells House

PI: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry

Summary: This project offers telepsychiatry addiction treatment to an outpatient behavioral health clinic.

Funders: Wells House

Project Name: BHA Telepsychiatry RFP (Infrastructure/Training)

PIs: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry; [Kelly Coble, LCSW-C](#), MACS Program Director

Summary: This project aims to develop telepsychiatry policy, train future psychiatrists in telepsychiatry, and inform these processes with expertise to expand telepsychiatry services in Maryland, particularly in underserved rural and urban communities. The Department of Psychiatry is working to build resources and educational content related to telepsychiatry.

Funders: Maryland Department of Health, Behavioral Health Administration

Outstanding Needs/Areas for Growth: The Department of Psychiatry actively seeks funding to develop and expand a Center of Telemedicine Training Excellence, which will provide residents and staff with the tools and skills to provide telemental health services in our ever-increasing virtual practice structure.

Project Name: MACS for MOMS

PIs: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry; [Kelly Coble, LCSW-C](#), MACS Program Director

Summary: This project will expand efforts to support primary care and specialty prescribers across Maryland in the identification and care of pregnant and postpartum Medicaid participants diagnosed with opioid use disorder through phone consultation, training, and resource and referral identification.

Funders: Maryland Centers for Medicare & Medicaid Services

Project Name: DC MACS

PIs: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry; [Kelly Coble, LCSW-C](#), MACS Program Director

Summary: Along with the D.C. Department of Health, MACS will expand its efforts into the Washington area to support prescribers in addressing the needs of patients with substance use disorders and chronic pain management through phone consultation, training, and resource and referral identification.

Funders: District of Columbia Department of Health

Project Name: Continued Expansion in Detention Centers

PI: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry

Summary: As Maryland institutes HB 116, this project looks forward to applying its telemedicine experience in detention centers to support opioid use disorder treatment and provide additional detention centers with telepsychiatry and addiction treatment services throughout the state.

School of Medicine Areas of Potential Expansion and Growth

Program Name: Telemental Health Program, Department of Psychiatry

Summary: This program would benefit from the development of a “recruiting package” for a seasoned telemental health practitioner to include incentive money for salary for a national-level doctor; administrative support; office space (i.e., rent); research support staff; a “seed” package to develop programs, and studies

Project Name: Growth of Mobile Units

PI: [Eric Weintraub, MD](#), Associate Professor of Psychiatry; Director, Division of Alcohol and Drug Abuse; and Co-Director of Adult Psychiatry

Summary: Based on its success and expertise, the Department of Psychiatry is interested in increasing access to care through continued work in mobile units. Providing care via mobile treatment units brings treatment to patients who may otherwise not seek care in traditional settings. Medication-based treatment, infectious disease, and harm reduction are areas of use and expansion for mobile treatment units to consider.

Project Name: Tele-EAP for Front-Line Health Care Workers

PI: [Rob White, LCPC](#), Adjunct Assistant Professor, Psychiatry

Summary: Our front-line health care workers experience a very specific and highly stressful work environment. Therefore, this project would like to provide telepsychiatry services to UMB front-line health care workers through the Employee Assistance Program. High crime rates and COVID-19 have

increased the stress and anxiety of our front-line providers. As such, this project seeks funding for a Tele-Employee Assistance Plan to specifically address the mental health needs of our clinical faculty and staff who work in the Emergency Department.

Project Name: Telepsychiatry for UMMC Emergency Rooms

Summary: This project aims to provide telepsychiatry services across UMMC emergency rooms in order to provide mental health evaluations and recommendations, and to begin medication-assisted treatment in a more timely manner. This would significantly increase access to underserved populations and to patients living in areas where there are no emergency psychiatric services.



SCHOOL OF NURSING

A recognized leader in nursing education, research, and practice, the University of Maryland School of Nursing (UMSON) is well positioned to train future experts in telehealth and telemedicine. The school's No. 1-ranked Nursing Informatics program has been integrating nursing and technology for more than 30 years, preparing students to develop and improve systems for telehealth, telemedicine, and telemonitoring.

Project Name: mLearning in Morocco: A Mixed-Methods Feasibility and Pilot Cluster Randomized Trial Using the Safe Delivery App

PI: [Nancy Bolan](#), PhD, PMH, FNP, CNM, Assistant Professor, Office of Global Health

Summary: Dr. Bolan works on telehealth research in developing countries for training providers in rural areas on emergency obstetric and newborn care. She tested the French version of an innovative digital learning app with interprofessional health workers (128 doctors, registered nurses, and midwives) in the Democratic Republic of the Congo and found that the use of a mobile app resulted in significant increases in worker knowledge and self-confidence in the management of basic newborn emergencies. This project will leverage collaboration with researchers at the National School of Public Health in Morocco who are exploring mobile applications for public health (mHealth), given widespread availability of cellphones and the low cost of providing continuing professional development via mobile phones (mLearning). Research methods will include conducting an mLearning study and providing interprofessional UMB students opportunities to gather baseline data and carry out a mixed methods pilot cluster study to examine the feasibility, acceptability, and impact of use of the Safe Delivery App with facility-based interprofessional newborn workers in Morocco. The effects of the app will be analyzed on provider knowledge and on neonatal mortality and stillbirth after six and 12 months.

Project Name: The Impact of a Digital Cancer Survivorship Patient Engagement Toolkit (CaS-PET Silver) on Older Cancer Survivors' Health Outcomes: A Pilot Study

PI: [Eun-Shim Nahm, PhD '03, RN, FAAN](#), Professor, Organizational Systems and Adult Health, and Program Director, Nursing Informatics

Summary: Professor Nahm's work focuses on developing appropriate and accessible patient portals and eHealth technology to support older adults in managing chronic conditions, improving patient outcomes, and improving workflow of clinicians. Nahm focuses especially on applying technologies to the promotion of health for older adults and on developing, implementing, and optimizing health information systems: "Technologies allow us to create bidirectional communication to increase patient-provider communication," she says. "We can really engage them in their care, and then we can empower them to better manage their health in the community where they reside."

Project Name: The Effects of a Theory-Based Patient Portal eLearning Program for Older Adults with Chronic Illnesses

PI: [Eun-Shim Nahm, PhD '03, RN, FAAN](#), Professor, Organizational Systems and Adult Health, and Program Director, Nursing Informatics

Summary: The high prevalence of chronic illnesses is a serious public health problem in the United States, and more than 70 million older adults have at least one chronic illness. Patient portals have an excellent potential to assist older adults in managing chronic illnesses, but older adults' patient portal adoption rates have been low. Lack of support for older adults using patient portals remains a critical gap in most implementation processes. The main aim of this study is to assess the impact of an older adult-friendly Theory-based Patient portal e-Learning Program (T-PeP) on patient portal knowledge, selected health outcomes (health decision-making self-efficacy [SE] and health communication), patient portal SE and use, and e-health literacy in older adults.

Project Name: Development and Feasibility Testing of The CARE Intervention for Older African American Women with HIV Infection

PI: [Veronica Njie-Carr, PhD, RN, ACNS-BC, FWACN](#), Associate Professor, Organizational Systems and Adult Health

Summary: This project seeks to develop and test a web-based intervention for older African American HIV+ women: a community-informed, theory-based **T**echnology-**E**nhanced application (app) with knowledge development, skills training, and support through **C**ompetence, **A**utonomy, and **R**elatedness for the **E**lderly (The CARE). This app represents a replicable, culturally relevant intervention for older African American women with HIV infection to contribute to curbing health disparities, designed to improve overall functional abilities, self-management of symptoms, and self-care.

SCHOOL OF PHARMACY

The Patients, Pharmacists, Partnership (P³) Program® is the clinical initiative arm of the School of Pharmacy's Center for Innovative Pharmacy Solutions (CIPS). The program provides solutions to address:

- Chronic disease management
- Transitions of care management
- Population health
- Comprehensive medication therapy management
- Social determinants of health and behavioral health management
- Workflow and process flow development and management

CIPS is a national leader in the development of novel patient care and business solutions to health problems. It is the innovative leader in delivering health care solutions through the optimization of medication management. CIPS responds to urgent needs in the health care landscape with strategic action and generates health care models with improved patient outcomes and cost savings. CIPS excels in providing telehealth solutions to multiple stakeholders.

Our telehealth expertise has come in handy during the COVID-19 pandemic to train students in interprofessional education and clinical experiences. CIPS strives to:

- Build and nurture relationships with our stakeholders and members of our community.
- Develop innovative models of care in partnership with our stakeholders to provide optimal outcomes and decreased costs for their patients.
- Inspire excellence in our health care professionals, pharmacy fellows, residents, and students through the application and use of innovative technology, telehealth, educational, and clinical experiences.

Project Name: Center for Innovative Pharmacy Solutions (CIPS) eHealth Center

PIs: [Magaly Rodriguez de Bittner, PharmD, BCPS, CDE, FAPhA](#), Associate Dean for Clinical Services and Practice Transformation, and Executive Director, CIPS; [Charmaine Rochester, PharmD, CDE, BCACP](#), Associate Director for Clinical Services, CIPS

Summary: The P³ (Patients, Pharmacists, Partnerships) Program® represents the clinical initiative arm of CIPS. The P³ Program provides the most unique, effective, and proven solutions to a wide range of issues across the fields of chronic disease self-management and patient-centered health education. The eHealth Center's patient care services are delivered by leveraging technology housed in a remote location from the patient and providers in scenarios where advanced practice pharmacists work closely within a patient-centered team-based model. These advanced practice pharmacists are

proficient in the use of and able to document in various electronic medical records (EMRs), including: EPIC, Cerner, Athena, and ThinkEHRx, which allows pharmacists to function in an embedded team-based model despite working from a remote location. The eHealth Center offers a variety of established services including:

- Pharmacist-to-patient comprehensive medication management services
- Provider-to-provider medication information/consultation
- Multidisciplinary patient visits, delivered via HIPAA-compliant video technology such as Zoom, Vidyo, and Skype for Business, while provider-to-provider instant text messaging occurs via DocHalo

Funders: All the funding sources for each project are listed below.

Project Name: West Baltimore Mobile Integrated Health (MIH) 2-Year Pilot Program with UMMS, UMB, and Baltimore City Fire Department

PI: [Magaly Rodriguez de Bittner, PharmD, BCPS, CDE, FAPhA](#), Associate Dean for Clinical Services and Practice Transformation, and Executive Director, CIPS

Summary: A program designed to provide care to Baltimore residents and improve the transition of care from the hospital to the home, specifically targeting patients with chronic diseases who require frequent hospitalizations and often need 911 services. The P3 clinical pharmacist works with the MIH multidisciplinary team to:

- Conduct medication therapy management (MTM) services for various populations (self-insured, commercial, Medicare, Medicaid, etc.).
- Assess medication adherence and generic dispensing rate to optimize drug therapy and improve therapeutic outcomes during initial visits.
- Develop and analyze pharmacy utilization reports, academic detailing, maximizing medication-related quality metrics.
- Participate as a member of a care management interdisciplinary team.
- Provide patient education on self-management of their chronic diseases.
- Provide patients with a Medication Action Plan by incorporating the interprofessional team and primary care physician's recommendations.
- Serve as a liaison with the community/dispensing pharmacies.

Funders: UMMS

Project Name: eHealth Center Activities

PIs: [Charmaine Rochester, PharmD, CDE, BCACP](#), Associate Director for Clinical Services, CIPS; [Magaly Rodriguez de Bittner, PharmD, BCPS, CDE, FAPhA](#), Associate Dean for Clinical Services and Practice Transformation, and Executive Director, CIPS

Summary: eHealth Center pharmacists are proficient in the use of and able to document in various electronic medical records, including EPIC, Cerner, Athena, and ThinkEHRx, which allows pharmacists and the students to function in an embedded team-based model, despite working from remote locations. Care delivery in this manner allows for efficient use of the pharmacist's resources, while improving patients' access to care in scenarios where COVID-19 and the quarantine policies, distance, lack of transportation, and inconvenience might be a barrier to patients, especially those who live in rural areas.

The fourth-year pharmacy students on rotation at the eHealth Center participate in transition of care services, chronic disease state MTM services, medication reconciliation services, comprehensive medication reviews, and targeted intervention services.

Project Name: Interprofessional Remote Patient Monitoring Using eMocha's Direct Observational Technology (DOT) and Pharmacist-led Clinical Protocols

PIs: [Charmaine Rochester, PharmD, CDE, BCACP](#), Associate Director for Clinical Services, CIPS; [Magaly Rodriguez de Bittner, PharmD, BCPS, CDE, FAPhA](#), Associate Dean for Clinical Services and Practice Transformation, and Executive Director, CIPS

Summary: P³ is achieving goals regarding increasing medication adherence and improving health outcomes in a pilot group of Medicaid participants with diabetes and asthma complications. The P³ Program is analyzing the pharmacy and medical claims data along with the patient videos that are uploaded each day to evaluate the patient medication history, current medications, drug-drug interactions, medication adherence, and administration issues.

The P³ student pharmacists, pharmacy residents, and licensed pharmacists provide clinical expertise and counselling to the patient through the secure HIPAA-compliant video/telephone option for the 90 days that they are enrolled in the program. P³ develops a medication list and a Medication Action Plan (MAP) for each patient that is enrolled in the program. Any patient with medication adherence or administration issues will get escalated for additional follow-up. P³ uses customized workflows, Patient Tracking System, CMR and MTM templates, and communication protocols to communicate with the PCPs and/or providers.

Funders: emocha Mobile Health Inc.

Project Name: PreventionLink/CDC program

PI: [Magaly Rodriguez de Bittner, PharmD, BCPS, CDE, FAPhA](#), Associate Dean for Clinical Services and Practice Transformation, Executive Director, CIPS

Summary: P³ pharmacists integrate clinical practice with evidence-based public health programs to improve health outcomes for patients at all levels of risk for chronic disease, from people at risk for diabetes and heart disease to high-system utilizers with frequent hospitalizations.

- Innovations in the use of health information technology and the development of communities of practice will bring together stakeholders in chronic disease care with a shared goal of reducing the burden of diabetes, hypertension, and stroke in underserved areas of Prince George's, St. Mary's, Charles, and Calvert counties.
- We provide Medication Therapy Management (MTM) services through telehealth. A comprehensive review of patients' medications (prescribed, over-the-counter, and herbals) is conducted to assess the safety and effectiveness of drug therapy. Identification and resolution of potential and actual drug-related problems also is accomplished.

Funders: Prince George's County Health Department

Project Name: Totally Linking Care in Maryland (TLC-MD)

PI: [Magaly Rodriguez de Bittner, PharmD, BCPS, CDE, FAPhA](#), Associate Dean for Clinical Services and Practice Transformation, and Executive Director, CIPS

Summary: TLC-MD is a team of more than 50 providers, outpatient services, local health departments, community organizations, and residents. The P³ Program provides the staff and expertise to assist patients enrolled in TLC-MD through telehealth to provide the following:

- **Medication Reconciliation:** Conduct a patient interview, review eQHealth patient records to develop a complete medication reconciliation, and consult the primary care physician as needed to discuss patient case.
- **MTM: Comprehensive Medication Review:** By referral from case management, or identified by specific criteria (chronic diseases, high-risk medications, polypharmacy). A P³ pharmacist conducts a patient interview, reviews eQHealth, Chesapeake Regional Information System for Patients, and emergency health records if available to:
 - Assess patient's medication-related needs (Indication, appropriateness and effectiveness).

- Assess patient's medication-related problems (dose, safety, interactions, adherence, side effects).
- Document drug-related problems.
- Offer a plan of care and/or recommendations to other members of the patient's health care team.
- Document in eQHealth the Medication Therapy Management plan for review by other providers within eQHealth and if possible provide a summary to the primary care physician

Funders: Prince George's County Health Department

Project Name: McCormick & Company and the P³ Program

PI: [Charmaine Rochester, PharmD, CDE, BCACP](#), Associate Director for Clinical Services, CIPS

Summary: The P³ Program provides unique, effective, and proven solutions for a wide range of chronic conditions to employees and beneficiaries of self-insured employers.. Specially trained and certified pharmacists focus on identifying, preventing, and resolving drug-related problems to optimize therapeutic outcomes for patients, which reduces overall health care costs. Through the COVID-19 crisis, the P³ program has utilized telehealth to meet with and provide individualized guidance in medication adherence, lifestyle changes, and disease self-management knowledge and skills. Through these sessions, participants learn how to better manage their medications and chronic conditions as well as how to reduce associated health risks. The pharmacists, as the patients' coaches, medication experts, and educators, provide the most positive outcomes in health care. During the counseling sessions, the pharmacist uses the goal standard of care, which involves the cyclical P³ process of care. The process involves engaging the patients, gathering data, assessing disease and drug therapy, action planning, documenting, communication, coordinating care, and re-evaluating the intervention. P³ pharmacists submit recommendations to physicians after documentation of the patient encounter in the electronic health record, ThinkEHRx, via secure faxes.

Funders: McCormick & Company

Project Name: UMB President's Transformational Initiative

PIs: [Magaly Rodriguez de Bittner, PharmD, BCPS, CDE, FAPhA](#), Associate Dean for Clinical Services and Practice Transformation, and Executive Director, CIPS; Michele Beaulieu, LCSW-C, Director, Behavioral Health Education Programs; [Charmaine Rochester, PharmD, CDE, BCACP](#), Associate Director for Clinical Services, CIPS

Summary: Telehealth, behavioral health, and team-based care are emerging needs in health care. The UMB President's Transformational Initiative has demonstrated that interprofessional telehealth services improve access to care while decreasing costs. Medication management and social work support have emerged as the greatest needs, creating an opportunity to expand our academic experiences for students in the e-health center.

The new Medicare Waiver in Maryland creates an urgent and cutting-edge opportunity for our UMB students to be part of this innovative model. The UMB President's Office awarded a two-year initiative under the Academic Innovation category that seeks to increase student enrollment in emerging areas of educational interest and emphasizes academic program areas that draw on and intersect with our strengths as a graduate and professional health and human services institution.

Funders: UMB President's Office

Project Name: UMMS Quality Care Network/Transform Health MD/SOP Partnership

PI: [Magaly Rodriguez de Bittner, PharmD, BCPS, CDE, FAPhA](#), Associate Dean for Clinical Services and Practice Transformation, and Executive Director, CIPS

Summary: As part of a partnership with UMMS' Quality Care Network/Transform Health MD, advanced clinical pharmacists provide telecare management including comprehensive medication management services, disease state management services, and provider education, and develop and analyze pharmacy utilization reports, academic detailing, and maximizing medication-related quality metrics. Our team also accomplishes the following:

- Participates as a member of a primary care interdisciplinary team
- Provides patient education on self-management of their chronic diseases
- Provides patients with a Medication Action Plan by incorporating the interprofessional team and primary care physician's recommendations
- Serves as a liaison with the community/dispensing pharmacies to Medicare and commercial-payer patients attributed to primary care practices supported by the UMMS program and also to UMMS employees.

Advanced clinical pharmacists also provide clinical supervision to student pharmacists and pharmacy residents assigned to this site for their clinical rotations.

Funders: UMMS and Transform Health MD

SCHOOL OF SOCIAL WORK

The School of Social Work is committed to providing evidence-based training in clinical practice to those social work graduate students planning a career in behavioral health. Prioritizing the development of tele-behavioral health training, a service delivery model that provides access to behavioral health services to underserved and under-resourced populations, stems from the professional values of social justice and equity. The School of Social Work, led by a core faculty group, has begun to develop training for clinical social work graduate students in the competent and ethical delivery of tele-behavioral health services. We are committed to expanding training opportunities for students and practitioners, especially given the COVID-19 impact, pivoting most community behavioral health services to virtual platforms.

Project Name: UMB President's Transformational Initiative with School of Pharmacy

Co-PI: [Michele Beaulieu](#), LCSW-C, Director, Behavioral Health Education Programs

Summary: Telehealth, behavioral health, and team-based care are emerging needs in health care. The UMB President's Transformational Initiative has developed a clinical rotation for pharmacy and social work students to learn how to deliver interprofessional telehealth services knowledgeably and ethically.

Project Name: Transform Health MD/SSW Partnership

PI: [Michele Beaulieu](#), LCSW-C, Director, Behavioral Health Education Programs

Summary: As part of a partnership with UMMSTransform Health MD, two School of Social Work clinical social workers provide telecare management including tele-behavioral health to Medicare patients attributed to primary care practices supported by the UMMSprogram. The clinical social workers also provide clinical supervision to social work graduate students assigned to this site for their field practicum.

Project Name: Tele-Behavioral Health: Delivery of Clinical Social Work Services

Faculty Lead: Jane Schindler, LCSW-C, Clinical Instructor

Summary: Development of a virtual 1-credit course for School of Social Work graduate students to be offered in fall 2020. This course will introduce the practical and knowledge-based skills required to engage in safe, effective, and ethical tele-behavioral health services. Through a series of online modules and practice sessions, students will gain confidence and competence in the use of

appropriate technology, establishing virtual services with a client, safety planning, and how to handle potential issues that arise. Additionally, students will learn about current research on what treatment modalities are effective delivered virtually as well as how particular services can be competently delivered through technology (e.g., substance use treatment, case management, and group treatment services).

