

JON EASTER

TITLE: EXPANDING TELEHEALTH SERVICES TO PREVENT COVID-19 IN RURAL NORTH CAROLINA

PRINCIPAL INVESTIGATOR: Jon Easter

PROJECT SUMMARY

COVID-19 places great strain on our primary care delivery system. We must protect vulnerable, complex patients with diabetes by limiting their interaction in clinics and hospitals, while continuing to provide access to care and needed medications. Telehealth is now at the forefront as a solution, but questions remain as to whether this is a usable, feasible and effective mode of care delivery. The UNC ESOP Center for Medication Optimization is working with four rural NC primary care clinics to implement a Telehealth clinical pharmacy services model. The clinics have requested an expansion of services in in order to support vulnerable patients at home to prevent the spread of COVID-19 in rural NC communities.

With additional funding, new at home-based telehealth services can be created, tested and evaluated. Validating effective services could have far-reaching impact on patient engagement, access to care, and improved health outcomes, while reducing the spread of COVID-19. Expanded services include referrals to community based COVID support resources (e.g. food banks, testing), medication access and adherence tools through local pharmacies, and linking care coordination activities between providers.

Our approach will be to evaluate the feasibility of expanded services, as well as their potential impact on patient care over a three-month period using data from a process evaluation. This will allow us to gain an understanding of implementation successes and challenges, while obtaining preliminary evidence of effectiveness within the six-month timeframe. This evidence will support scaling and sustaining Telehealth services within rural NC communities.

IMPACT ON NORTH CAROLINA

Problem description: COVID-19 continues to have a devastating impact on our economy, our healthcare system and the well-being of our citizens. With 'stay at home' shifting to 'safe at home' orders, more businesses are opening which dramatically increases the amount of people in public places. As a result, we must protect vulnerable citizens of NC, especially those with complex chronic conditions, by limiting their interactions in high risk places like healthcare clinics and hospitals. In parallel, we must enhance their access to care and needed services like food and medications.

COVID also places strain on our primary care delivery system. Primary care visits are down during the pandemic. As visits and revenue decrease, patient needs increase, resulting in more stress on providers.

Solutions and impact: Telehealth is moving to the forefront as a solution to address these problems, but questions remain as to whether this is a usable, feasible and effective mode of care delivery. The UNC ESOP Center for Medication Optimization is working with four rural NC primary care clinics to implement a TeleHealth clinical pharmacy services model. The clinics requested an expansion of services to support vulnerable patients at home to prevent the spread of COVID-19. With additional funding, new at home-based telehealth services can be created, tested and evaluated.

Validating remote at home services could have far-reaching impact on vulnerable patients, including reducing the spread of COVID-19, improving access to care, and enhancing quality of life. Future impact could enable more elderly citizens to 'age in place', which translates to economic benefit for NC through less dependence on Long Term Care (LTC).

Telehealth services positively impacts primary care physicians by addressing provider satisfaction, efficiency and overall burnout. Finally, evaluating the implementation of these services could lead to a state-wide scale up plan that extends impact across NC.

MILESTONES

The existing CMM telehealth project will benefit from additional funding to evaluate the expanded services for patients with diabetes in four rural NC clinics. Aims for this 6-month evaluation will focus on (1) understanding

implementation successes, challenges, and lessons learned to facilitate scaling; (2) assessing key stakeholders' experience with the services (i.e., clinics, pharmacists, patients); and (3) assessing preliminary short-term impact on patients (i.e., quality of life, % of COVID positive over 3 months). These aims will be accomplished through surveys, focus groups, and clinic data. With implementation of services planned to start in June 2020, the timeline for this 6-month project aligns well with our existing CMM telehealth grant.

August 31st Milestones

- Existing project IRB will be amended to accommodate the additional data collection
- Preparation of all surveys/focus group protocols (July)
- An implementation tracking tool, including key process metrics (e.g., % of COVID-related referrals by the pharmacist), will be developed to facilitate implementation documentation (July)
- The pharmacist focus group (3) will be conducted to obtain experience data, successes, challenges, and lessons learned (August)
- NC clinic staff/providers willing to participate in the survey/focus group will be scheduled (August)

December 31st Milestones

- NC clinic staff/providers (N=20) will complete a mixed methods experience survey, with a subset (N=5) participating in a focus group to elaborate on results (September)
- Completion of patient responsiveness and a quality of life surveys (N=40, 10/clinic) to assess their experience w/the services and the impact of these services on their life during COVID (October)
- Rates of COVID positive testing in participating patients will be collected over the first 3 month of the intervention period (November)
- All data will be analyzed and synthesized (November)
- At least one dissemination effort (e.g., report, white paper) will be drafted and delivered to NCGA and UNC leadership (December)

BUDGET JUSTIFICATION

Personnel: \$65,585

Jon Easter, Faculty and Center Director (as needed)

Jon will be responsible for leading the dissemination efforts.

Melanie Livet, Research Track Faculty (22.432% or 1.35 cal months)

Dr. Livet will be responsible for leading the project (overseeing the implementation work, ensuring best practices, and managing the overall project execution).

Jordana Levitt, Implementation RA (20% or 1.20 cal months)

Jordana will be responsible for managing and executing on the data collection process.

Shweta Pathak, Health Services Researcher (26.486% or 1.59 cal months)

Shweta will be responsible for analyzing the quantitative data.

Amy Cardenas, Research Associate (42% or 2.52 cal months)

Amy will assist with the implementation activities of the project (documentation of the implementation process and data collection).

Fringe Benefits:

The fringe benefits are calculated based on the rates detailed at <https://research.unc.edu/files/2020/01/osr-CY-2020-Annual-Fringe-Benefits-Memo.pdf>

Other: \$120

Transcription costs

A total of \$120 will be used to pay for the cost of transcribing the NC clinic staff/providers focus groups.