

## 2020 Model Practices

### Applicant Information

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### Size

Select a size: \*

Small (0-50,000)  Medium (50,000-499,999)  Large (500,000+)

### Application Information

Local Health Department/Organization Name: \*

Florida Department of Health-Duval

Title of Practice: \*

Medication Adherenc

Submitter Name: \*

Samantha Thompson

Submitter Title: \*

The Impact of Pharmacist Implemented HIV Medication Adherence in Minority Communities

Submitter Email: \*

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State: \*

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Zip Code: \*

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## Practice Categories

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select the most relevant category that applies most to your practice: : \*

- |   |   |  |   |  |
|---|---|--|---|--|
| <input type="checkbox"/> Access to Care         | <input type="checkbox"/> Advocacy and Policy Making     | <input type="checkbox"/> Animal Control          | <input type="checkbox"/> Coalitions and Partnerships          | <input type="checkbox"/> Communications/Public Relations |
| <input type="checkbox"/> Community Involvement  | <input type="checkbox"/> Cultural Competence            | <input type="checkbox"/> Emergency Preparedness  | <input type="checkbox"/> Environmental Health                 | <input type="checkbox"/> Food Safety                     |
| <input type="checkbox"/> Global Climate Change  | <input type="checkbox"/> Health Equity                  | <input checked="" type="checkbox"/> HIV/STI      | <input type="checkbox"/> Immunization                         | <input type="checkbox"/> Infectious Disease              |
| <input type="checkbox"/> Information Technology | <input type="checkbox"/> Injury and Violence Prevention | <input type="checkbox"/> Marketing and Promotion | <input type="checkbox"/> Maternal-Child and Adolescent Health | <input type="checkbox"/> Organizational Practices        |
| <input type="checkbox"/> Other                  | <input type="checkbox"/> Primary Care                   | <input type="checkbox"/> Quality Improvement     | <input type="checkbox"/> Research and Evaluation              | <input type="checkbox"/> Tobacco                         |
| <input type="checkbox"/> Vector Control         | <input type="checkbox"/> Water Quality                  | <input type="checkbox"/> Workforce               |   |  |

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select the second most relevant category that applies most to your practice: : \*

- |   |   |  |   |  |
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## Overview: Provide a brief summary of the practice in this section (750 Word Maximum)

Your summary must address all the questions below:

- Brief description of LHD- location, demographics of population served in your community.
- Describe public health issue.
- Goals and objectives of the proposed practice.
- How was the practice implemented/activities.
- Results/Outcomes (list process milestones and intended/actual outcomes and impacts.
- Were all of the objectives met?
- What specific factors led to the success of this practice?
- Public Health impact of practice.
- Website for your program, or LHD.

The FAMU-DOH Medication Adherence Program is designed as a practice that has been a positive staple in the Duval community for over five years. Located in Jacksonville, Florida, the Florida Department of Health-Duval (FDOHD, <http://duval.floridahealth.gov/index.html>) is the largest provider of HIV specialty care in Jacksonville. Serving over >1,500 HIV patients, FDOHD is dedicated to the comprehensive care of this population and also determined to foster pathways for all patients to be virally suppressed. This dedication and service is the design of the pharmacist-initiated and engineered medication adherence program. Funded by Ryan White Part C and clinically applied by the Senior Clinical Pharmacist and Assistant Professor of Advanced Pharmacy Practice at Florida A&M College of Pharmacy, the medication adherence program is supervised by the Senior Clinical Pharmacist. The Medication Adherence Program is composed of FAMU College of Pharmacy and Institute of Public Health clinical pharmacists as well as Pharm.D. Candidates. Pharm.D. Candidates are monitored by registered pharmacists at all times. Progress of medical interventions and adherence are monitored and submitted monthly to the Florida Department of Health.

FDOH also incorporates a central pharmacy on campus to continue the comprehensive care of these patients allowing both clinical outreach in the practice area and dispensing and medication adherence follow up expeditiously in the pharmacy.

Medication adherence, being the quintessential challenge of most therapies and huge public health issue, is key to achieving viral suppression. Therapeutic success has been achieved with anti-retroviral therapy, decreasing morbidity and mortality. First line therapy has resulted in adequately treating patients, blocking resistance, lowering adverse side effects, and contributing to increased CD4(+) counts and lowering viral load. With emerging and pharmacokinetically stable advances in HIV medication regimens, there has been an alarming incidence in HIV in Duval as well as a rising level of viral load. Viral suppression, usually measured by a viral copy of <200 copies/mL or less, is the goal of HIV therapy. Viral suppression, as well as high CD4(+) count, not only ensures the patient's successful immune response but also severely decreased the ability to spread the virus to another person. In 2015, Dr. LeMorris Prier, former Sr. Clinical Pharmacist, was touched by the amount of minority men not reaching undetectable status. He implemented the FAMU-FDOH Medication Adherence Program to ensure that all patients, especially minority male HIV patients, were able to access their medication and an outlet to hold themselves accountable for their therapy. Weekly to monthly appointments and daily adherence calls were scheduled and success was measured by decrease in viral load, increase in CD4(+) count, and quality of life surveys. This practice still continues today with a compendium of data that furthers research and positively impacts public health.

#### Goals of the Medication Adherence Program

- Consistent delivery of pharmacy services to meet organizational goals of our internal and external customers
- Collaboration with our core program teams, Disease Control Division (DCD) and Aids Program Office (APO)
- Further development of a graduate pharmacy training program
- Achieving a 95% adherence level for all HIV patients serviced from Central Pharmacy measured by an undetectable viral load

#### Deliverables of the Medication Adherence Program

- Develop and maintain a supportive clinical pharmacy service that enhances the pharmacy functions and improves client outcomes. These outcomes reflect current national goals as outlined in the Center for Disease Control for the treatment and prevention of HIV/AIDS. The program will support organizational values ensuring the following:
  - Provide consistent, accessible, and professional client and team dynamics that foster opportunities to improve client health outcomes
  - Cultivate and mentor pharmacy graduate students participating in research development, medication therapy management, and patient care process development
  - Provide at least 40 hour/week medication consultations to all providers for medication recommendations
  - Provide at least 40 hour/week access to all patients for medication consultations, adherence appointments, and outreach
  - Reaching at least 60 non virally suppressed patients via phone or in person for medication adherence interviews and follow up

Impactful outcomes have been both objective and subjective. Feedback from the community has been immensely positive, non-compliance lowering from 88% in 2016 to >40% in 2019. Huge milestones include positive feedback from the state capital, success in large audits and reviews by Ryan White, and submission for publication of adherence research. Medication adherence is one of the largest public health issues however it is the honor of this program to address the behavioral aspect of HIV therapy.

Monthly reports to the State of Florida are required to be submitted by the Sr. Clinical Pharmacist describing what obstacles occurred recently that may have impacted any success in the program. Objectives that are met monthly include the contact of at least 60 non virally suppressed patients. Reaching goals of viral suppression on a larger scale can be much more challenging. Outpatient adherence is, once again, a behavioral public health issue. However, providing constant verbal and medical support is extremely helpful for our patients. Success we have found with patients in this program usually centers around monthly pick-ups that were precluded by phone calls from the adherence team to pick up medication. These pick-ups are then followed by a brief medication adherence interview by the pharmacist or Pharm.D. Candidate.

A Model Practice must be responsive to a particular local public health problem or concern. An innovative practice must be -

1. new to the field of public health (and not just new to your health department) OR
2. a creative use of an existing tool or practice, including but not limited to use of an Advanced Practice Centers (APC) development tool, The Guide to Community Preventive Services, Healthy People 2020 (HP 2020), Mobilizing for Action through Planning and Partnerships (MAPP), Protocol for Assessing Community Excellence in Environmental Health (PACE EH). Examples of an inventive use of an existing tool or practice are: tailoring to meet the needs of a specific population, adapting from a different discipline, or improving the content.

Please state the Responsiveness and Innovation of your practice : \*

This practice is not new to the field of public health although it does address a huge public health issue with a creative way of modifying an existing tool: medication adherence outreach. Primarily providing care for the minority HIV population in Duval, the FAMU-FDOH Medication Adherence Program possessed pharmacist initiated and engineered adherence initiative that was designed by minority pharmacists to connect with minority patients. The program is not specifically implemented for minority patients however it was initially designed to meet with specific needs of minority HIV patients (particularly minority male patients). In 2016, over 85% of the minority male patients were reported as either non adherent to their medication regimens, lab appointments, and/or doctor's appointments. Research prior to the initiation of this program demonstrated the lowest adherence in HIV therapy was from minority males. The Department of Health recognized this need and fostered a relationship with a FAMU College of Pharmacy, a historically black college, that would help address this specific need. Pharmacists, who are now seen as invaluable members of the healthcare team, have the training to foster a full clinical acumen and lifelong learning, possess the skill of bridging the clinical portion and medication maintenance. The Senior Clinical Pharmacist funded for this program is not only required to have an extensive research and clinical background but also demonstrates competency in the clinic and lab on campus and verification, ordering, and dispensing of all medications prescribed in the clinic. Innovation was expressed with a simple question: Would minority populations feel compelled to be more adherent if they had access to an adherence counselor to help them navigate through their care and advocate for their health? Inventive tools involving extensive empathy and cultural competency were applied extensively. While not always able to positively reach and maintain every patient, positive feedback was enormous.

## LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broad-based involvement and participation of community partners (e.g., government, local residents, business, healthcare, and academia). If the practice is internal to the LHD, it should demonstrate cooperation and participation within the agency (i.e., other LHD staff) and other outside entities, if relevant. An effective implementation strategy includes outlined, actionable steps that are taken to complete the goals and objectives and put the practice into action within the community.

- Goal(s) and objectives of practice
- What did you do to achieve the goals and objectives?
  - Steps taken to implement the program
- Any criteria for who was selected to receive the practice (if applicable)?
- What was the timeframe for the practice were other stakeholders involved?
- What was their role in the planning and implementation process?
  - What does the LHD do to foster collaboration with community stakeholders? Describe the relationship(s) and how it furthers the practice goal(s)
- Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/ budget breakdown.

The FAMU-DOH Medication Adherence Program is designed as a practice that has been successfully granted a plethora of resources that have maintained this practice for several years. The medication adherence program is funded by Ryan White Part C and is clinically applied by the Senior Clinical Pharmacist and Assistant Professor of Advanced Pharmacy Practice for a yearly contract. Maintenance and sustainability are reviewed by the State of Florida and Ryan White every month with Medication Adherence and Viral Suppression reports which are completed by the Sr. Clinical Pharmacist. In 2015, Dr. LeMorris Prier, former Sr. Clinical Pharmacist, was touched by the amount of minority men not reaching undetectable status. He implemented the FAMU-FDOH Medication Adherence Program to ensure that all patients, especially minority male HIV patients, were able to access their medication and an outlet to hold themselves accountable for their therapy. Weekly to monthly appointments and daily adherence calls were scheduled and success was measured by decrease in viral load, increase in CD4(+) count, and quality of life surveys. This practice still continues today with a compendium of data that furthers research and positively impacts public health. While the implementation and planning process was simple in theory, challenges that occur between any two entities presented themselves, mostly financially. These challenges were addressed with the involvement and positive participation between FAMU and DOH. Consistent and effective reporting has been a measurable outlet to remain compliant with not only all standards set forth by Ryan White but also standards of HIV medication adherence and care. What was an invaluable lesson learned about the partnership between an academic entity and a local health department is maintaining and fostering the professional bridge between the two organizations. Complete transparency, even in the midst of lack of funding, disappointing results, low adherence, and distorted communication, is always required for the best outcome between two entities. Both organizations, FAMU and the Department of Health-Duval, have made a commitment to remain transparent about the deliverables of this practice. Measuring clear deliverables and communicating effectively to the team regarding follow up, obstacles, and triumphs is essential for success. This success isn't limited to the success of continuing the grant. In my opinion, it is primarily measured by the subjective and objective response of the patients in our program. Since adherence is measured by objective data, it is collected by subjective data. This includes phone calls, office visits, and medication adherence appointments. These visits are not long, usually 15-20 minutes, including a full evaluation of medication regimen, possible adverse side effects, access to care, and most importantly the accomplishing viral suppression. Of course, objective data such as quarterly lab results are necessary for measuring the effectiveness of this practice as well. Cost/benefit analysis are completed by the Executive Leadership Team yearly at the Department of Health, evaluating the results of the viral suppression and medication adherence programs, as well as the impact the pharmacy medication adherence team and clinical pharmacy interns have made on the population.

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Steps that are consistently completed to continue the success and growth of the medication adherence program include monthly follow up with the State of Florida (Ryan White) as well as with the contract manager, medical director, and director of pharmacy. These reports and follow up describe the statistical analysis of the adherence program, particularly patients who are not virally suppressed.

No start up costs were needed with implementation of this practice.

## Evaluation

Evaluation assesses the value of the practice and the potential worth it has to other LHDs and the populations they serve. It is also an effective means to assess the credibility of the practice. Evaluation helps public health practice maintain standards and improve practice. Two types of evaluation are process and outcome. Process evaluation assesses the effectiveness of the steps taken to achieve the desired practice outcomes. Outcome evaluation summarizes the results of the practice efforts. Results may be long-term, such as an improvement in health status, or short-term, such as an improvement in knowledge/awareness, a policy change, an increase in numbers

reached, etc. Results may be quantitative (empirical data such as percentages or numerical counts) and/or qualitative (e.g., focus group results, in-depth interviews, or anecdotal evidence).

- What did you find out? To what extent were your objectives achieved? Please re-state your objectives.
- Did you evaluate your practice?
  - List any primary data sources, who collected the data, and how? (if applicable)
  - List any secondary data sources used. (if applicable)
  - List performance measures used. Include process and outcome measures as appropriate.
  - Describe how results were analyzed.
  - Were any modifications made to the practice as a result of the data findings?

Please enter the evaluation results of your practice : \*

It is honorable to say, as a researcher, that long term health goals are clearly being reached. This is seen with both objective and subjective patient data. What was discovered was that HIV medication adherence, although primarily target for minority patients and implemented by minority pharmacists, is still completely behavioral. Access to care at FDOH may be extremely manageable for some patients but for others, no matter what background they may be from, is impossible. We have seen this primary data in patient surveys throughout the past 4 years both at the pharmacy as well as in research settings for IRB approval and publication. Additional data is compiled by the Pharm.D. Candidates and Sr. Clinical pharmacist and is compressed by a statistician from Florida A&M University. With over a 40% increase in medication, lab, and clinical appointment compliance, short term success has been reached with more undetectable virus statuses. However, long term goals, some reaching over 10 years, include completely eradicating HIV from the population entirely. Another includes achieving viral suppression for >95% of patients in Duval. Results, whether monthly or quarterly, are analyzed by the Senior Clinical Pharmacist, Director of Pharmacy, Chief Medical Director, and contract manager. Performance measures, outside of subjective and objective information from patients and team members include laboratory levels, appointment adherence, and successful medication pick ups every 30 days. Modifications made included incorporating a "ready fill" program for patients in compliance with their Ryan White and AIDS Drug Assistance Program (ADAP). This additional program has allowed patients to faithfully pick up their medication every thirty days without calling for a refill request. The Medication Adherence program is able to access this system to quickly to find patients who have missed their pick up times. A phone call is made to the patient to discuss the importance of adherence and picking up their medication. A further medication interview is completed over the phone as a follow up and discussion of obstacles are covered with the patient. The provider is always immediately informed of encounter. Further developments include modifying to delivering medications to patients without transportation.

## Sustainability

Sustainability is determined by the availability of adequate resources. In addition, the practice should be designed so that the stakeholders are invested in its maintenance and to ensure it is sustained after initial development (NACCHO acknowledges that fiscal challenges may limit the feasibility of a practice's continuation.)

- Lessons learned in relation to practice.
- Lessons learned in relation to partner collaboration. (if applicable)
- Did you do a cost/benefit analysis? If so, describe.
- Is there sufficient stakeholder commitment to sustain the practice?
  - Describe sustainability plans.

Please enter the sustainability of your practice : \*

The FAMU-DOH Medication Adherence Program is designed as a practice that has been successfully granted a plethora of resources that have maintained this practice for several years. The medication adherence program is funded by Ryan White Part C and is clinically applied by the Senior Clinical Pharmacist and Assistant Professor of Advanced Pharmacy Practice. Maintenance and sustainability are reviewed by the State of Florida and Ryan White every month with Medication Adherence and Viral Suppression reports which are completed by the Sr. Clinical Pharmacist. This reporting has been an effective and measurable outlet to remain compliant with not only all healthcare standards but also standards of HIV medication adherence and care. What was an invaluable lesson learned about the partnership between an academic entity and a local health department is maintaining and fostering the professional bridge between the two organizations. Complete transparency, even in the midst of lack of funding, disappointing results, low adherence, and distorted communication, is always required for the best outcome between two entities. Lessons learned in relation to practice sustainability have been involved with the research and success of lowering viral load in our patient population. This, I found, requires an exceptional team. Both organizations, FAMU and the Department of Health-Duval, have made a commitment to remain transparent about the deliverables of this practice. Measuring clear deliverables and communicating effectively to the team regarding follow up, obstacles, and triumphs is essential for success. This success isn't limited to the success of continuing the grant. In my opinion, it is primarily measured by the subjective and objective response of the patients in our program. Since adherence is measured by objective data, it is collected by subjective data. This includes phone calls, office visits, and medication adherence appointments. These visits are not long, usually 15-20 minutes, including a full evaluation of medication regimen, possible adverse side effects, access to care, and most importantly the accomplishing viral suppression. Of course, objective data such as quarterly lab results are necessary for measuring the effectiveness of this practice as well. Cost/benefit analysis are completed by the Executive Leadership Team yearly at the Department of Health, evaluating the results of the viral suppression and medication adherence programs, as well as the impact the pharmacy medication adherence team and clinical pharmacy interns have made on the population.

### Additional Information

How did you hear about the Model Practices Program?: \*

- I am a previous Model Practices applicant
- At a NACCHO conference
- Colleague in my LHD
- Colleague from another public health agency
- E-Mail from NACCHO
- NACCHO Publication (Connect, Exchange, Public Health Dispatch)
- NACCHO Website

Have you applied for Model Practices before?: \*

- No, this is my first time applying.  Yes, I have applied in the past.

If you answered yes to the question above, please let us know the year and award type. :

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