

PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date: January 23, 2024 [X] Consent [ ] Regular  
[ ] Workshop [ ] Public Hearing

Department: Fire Rescue

I. EXECUTIVE BRIEF

**Motion and Title: Staff recommends motion to:**

(A) authorize the County Administrator, or designee, to sign the State FY 2023-2024 annual Emergency Medical Services (EMS) Matching Grant Application requesting \$216,674, to fund 75% of the purchase of 13 Hamilton-T1 ventilators; and

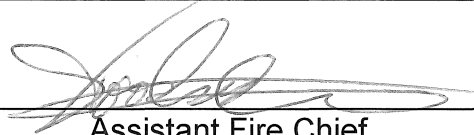
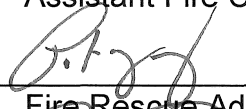
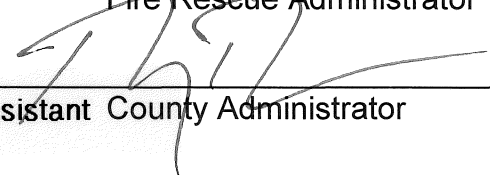
(B) authorize the County Administrator, or designee, to accept, approve, execute and submit, on County's behalf the grant award, representations, certifications, acknowledgments, assurances, standard forms and documents, reimbursement requests, amendments, time frame changes, EMS Grant program change requests, and any other necessary documents, that do not materially change the general scope of terms and conditions of the grant.

**Summary:** The EMS Matching grant is a grant from the Florida Department of Health, Bureau of EMS. This grant application requests \$216,674 from the Emergency Trust Fund for the purchase of 13 Hamilton-T1 ventilators. The total project cost identified in the grant application is \$288,899. **The required match for this grant is \$72,225 (25% of the State approved grant amount),** which will be funded from Fire Rescue's contingency reserve. **Countywide (SB)**

**Background and Justification:** Pursuant to Florida Statutes, Chapter 401, Part II, the FL-EMS Department has established an Emergency Medical Services Trust Fund consisting of a portion of every municipal and county moving violations including DUI convictions. Forty (40) percent of the monies must be used for making matching grants to local agencies, municipalities, emergency medical services organizations, and youth athletic organizations for the purpose of conducting research, increasing existing levels of emergency medical services, evaluation, community education, injury-prevention programs, and training in cardiopulmonary resuscitation and other lifesaving and first aid techniques.

**Attachments**

EMS Matching Grant Application

Recommended by:  12-22-2023  
Assistant Fire Chief Date  
Approved by:  12-22-2023  
Fire Rescue Administrator Date  
Approved by:  1/12/2024  
Assistant County Administrator Date

**II. FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**

Fiscal Years	2024	2025	2026	2027	2028
Capital Expenditures	<u>288,899</u>	_____	_____	_____	_____
Operating Costs	_____	_____	_____	_____	_____
External Revenues	<u>(216,674)</u>	_____	_____	_____	_____
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
<b>NET FISCAL IMPACT</b>	<u>*72,225</u>	_____	_____	_____	_____
<b># ADDITIONAL FTE POSITIONS (Cumulative)</b>	_____	_____	_____	_____	_____

Is Item Included in Current Budget? Yes \_\_\_ No X

Does this item include the use of federal funds? Yes \_\_\_ No X

Does this item include the use of State Funds? Yes X No \_\_\_

Budget Account No.: Fund 1300 Dept 440 Unit 4243 Object 6401

**B. Recommended Sources of Funds/Summary of Fiscal Impact:**

\* There is no fiscal impact at this time. Should the grant be awarded, a budget amendment will be brought to the Board for approval. The funding source for the required match of \$72,225 will be from the Fire Rescue MSTU (Fund 1300).

C. Departmental Fiscal Review: *Raun Maejemi* 12/27

**III. REVIEW COMMENTS**

**A. OFMB Fiscal and/or Contract Development and Control Comments:**

*Lisa Mante* 12/27/2023  
 OFMB 9A 1827  
 AMF 12/27

*Sara M. Amic* 1/8/24  
 Contract Development and Control

**B. Legal Sufficiency**

*Renee Bu* 1/10/24  
 Assistant County Attorney

**C. Other Department Review:**

\_\_\_\_\_  
 Department Director

(THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT.)

## **Application Form Instructions for 2023-2024 Matching Grant Requests**

**Optional:** In your application package cover letter, you may request to be, or recommend a person to be, a reviewer of matching grant applications during this grant cycle. If selected, reviewers will only evaluate applications that are not associated with them.

**Request for Grant Fund Distribution:** This form is page 9 of the application. A staff member of your organization who handles financial transactions with the state must complete the top part of the form. The address must match the address in the state financial system for your organization's corresponding nine-digit ID code and the additional three-digit sequence code of the address for any funds to be provided. State EMS staff will complete the bottom part, as indicated on the form. This form must be completed for distribution of awarded state funds.

**Number of Pages:** Each application cannot exceed more than 15 one-sided pages, including the form and all content. Reviewers may not read any pages beyond 15 one-sided pages. However, the applicant may submit a one-page cover letter and letters of recommendation, which do not count against the 15 one-sided page limit.

**Note:** This instruction form is for informational purposes only and is not part of form DH 1767.



**EMS MATCHING GRANT APPLICATION**

**FLORIDA DEPARTMENT OF HEALTH  
Emergency Medical Services Program**

**Complete all items unless instructed differently within the application**

**Type of Grant Requested:    Rural       Matching**

**ID. Code (The State Bureau of EMS will assign the ID Code – leave this blank) \_\_\_\_\_**

1. <u>Organization Name:</u> Palm Beach County (Fire Rescue)	
2. <u>Grant Signer:</u> (The applicant signatory who has authority to sign contracts, grants, and other legal documents. This individual must also sign this application)	
Name: Patrick J. Kennedy	
Position Title: Fire Rescue Administrator	
Address: 405 Pike Rd	
City: West Palm Beach	County: Palm Beach
State: Florida	Zip Code: 33411
Telephone: 561-616-7000	Fax Number:
E-Mail Address: PKennedy@pbcgov.org	

3. <u>Contact Person:</u> (The individual with direct knowledge of the project on a day-to-day basis and responsibility for the implementation of the grant activities. This person may sign project reports and may request project changes. The signer and the contact person may be the same.)	
Name: Michael Garcia	
Position Title: Captain	
Address: 405 Pike Rd	
City: West Palm Beach	County: Palm Beach
State: Florida	Zip Code: 33411
Telephone: 786-367-5106	Fax Number:
E-Mail Address: mgarcia1@pbcgov.org	

4. Legal Status of Applicant Organization (Check only one response):

(1)  Private Not for Profit [Attach documentation-501(c)(3)]  
 (2)  Private for Profit  
 (3)  City/Municipality/Town/Village  
 (4)  County  
 (5)  State  
 (6)  Other (specify): \_\_\_\_\_


5. Federal Tax ID Number (Nine Digit Number): VF 596000785 \_ \_

6. EMS License Number: 5013 Type: Transport Non-transport Both

7. Number of permitted vehicles by type: 0 BLS; 95 ALS Transport; 74 ALS non-transport.

8. Type of Service (check one):  Rescue;  Fire;  Third Service (County or City Government, non-fire);  Air ambulance;  Fixed wing;  Rotowing;  Both;  Other (specify) \_\_\_\_\_.

9. Medical Director of licensed EMS provider: If this project is approved, I agree by signing below that I will affirm my authority and responsibility for the use of all medical equipment and/or the provision of all continuing EMS education in this project. **[No signature is needed if medical equipment and professional EMS education are not in this project.]**

Signature: \_\_\_\_\_  \_\_\_\_\_ Date: 12/12/2023 \_\_\_\_\_

Print/Type: Name of Director Peter Antevy, MD \_\_\_\_\_

FL Med. Lic. No. ME 93139 \_\_\_\_\_

Note: All organizations that are not licensed EMS providers must obtain the signature of the medical director of the licensed EMS provider responsible for EMS services in their area of operation for projects that involve medical equipment and/or continuing EMS education.

**If your activity is a research or evaluation project, omit Items 10, 11, 12, 13, and skip to Item Number 14. Otherwise, proceed to Item 10 and the following items.**

10. Justification Summary: Provide on no more than three one sided, double spaced pages a summary addressing this project, covering each topic listed below.

A) Problem description (Provide a narrative of the problem or need).  
 B) Present situation (Describe how the situation is being handled now).  
 C) The proposed solution (Present your proposed solution).  
 D) Consequences if not funded (Explain what will happen if this project is not funded).  
 E) The geographic area to be addressed (Provide a narrative description of the geographic area).  
 F) The proposed time frames (Provide a list of the time frame(s) for completing this project).  
 G) Data Sources (Provide a complete description of data source(s) you cite).  
 H) Statement attesting that the proposal is not a duplication of a previous effort (State that this project doesn't duplicate what you've done on other grant projects under this grant program).

**Next, only complete one of the following: Items 11, 12, 13 or 14. Read all four and then select and complete the one that pertains the most to the preceding Justification Summary. Note that on all, that credible before-after differences for emergency victim data are the highest scoring items on the Matching Grants Evaluation Worksheet used by reviewers to evaluate your application form.**

11. Outcome For Projects That Provide or Effect Direct Services To Emergency Victims: This may include vehicles, medical and rescue equipment, communications, navigation, dispatch, and all other things that impact upon on-site treatment, rescue, and benefit of emergency victims at the emergency scene. Use no more than two additional one-sided, double-spaced pages for your response. Include the following.

- A) Quantify what the situation has been in the most recent 12 months for which you have data (include the dates). The strongest data will include numbers of deaths and injuries during this time.
- B) In the 12 months after this project's resources are on-line, estimate what the numbers you provided under the preceding "(A)" should become.
- C) Justify and explain how you derived the numbers in (A) and (B), above.
- D) What other outcome of this project do you expect? Be quantitative and explain the derivation of your figures.
- E) How does this integrate into your agency's five-year plan?

12. Outcome For Training Projects: This includes training of all types for the public, first responders, law enforcement personnel, EMS, and other healthcare staff. Use no more than two additional one-sided, double-spaced pages for your response. Include the following:

- A) How many people received the training this project proposes in the most recent 12-month time period for which you have data (include the dates).
- B) How many people do you estimate will successfully complete this training in the 12 months after training begins?
- C) If this training is designed to have an impact on injuries, deaths, or other emergency victim data, provide the impact data for the 12 months before the training and project what the data should be in the 12 months after the training.
- D) Explain the derivation of all figures.
- E) How does this integrate into your agency's five-year plan?

13. Outcome For Other Projects: This includes quality assurance, management, administrative, and other. Provide numeric data in your responses, if possible, that bear directly upon the project and emergency victim deaths, injuries, and/or other data. Use no more than two additional one-sided, double-spaced pages for your response. Include the following.

- A) What has the situation been in the most recent 12 months for which you have data (include the dates)?
- B) What will the situation be in the 12 months after the project services are on-line?
- C) If this project is designed to have an impact on injuries, deaths, or other emergency victim data, provide the impact data for the 12 months before the project and what the data should be in the 12 months after the project.
- D) Explain the derivation of all numbers.
- E) How does this integrate into your agency's five-year plan?

**Skip Item 14 and go to Item 15, unless your project is research and evaluation and you have not completed the preceding Justification Summary and one outcome item.**

14. Research and Evaluation Justification Summary, and Outcome: You may use no more than three additional one-sided, double spaced pages for this item.

- A) Justify the need for this project as it relates to EMS.
- B) Identify (1) location and (2) population to which this research pertains.
- C) Among population identified in 14(B) above, specify a past time frame, and provide the number of deaths, injuries, or other adverse conditions during this time that you estimate the practical application of this research will reduce (or positive effect that it will increase).
- D) (1) Provide the expected numeric change when the anticipated findings of this project are placed into practical use.  
(2) Explain the basis for your estimates.
- E) State your hypothesis.
- F) Provide the method and design for this project.
- G) Attach any questionnaires or involved documents that will be used.
- H) If human or other living subjects are involved in this research, provide documentation that you will comply with all applicable federal and state laws regarding research subjects.
- I) Describe how you will collect and analyze the data.

**ALL APPLICANTS MUST COMPLETE ITEM 15.**

15. Statutory Considerations and Criteria: The following are based on s. 401.113(2)(b) and 401.117, F.S. Use no more than one additional double-spaced page to complete this item. Write N/A for those things in this section that do not pertain to this project. Respond to all others.

Justify that this project will:

- A) Serve the requirements of the population upon which it will impact.
- B) Enable emergency vehicles and their staff to conform to state standards established by law or rule of the department.
- C) Enable the vehicles of your organization to contain at least the minimum equipment and supplies as required by law, rule, or regulation of the department.
- D) Enable the vehicles of your organization to have, at a minimum, a direct communications linkup with the operating base and hospital designated as the primary receiving facility.
- E) Enable your organization to improve or expand the provision of:
  - 1) EMS services on a county, multi county, or area wide basis.
  - 2) Single EMS provider or coordinated methods of delivering services.
  - 3) Coordination of all EMS communication links, with police, fire, emergency vehicles, and other related services.

16. Work activities and time frames: Indicate the major activities for completing the project (use only the space provided). Be reasonable, most projects cannot be completed in less than six months and if it is a communications project, it will take about a year. Also, if you are purchasing certain makes of ambulances, it takes at least nine months for them to be delivered after the bid is let.

Work Activity	Number of Months After Grant Starts	
	Begin	End
Procurement of equipment	1	6
Protocol Modification	1	2
Training EMS supervisors to operate equipment	6	7
Modify ePCR system to include ventilator	6	7
Place ventilators on the units for use	7	8

17. County Governments: If this application is being submitted by a county agency, describe in the space below why this request cannot be paid for out of funds awarded under the state EMS county grant program. Include in the explanation why any unspent county grant funds, which are now in your county accounts, cannot be allocated in whole or part for the costs herein.

All funds previously awarded to Palm Beach County Fire Rescue under the State EMS County grant were allocated and spent on the Whole Blood Transfusion Program. Any unspent County grant funds are submitted to the State as a change order to roll them into the following County Grant year account.



18. Budget:		
<b>Salaries and Benefits:</b> For each position title, provide the amount of salary per hour, FICA per hour, fringe benefits, and the total number of hours.	<b>Costs</b>	<b>Justification:</b> Provide a brief justification why each of the positions and the numbers of hours are necessary for this project.
N/A	N/A	N/A
TOTAL:	<b><u>\$ 0.00</u></b>	Right click on 0.00 then left click on "Update Field" to calculate Total

<b>Expenses:</b> These are travel costs and the usual, ordinary, and incidental expenditures by an agency, such as, commodities and supplies of a consumable nature, <u>excluding</u> expenditures classified as operating capital outlay (see next category).	<b>Costs:</b> List the price and source(s) of the price identified.	<b>Justification:</b> Justify why each of the expense items and quantities are necessary to this project.
N/A	N/A	N/A
TOTAL:	<b><u>\$ 0.00</u></b>	Right click on 0.00 then left click on "Update Field" to calculate Total



19. <u>Certification:</u>	
My signature below certifies the following.	
I am aware that any omissions, falsifications, misstatements, or misrepresentations in this application may disqualify me for this grant and, if funded, may be grounds for termination at a later date. I understand that any information I give may be investigated as allowed by law. I certify that to the best of my knowledge and belief all of the statements contained herein and, on any attachments, are true, correct, complete, and made in good faith.	
I agree that any and all information submitted in this application will become a public document pursuant to Section 119.07, F.S. when received by the Florida Bureau of EMS. This includes material which the applicant might consider to be confidential or a trade secret. Any claim of confidentiality is waived by the applicant upon submission of this application pursuant to Section 119.07, F.S., effective after opening by the Florida Bureau of EMS.	
I accept that in the best interests of the State, the Florida Bureau of EMS reserves the right to reject or revise any and all grant proposals or waive any minor irregularity or technicality in proposals received, and can exercise that right.	
I, the undersigned, understand and accept that the Notice of Matching Grant Awards will be advertised in the <i>Florida Administrative Weekly</i> , and that 21 days after this advertisement is published I waive any right to challenge or protest the awards pursuant to Chapter 120, F.S.	
I certify that the cash match will be expended between the beginning and ending dates of the grant and will be used in strict accordance with the content of the application and approved budget for the activities identified. In addition, the budget shall not exceed, the department, approved funds for those activities identified in the notification letter. No funds count towards satisfying this grant if the funds were also used to satisfy a matching requirement of another state grant. All cash, salaries, fringe benefits, expenses, equipment, and other expenses as listed in this application shall be committed and used for the activities approved as a part of this grant.	
Acceptance of Terms and Conditions: If awarded a grant, I certify that I will comply with all of the above and also accept any attached grant terms and conditions and acknowledge this by signing below.	
<hr style="width: 40%; margin: 0 auto;"/> Signature of Authorized Grant Signer (Individual Identified in Item 2)	<hr style="width: 40%; margin: 0 auto;"/> <div style="display: flex; justify-content: center; gap: 10px;"> <span>/</span> <span>/</span> </div> MM / DD / YY

DH 1767 [2013]

THE TOP PART OF THE FOLLOWING PAGE MUST ALSO BE COMPLETED AND SIGNED.

APPROVED AS TO FORM  
AND LEGAL SUFFICIENCY

  
COUNTY ATTORNEY



## **10. Justification Summary**

A) Palm Beach County Fire Rescue (PBCFR) is confronted with critical limitations in its ventilator equipment. The existing ventilators on transport units lack versatility and adaptability for various patient needs. Specifically, they cannot accommodate Positive End Expiratory Pressure (PEEP) valves required for cardiac arrest patients, necessitating manual ventilation that risks over-ventilation and lacks precision in determining necessary tidal volumes. Moreover, these ventilators lack essential features such as a fraction of inspired oxygen (FIO<sub>2</sub>) control dial and the ability to adjust ventilation rates according to individual patient needs.

This deficiency leads to challenges in prehospital care, resulting in an overzealous approach to ventilation post-intubation. This discrepancy in equipment between prehospital and hospital ventilators exacerbates compatibility issues. Compounded by a shortage of nursing staff, there's a pressing issue regarding inadequate accompanying personnel for transport crews during transfers to other hospitals.

B) Presently, the management of ventilator settings involves manual adjustments in breathing rates and tidal volumes instead of pressure regulation. However, this makeshift method poses risks of inadequate ventilation, potentially leading to complications for patients during transport. In the case of inter-facility transfers involving critical patients, the ventilator's incompatibility necessitates the presence of a hospital nurse or respiratory technician to accompany the transport, highlighting the critical need for compatibility between devices.

C) PBCFR advocates for a comprehensive enhancement by procuring (13) Hamilton T1 ventilators, allocating (10) for EMS supervisor vehicles, (2) for trauma hawk helicopters, and (1) designated for continuous training purposes. These state-of-the-art ventilators boast advanced features, including the Adaptive Support Ventilation (ASV) mode suitable for patients of all ages, including newborns. The ASV mode continuously adapts key parameters such as respiratory rate, tidal volume, and inspiratory time based on individual patient lung mechanics and effort. Presently, EMS supervisors are tasked with responding to all cardiac arrests, trauma alerts, high-index respiratory medical calls, and inter-facility transports. Equipping the Hamilton T1 ventilators in their vehicles is poised to significantly enhance the care and outcomes for intubated patients in these crucial situations.

D) Without this equipment, patients with COPD, heart failure, and pulmonary edema are at risk of inadequate ventilation, exacerbating their conditions. This may lead to increased morbidity, prolonged hospital stays, and potentially life-threatening complications.

E) In the fiscal year of 2022, PBCFR responded to 154,024 (911) calls, 130,921 were medical calls, and 93,339 transports. Of the total transports, 14,043 were respiratory related, 1255 required intubation, and 729 cardiac arrest. PBCFR has 50 stations with 9 EMS supervisors on shift daily (10 when staffing permits), and 2 trauma hawk helicopters, serving a population of 969,125 covering 1769 square miles with rural areas requiring long transports to the closest appropriate hospital.

F) The plan includes purchasing the equipment within 180 days, followed by personnel training within 30 days. Implementation on the units is slated within 30 days post-training, ensuring swift deployment for improved patient outcomes.

G) Data Sources:

1. Hernández-Tejedor, A., Puebla, V. G., Torres, E. C., Sánchez, A. I., López, R. R., & Calategui, M. D. G. (2023). Ventilatory improvement with mechanical ventilator versus bag in non-traumatic out-of-hospital cardiac arrest: SYMEVECA study, phase 1. *Resuscitation*, 192, 109965. <https://doi.org/10.1016/j.resuscitation.2023.109965>
2. *HAMILTON-T1 - Intelligent transport ventilator | Hamilton Medical*. (n.d.). [https://www.hamilton-medical.com/en\\_US/Products/HAMILTON-T1.html](https://www.hamilton-medical.com/en_US/Products/HAMILTON-T1.html)
3. PBCFR EMS records

H) This grant proposal does not duplicate any previous efforts or duplicate any previous grant projects.

## **11. Outcome for projects that provide or effect direct services to emergency**

### **victims**

A) In the fiscal year of 2022, Palm Beach County Fire Rescue (PBCFR) responded to 154,024 (911) calls, 130,921 were medical calls, and 93,339 transports. Of these transported cases, a considerable 59% constituted Medicare qualified patients. Specifically, within the spectrum of transports, 14,043 cases were respiratory-related, with 1,255 requiring intubation, and 729 categorized as cardiac arrests.

B) In the first 12 months following the project's launch, we foresee immediate and tangible improvements in the care of patients reliant on respiratory support. Specifically, for all our cardiac arrest patients, PBCFR will meticulously assess cases where there's a return of spontaneous circulation (ROSC) alongside a cerebral performance category (CPC) score of 1 or 2, comparing data from the year preceding the project's implementation to the subsequent year. The Hamilton T1 offers a versatile array of ventilation modes, catering comprehensively to both invasive and noninvasive therapies suitable for patients of all ages, including newborns. Its integration of Adaptive Support Ventilation (ASV) technology allows for automatic adjustments in therapy, responding dynamically to a patient's breathing patterns and needs. This state-of-the-art technology not only empowers our crews to attend to other critical patient needs during transport but also facilitates simultaneous monitoring of the patient's respiratory response. With the Hamilton T1's capabilities, our teams gain the flexibility to concentrate on various aspects of patient care while maintaining a vigilant focus on the patient's respiratory well-being.

C) The data provided was obtained from our ePCR program, and myCares.net



D) The core objective of this equipment is to elevate the efficiency of respiratory care. However, an additional anticipated improvement lies in mitigating patient anxiety and distress during respiratory emergencies. The integration of the Hamilton T1 is expected to curtail the risk of overzealous ventilation among intubated patients. Its capability to seamlessly transition between different levels of respiratory care without necessitating equipment changes very important. This flexibility not only enhances crew efficiency but also ensures the delivery of optimal care during hospital transport. By offering a smoother transition between respiratory care levels, the Hamilton T1 empowers our teams to navigate respiratory emergencies more effectively while simultaneously alleviating patient distress.

E) Integrating this state-of-the-art ventilator into our EMS supervisor vehicles aligns seamlessly with our primary objective of enhancing patient care. This initiative is a pivotal component of our overarching five-year plan aimed at advancing respiratory care services and ultimately providing superior patient care. The Hamilton T1's design allows for seamless incorporation of software updates as they become available, ensuring the longevity and sustainability of the equipment well beyond the scope of our initial five-year plan. This adaptability not only supports our immediate goals but also future-proofs our capabilities, guaranteeing a sustained commitment to top-tier patient care well into the future

## **15. Statutory Considerations and Criteria**

A) In the fiscal year of 2022, Palm Beach County Fire Rescue (PBCFR) responded to 154,024 (911) calls, 130,921 were medical calls, and 93,339 transports. Among these transported cases, a substantial 59% is comprised of Medicare qualified patients. Given the substantial demand from this patient demographic, the cutting-edge technology embedded in the Hamilton T1 presents a valuable opportunity for PBCFR to improve the level of service to all the residents and visitors of Palm Beach County.

B) The Hamilton T1 meets and exceeds the Florida State statutes found in 64-J section 1.002 and section 1.003.

C) The integration of the Hamilton T1 into PBCFR resources ensures not only compliance but also surpasses the minimum equipment and supply standards outlined in 64-J, sections 1.002 and 1.003. This addition guarantees that PBCFR not only meets but also exceeds the mandated criteria, ensuring the provision of top-tier equipment essential for optimal emergency medical care.

D) N/A

E) The Hamilton T1 will enable PBCFR to improve the provision of:

1. This advanced technology could significantly enhance respiratory care for all residents and visitors of Palm Beach County affected with Chronic Obstructive Pulmonary Disease (COPD), Congestive Heart Failure (CHF) who require Bi-level Positive Airway Pressure (BiPAP), and potentially improve the Cerebral Performance Category (CPC) percentage of patients who achieved Return of Spontaneous Circulation (ROSC).
2. N/A
3. N/A