



Real-World Referral Patterns of PAH Patients to PHA-Accredited Comprehensive Care Centers in the State of Texas 2019-2020

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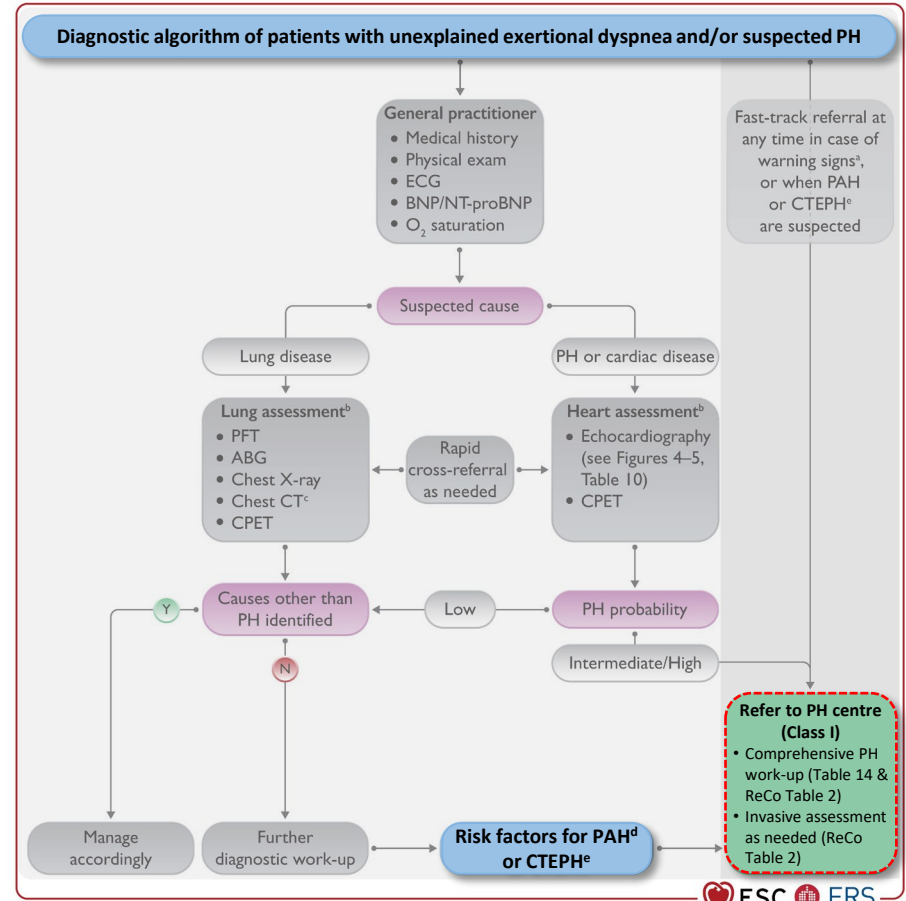
Disclosures

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Background & Purpose

- Guidelines on PH highlight the expertise of PH centers in the diagnosis and treatment of PH^{1,2}
 - PH centers offer a multi-disciplinary approach to diagnosis and treatment
 - Improved outcomes in mortality and hospitalization have been associated with care delivered to PAH patients at PH centers³
- This analysis explores the pattern of referral of PAH patients in one geographic region to these specialized centers

¹Klinger JR, et al. Therapy for Pulmonary Arterial Hypertension in Adults: Update of the CHEST Guideline and Expert Panel Report. *Chest* 2019; 155(3):565-586.
²Humbert M, et al. 2022 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension. *Eur Respir J* 2022; 2200879. Online ahead of print. ³Pi H, et al. Outcomes of Pulmonary Arterial Hypertension Are improved in a Specialty Care Center. *Chest* 2020;158(1):330-340. P(A)H, pulmonary (arterial) hypertension.



Adapted from Humbert M et al. 2022

Methods (1)

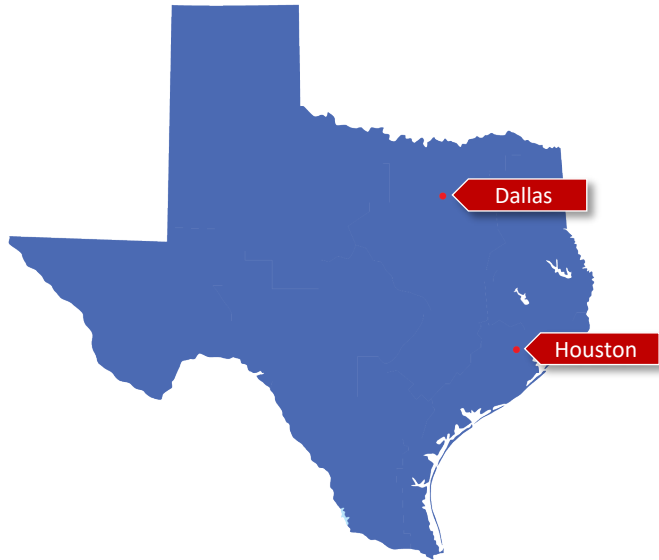
- Retrospective analysis of Texas PAH patients receiving PAH-specific therapy who visited an adult PHA-accredited Center of Comprehensive Care¹ (CCC) in the state
- Data were drawn from the Clarivate Real World Data repository (medical claims database)
- Patient selection:
 - ✓ ≥ 18 years
 - ✓ ≥ 2 PH diagnosis code (416.0, I27.0, I27.21) ≥ 30 days apart*
 - ✓ PAH-specific medication
 - ✓ ≥ 2 medical claims of any type in *both* 2019 and 2020
 - ✓ Resident of Texas

*Patients with multiple PH diagnostic codes and/or a diagnosis of erectile dysfunction were excluded

¹<https://phassociation.org/phcarecenters>

Methods (2)

- Patients with ≥ 1 medical claim associated with an adult Texas CCC* were designated “CCC patients”
- This proportion was compared to the total number of Texas PAH patients



Rationale for selecting the Texas CCCs as a proxy for analysis:

- Geography
- PHA CCC designation identifies centers as having special expertise in PAH

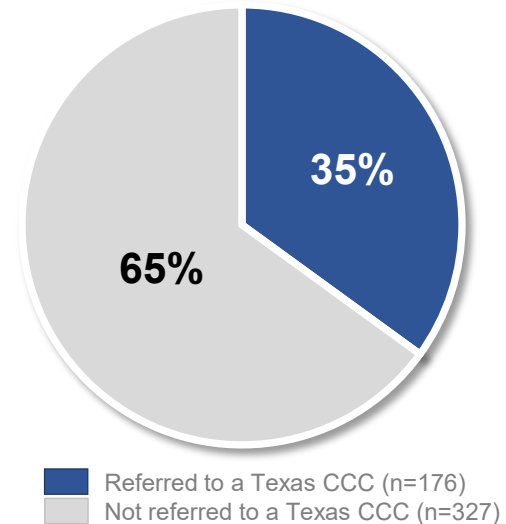
*Houston Methodist Lung Center (Houston) & Pulmonary Hypertension Program UT Southwestern Medical Center (Dallas)

Results (1)

PAH Patient Demographics*

Sex	n (%)
Female	399 (79)
Male	104 (21)
Age	Years
Median	67

Texas PAH Patients*



35% of Texas PAH patients visited an PHA-accredited CCC in Texas over the two-year period

*Texas, 2019-2020, N=503

Results (2)

CCC vs. Non-CCC Patient Demographics

(Texas, 2019 – 2020, N=503)

	CCC (n = 176)	Non-CCC (n = 327)
Sex	n (%)	
Female	149 (85)	250 (76)
Male	27 (15)	77 (24)
Age	Years	
Median	60	69

Compared to non-CCC patients, CCC patients were younger and more predominantly female

Conclusions & Clinical Implications

- This real-world data suggests that PH centers may be underutilized
- Additional research is needed to:
 - Understand national referral patterns
 - Identify and reduce barriers to PH center access
- A growing number of PH centers have been formed in the U.S., increasing the opportunity for the community to partner with these centers

Limitations: Data was pulled using ICD codes, a small cohort limited to a single state, and the exclusion of non-CCC designated expert centers

