

Adherence

Why My Patients Don't Listen to Me

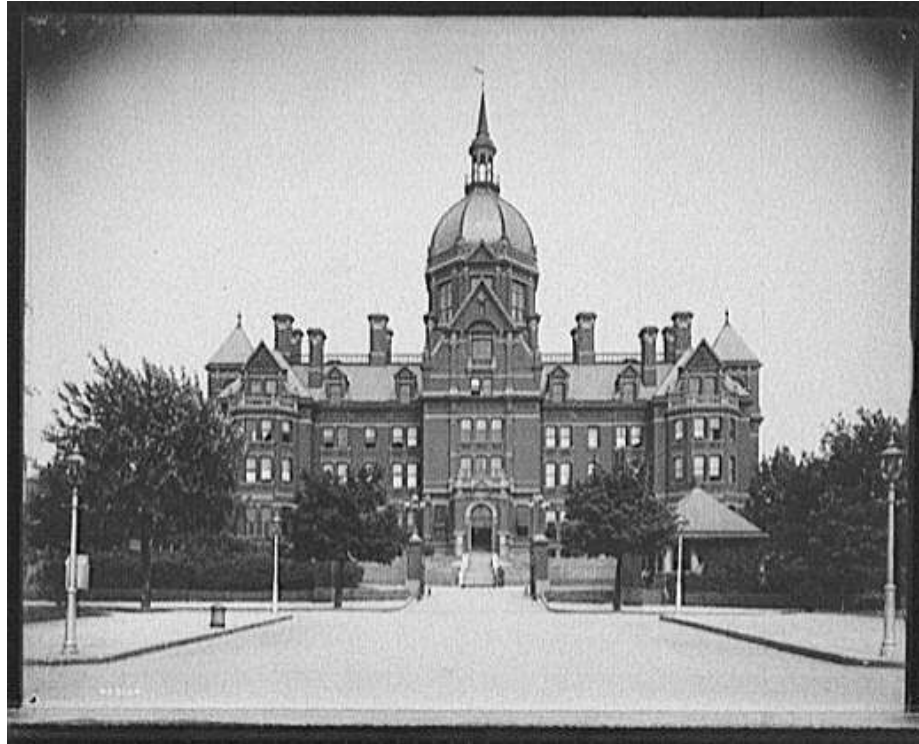
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Eudowood Division of Pediatric Respiratory Sciences

The Johns Hopkins School of Medicine



Hospital Founded in 1889

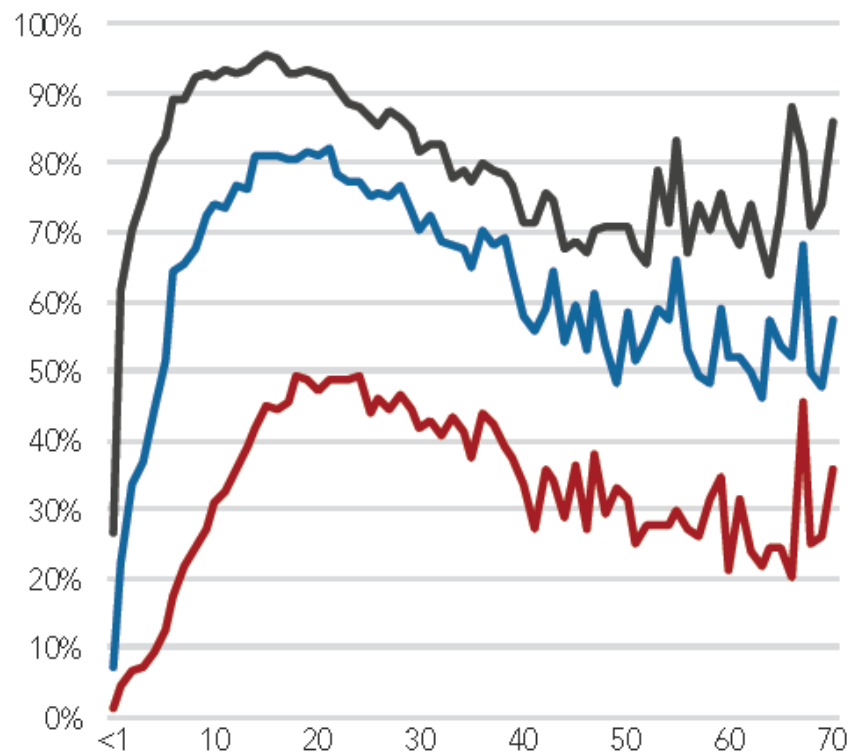
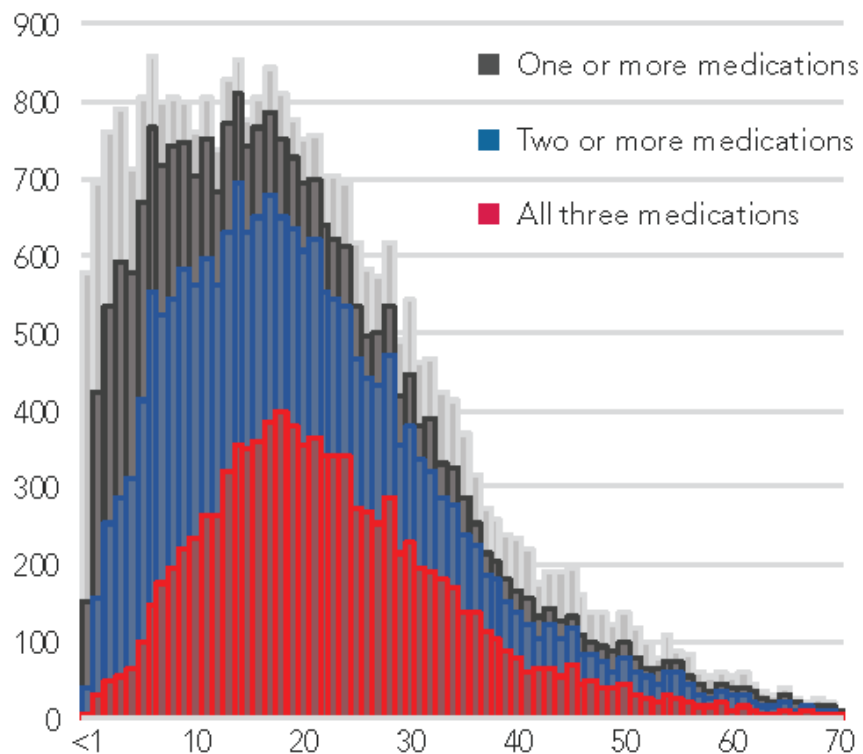




Treatment Burden in CF

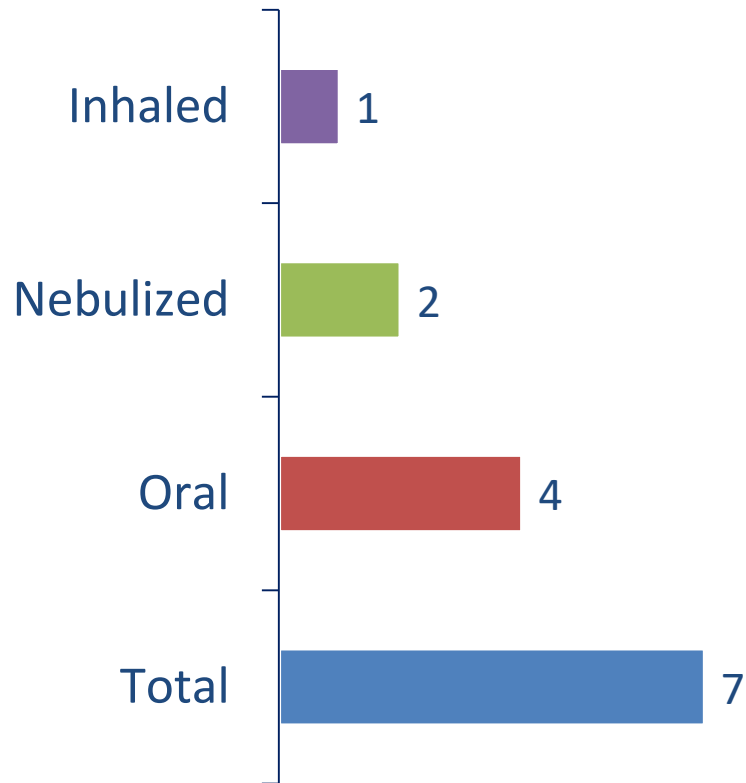
- Level of treatment activity is high regardless of age or disease severity
- New therapies are often added without discontinuing other pre-existing therapies
 - Redundant treatments
 - Cumulative toxicities
 - Overlapping administration, including multiple aerosolized delivery devices
 - May lead to confusing instructions

Inhaled Medication (Dornase Alfa, Hypertonic Saline, Inhaled Antibiotic) Prescription by Age in Years, 2015

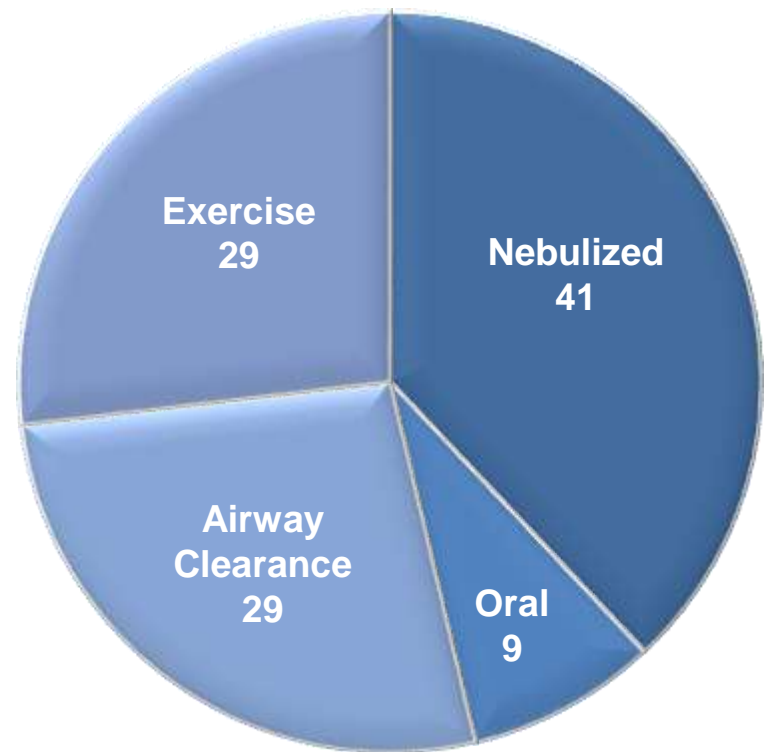


Daily Treatment Burden for Adults

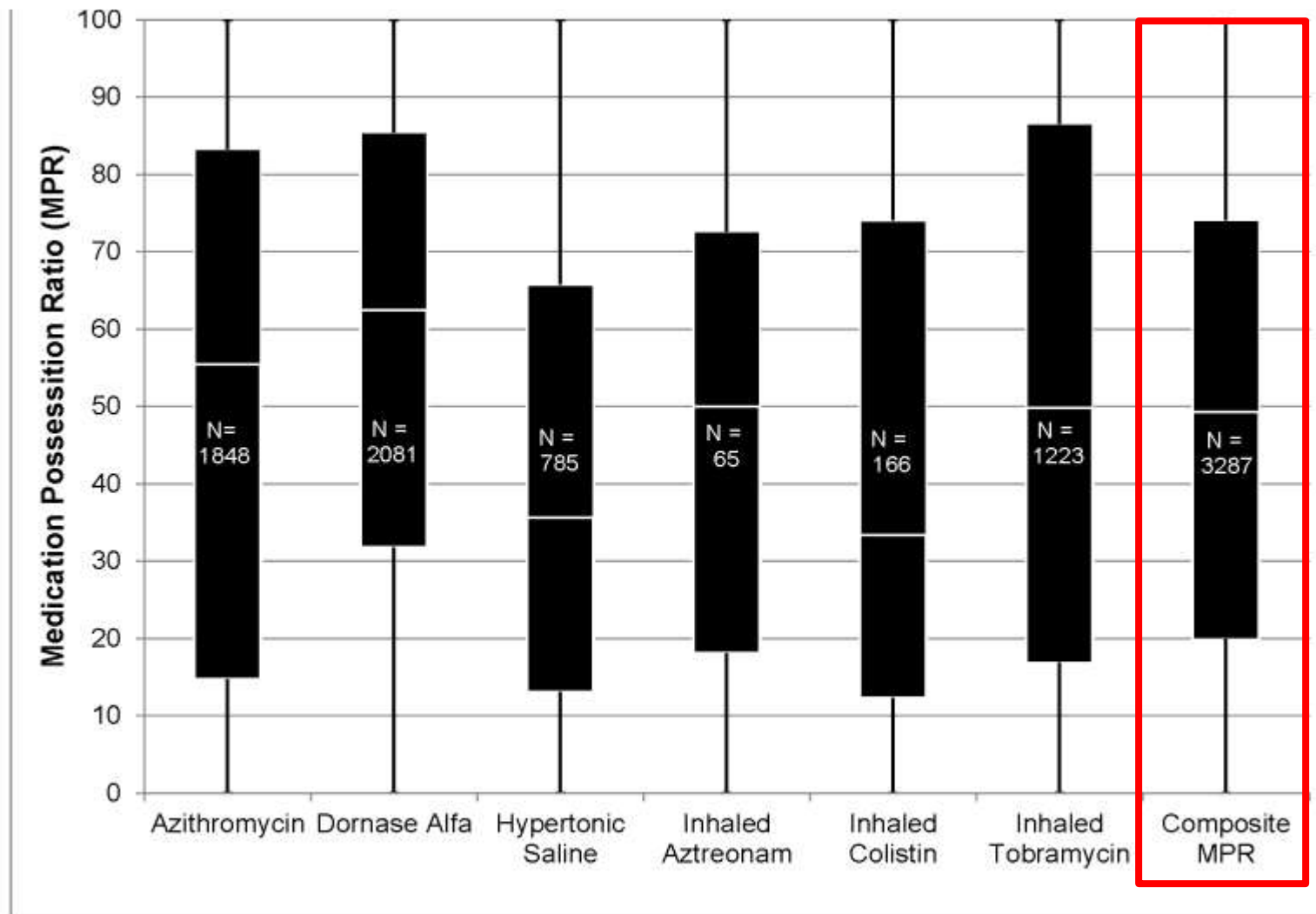
Median Number of Therapies



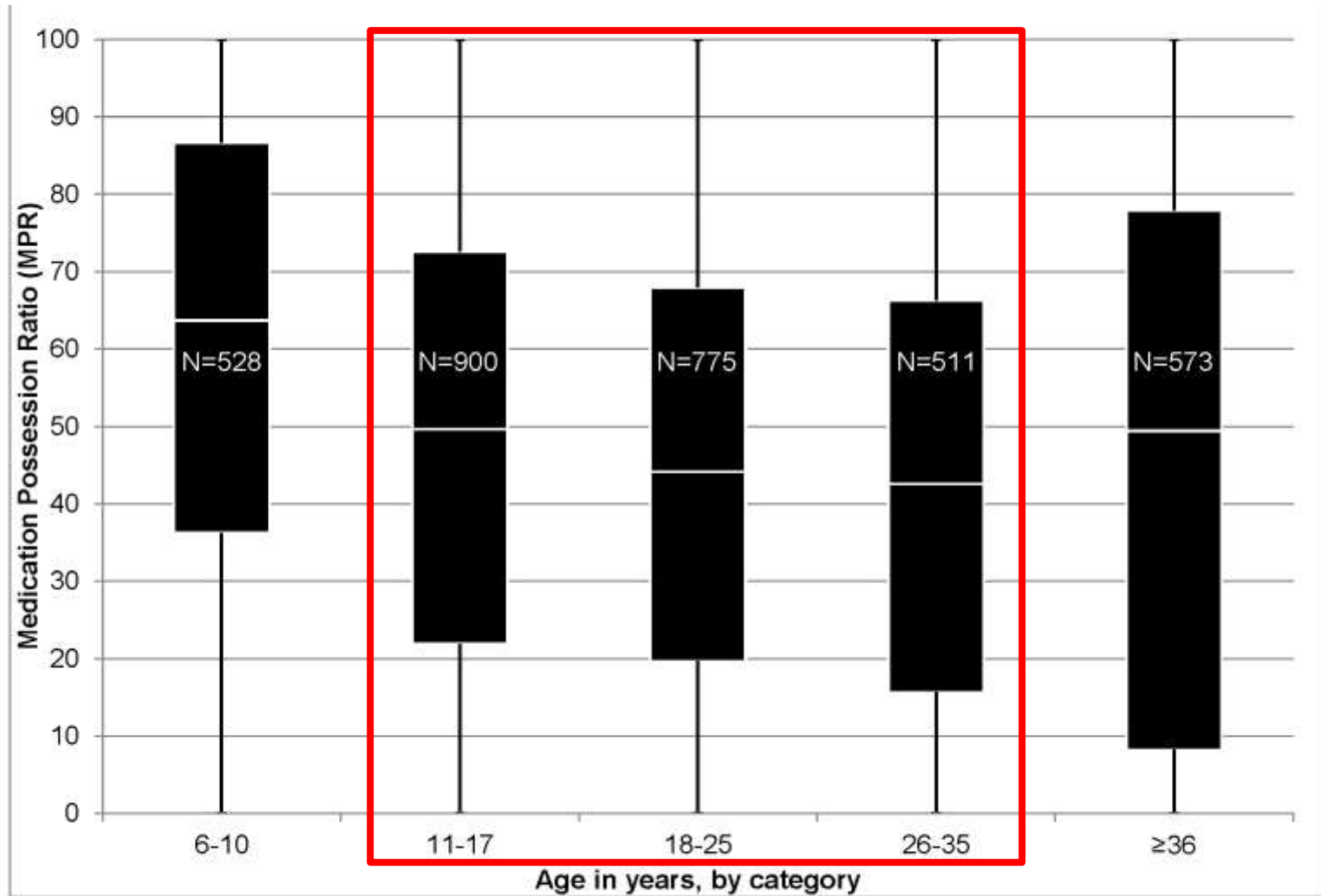
**Median Number of Minutes
(Total = 108)**



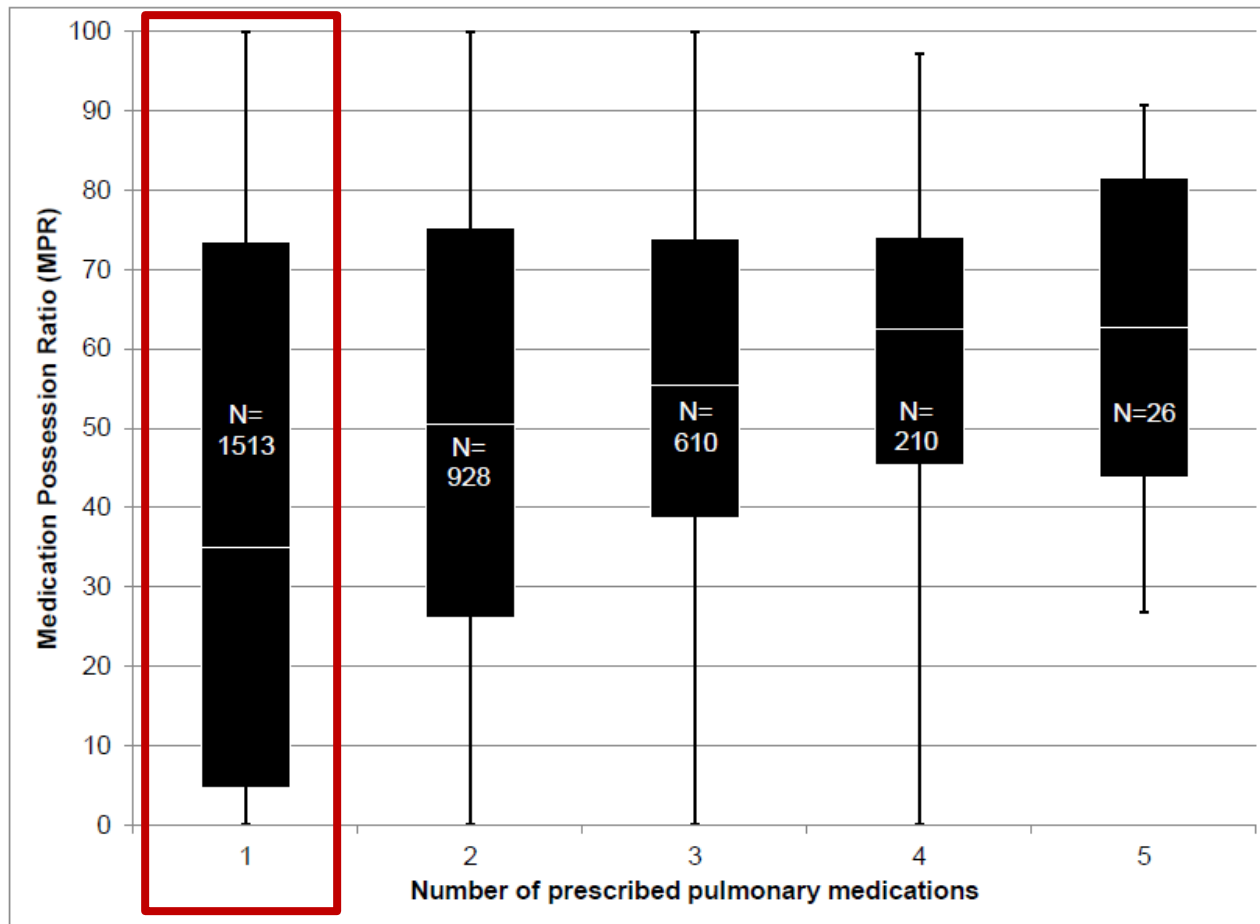
Adherence by Drug



Adherence by Age

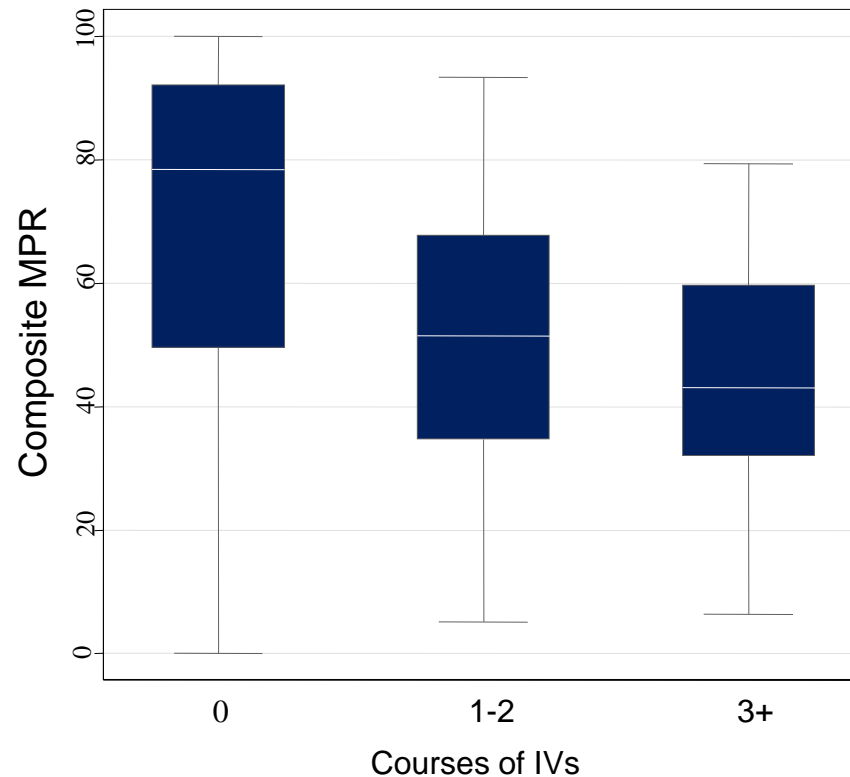


Prescribed Pulmonary Medicines

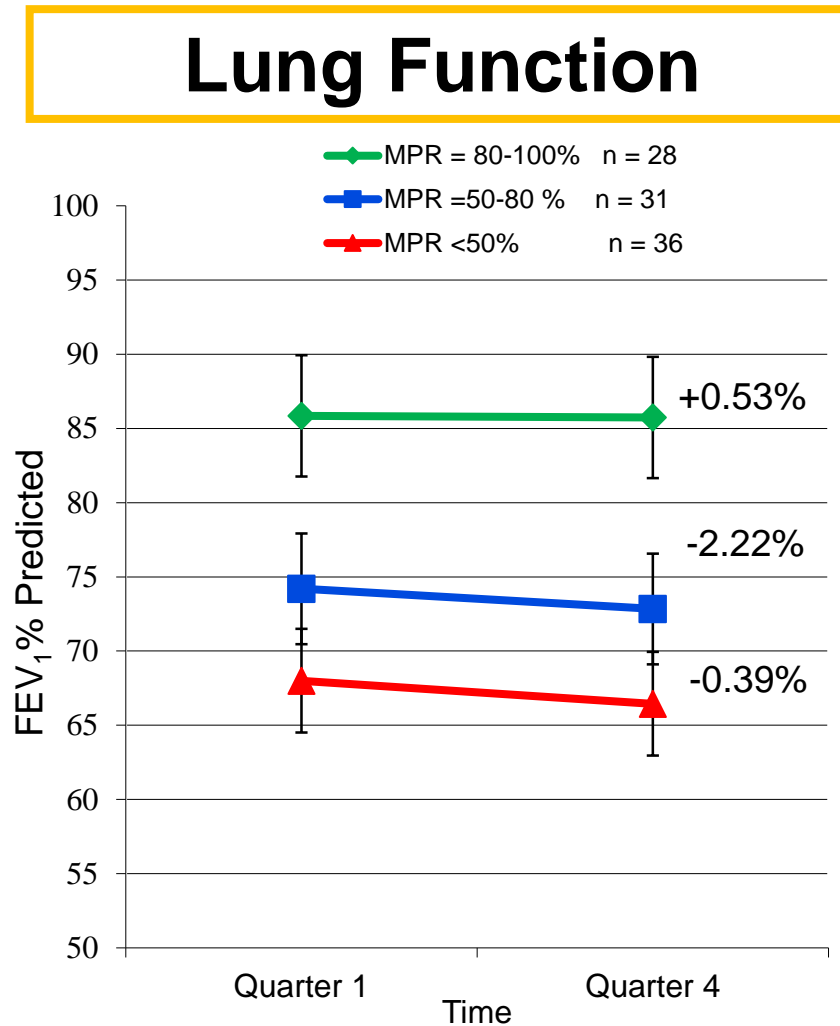


Impact of Nonadherence

Courses of IVs

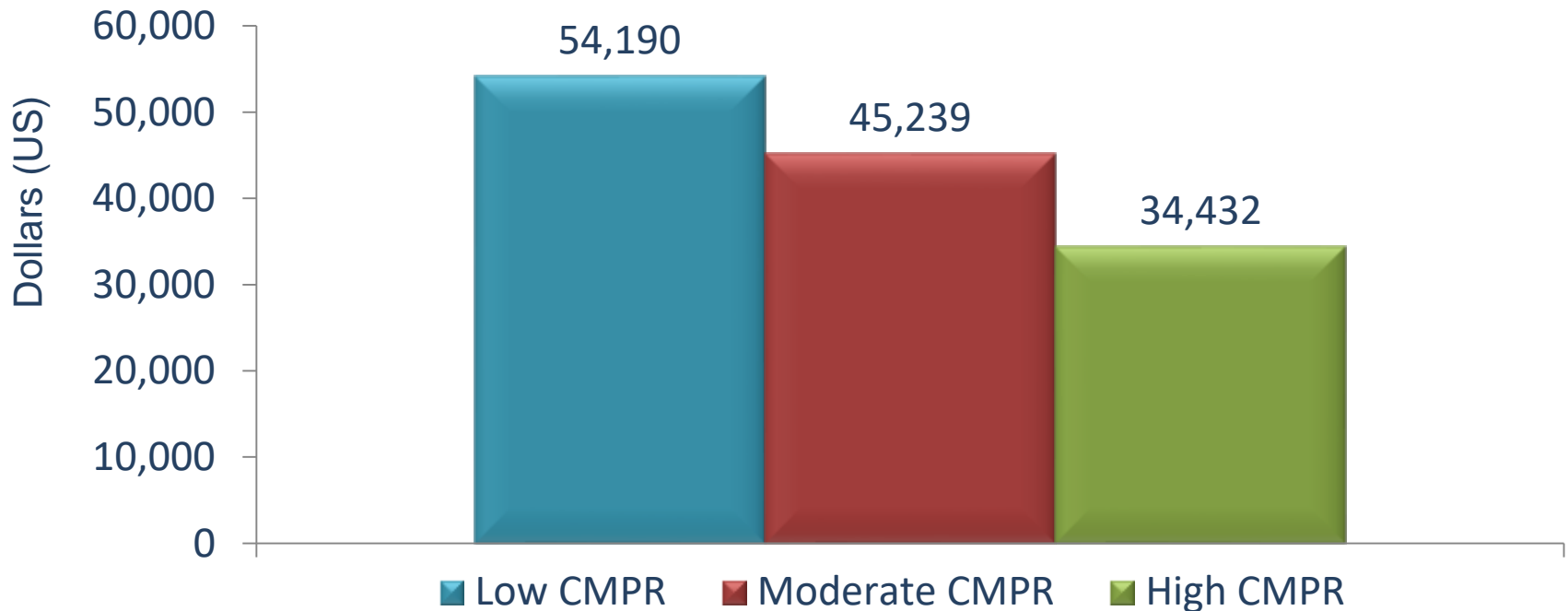


Impact of Nonadherence



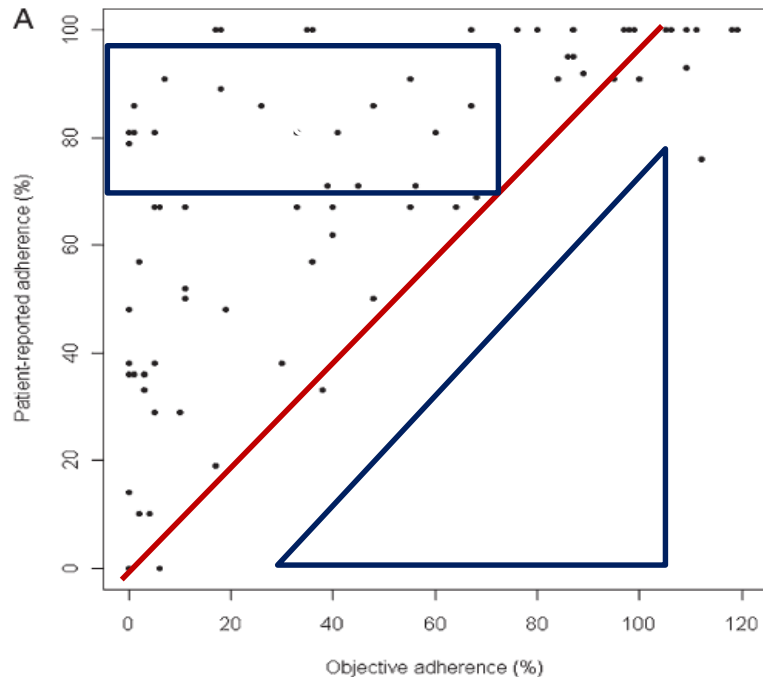
Impact of Nonadherence on Healthcare Costs

CF-Related Healthcare Costs Over 12-Month Period (Mean)

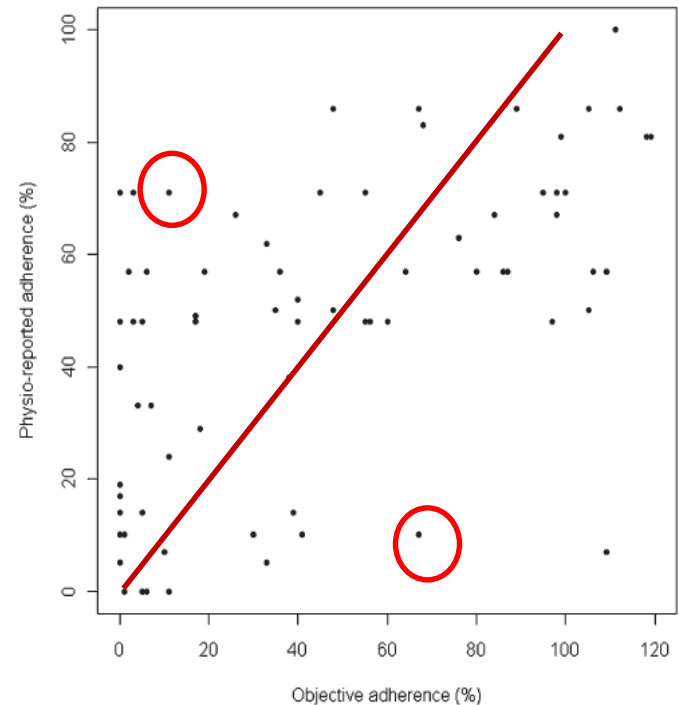


The Challenge of Identifying Nonadherence

PATIENT REPORT



PROVIDER REPORT



Types of Nonadherence

Erratic

- Patient understands therapy, but has difficulty maintaining cumbersome or time-consuming regimens

Intelligent

- Patient deliberately alters or discontinues therapy because he is unconvinced of its benefit

Unwitting

- Patient misunderstands therapy or administration instructions

Types of Nonadherence

Erratic

- Patient understands therapy, but has difficulty maintaining cumbersome or time-consuming regimens
- **Involve the patient/family; show cause-and-effect; simplify regimen; minimize life stressors; refer patient to other families and support groups**

Intelligent

- Patient deliberately alters or discontinues therapy because he is unconvinced of its benefit
- **Link therapy with goals; show cause-and-effect; identify concerns about safety/risk**

Unwitting

- Patient misunderstands therapy or administration instructions
- **Provide written reference materials; give hands-on instruction; refer patient to CF resources**

Steps to Maximize Adherence

Consistency

- Patient receives a clear and congruent message about the importance of adherence from all members of the healthcare team

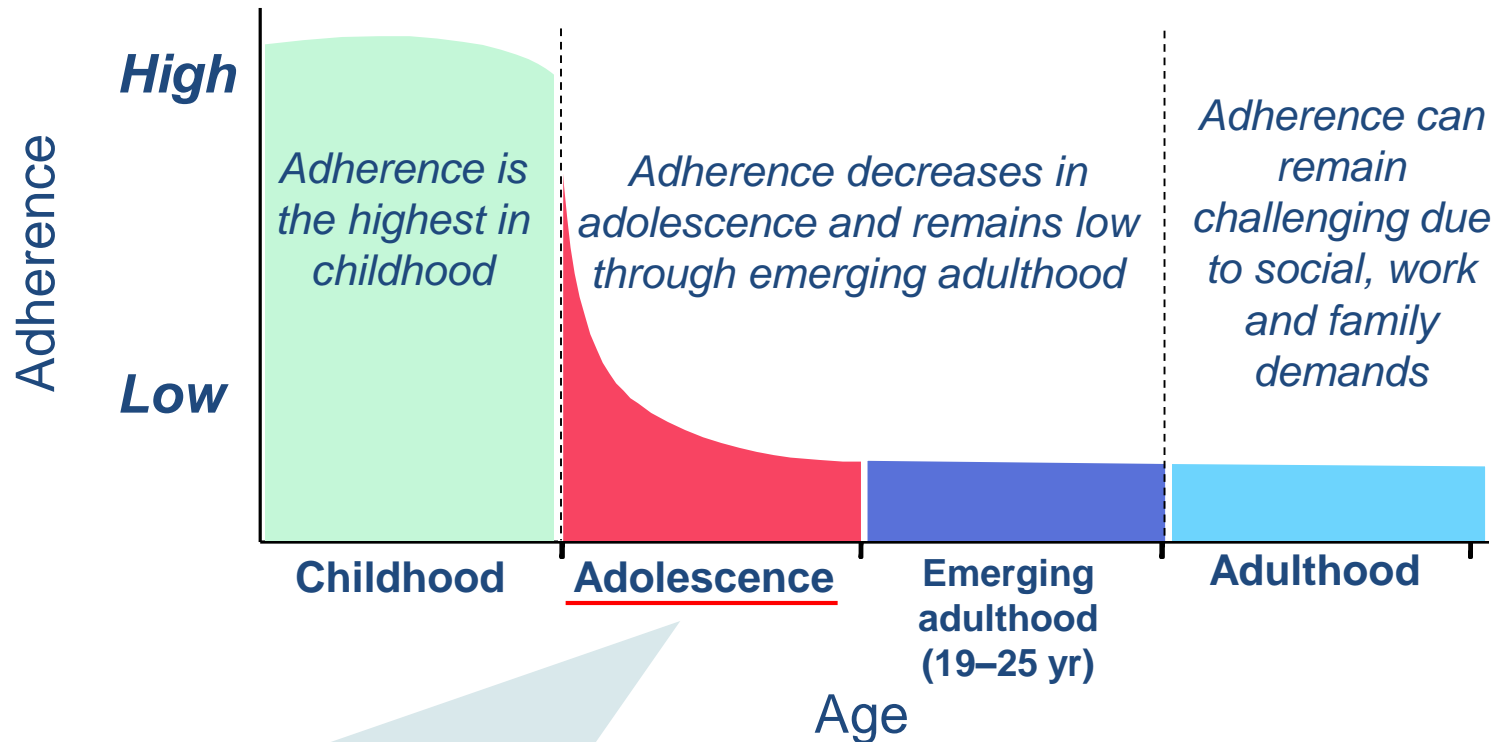
Assessment

- Systematic use of objective measures to reliably identify nonadherence

Counseling

- Healthcare team uses empirically validated educational, behavioral, and support strategies to promote improved adherence

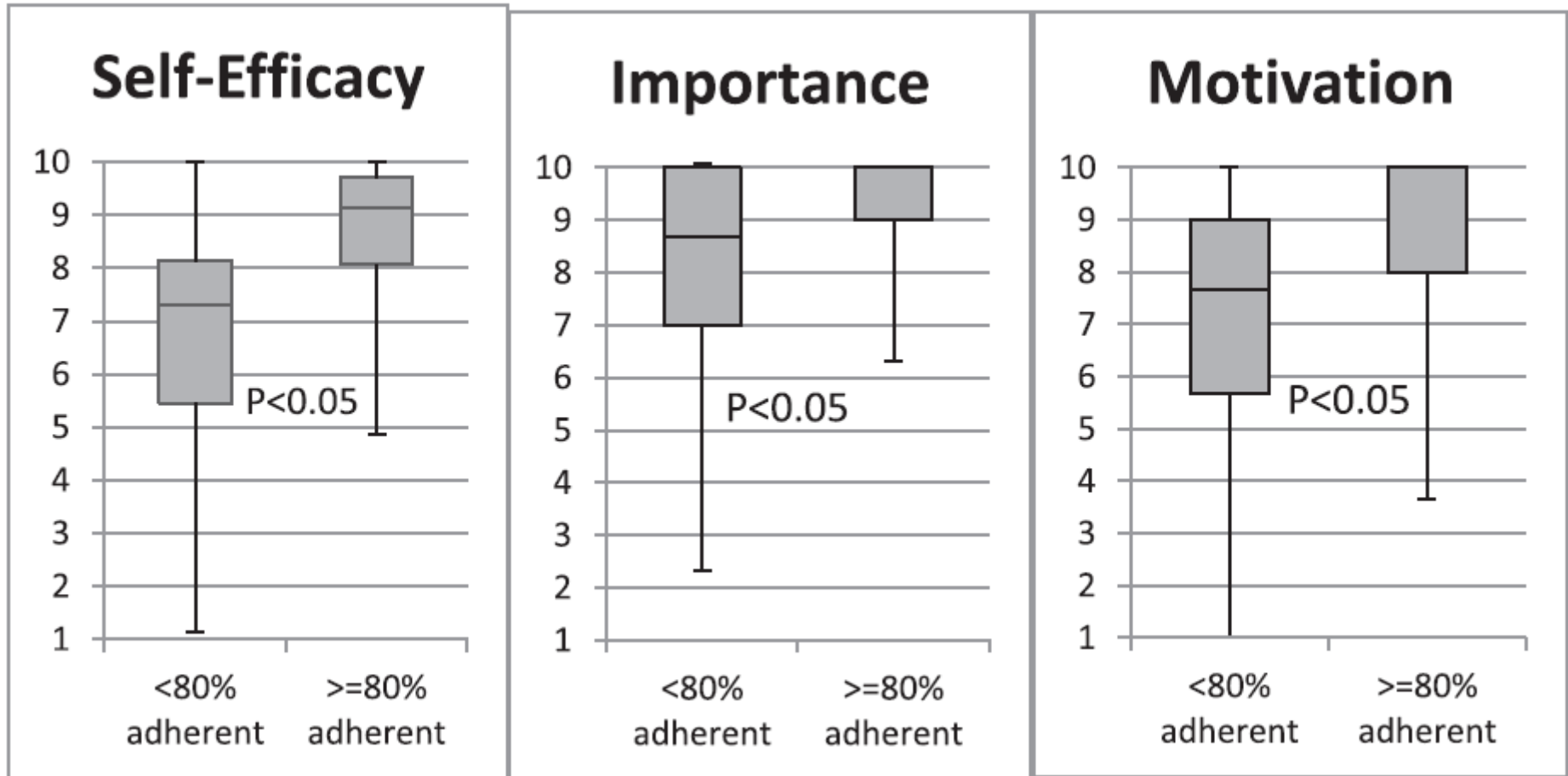
Addressing Adherence during Transition



Shift in care relationships:

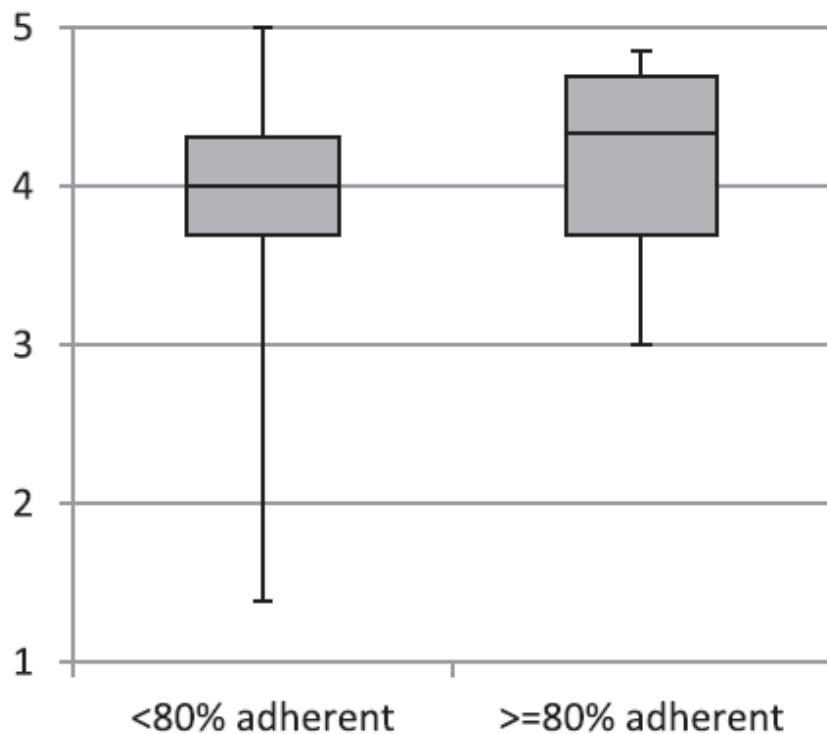
- Primary relationship shifts between physician and parent to one between physician and patient

Adherence Factors

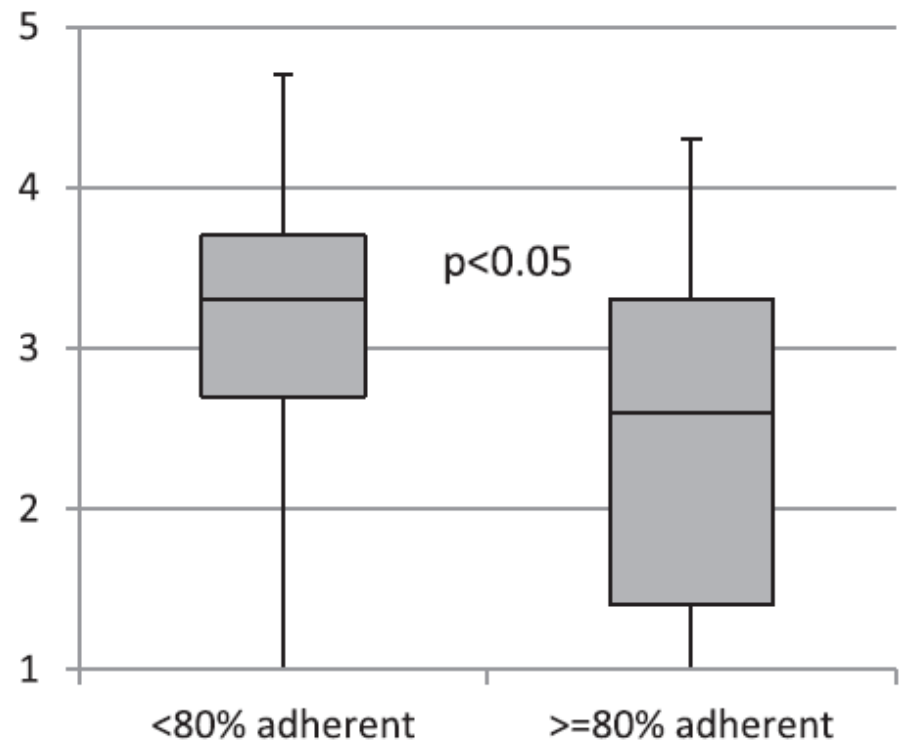


Adherence Factors

Reasons to Take



Reasons to Miss



Treatment Adherence in Adults

Barriers

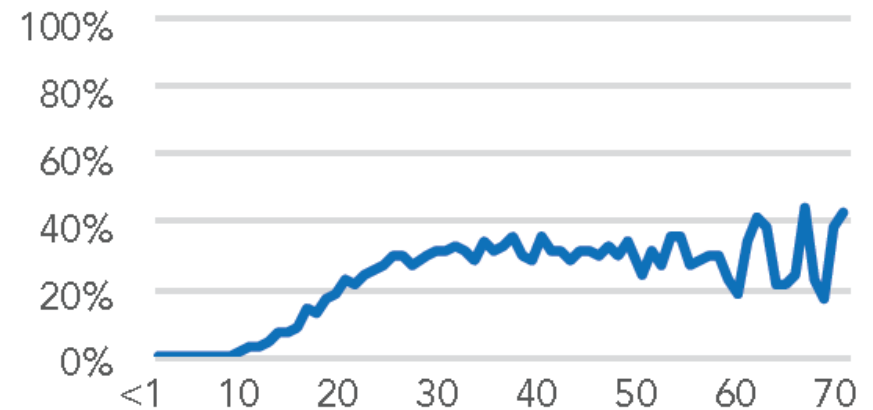
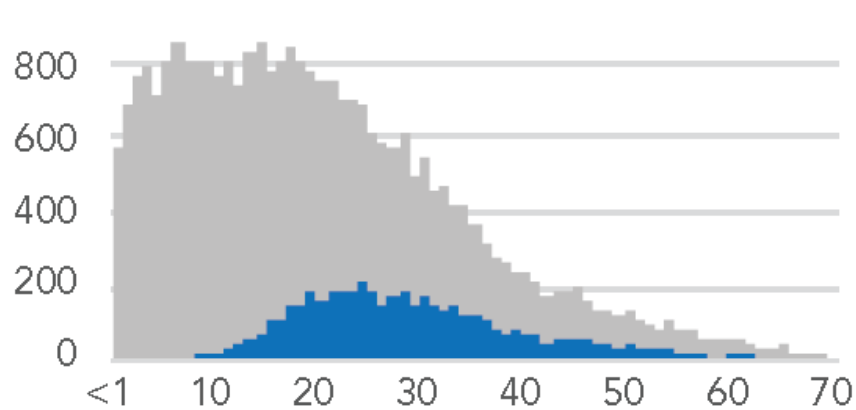
- Treatment burden
- Social and work demands
- Forgetting
- Absence of perceived benefits
- Fatigue
- Stigma / Embarrassment
- Planned nonadherence – for rebellion or as a reward

Facilitators

- CF clinic
- Support
- Presence of perceived benefits
- Ease of completion
- Habit / Routine / Reminders
- Distractions and rewards
- Guilt

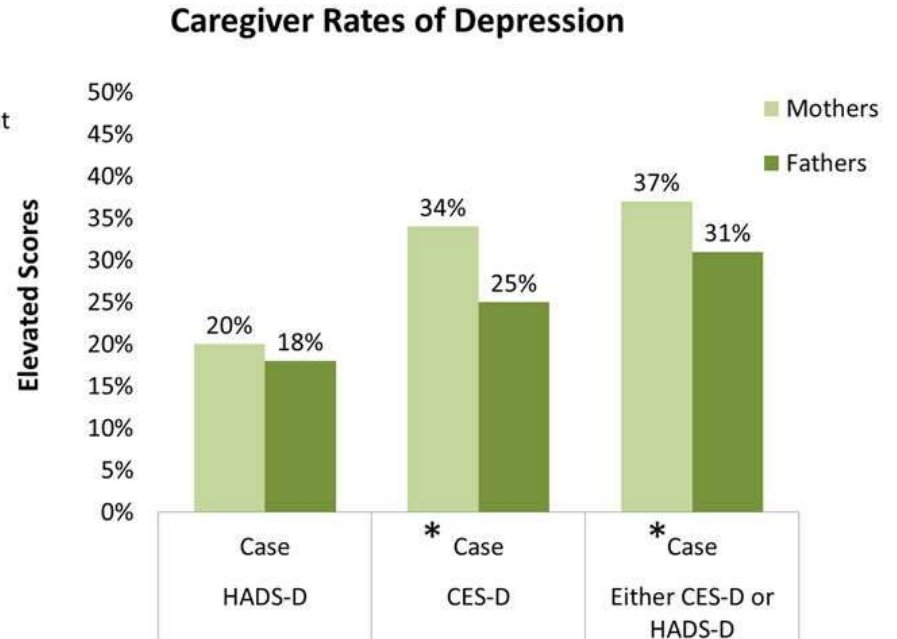
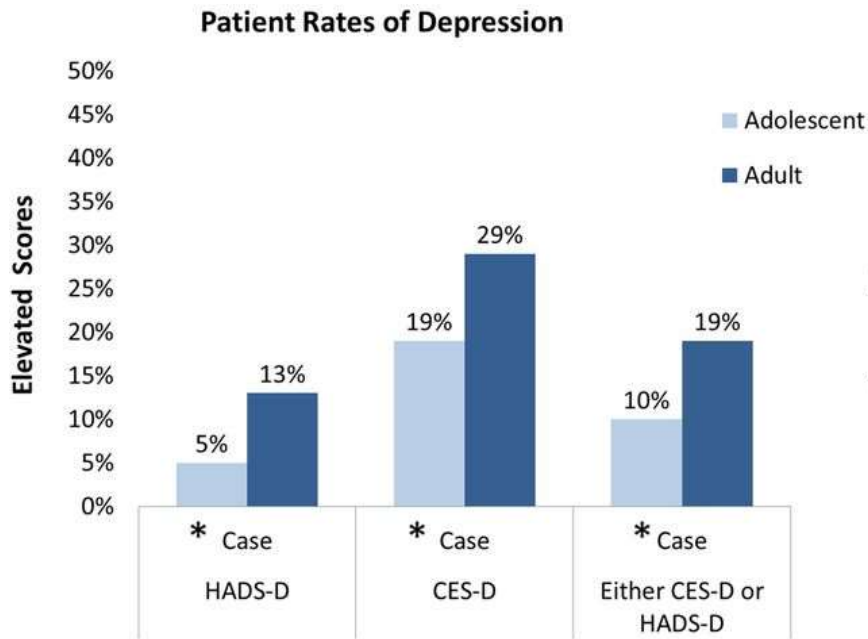
Mental Health

Depression or Anxiety



Depression

TIDES Group

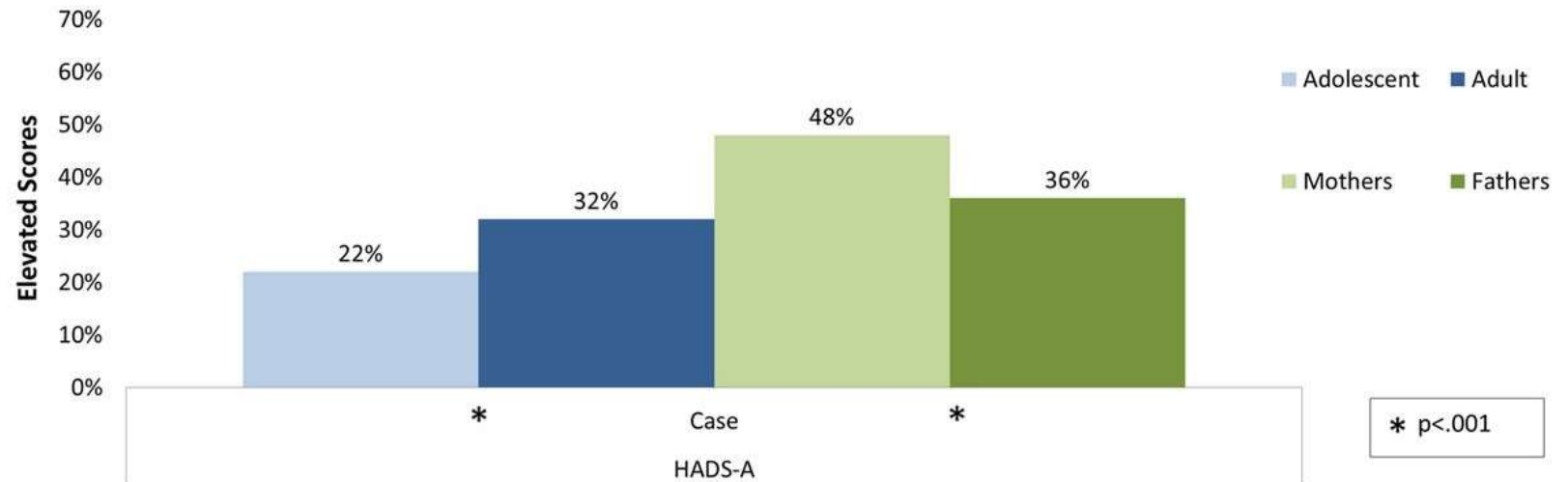


N=1286 Adolescent
 N=4739 Adults
 N=3127 Mothers
 N=975 Fathers

* $p < 0.001$

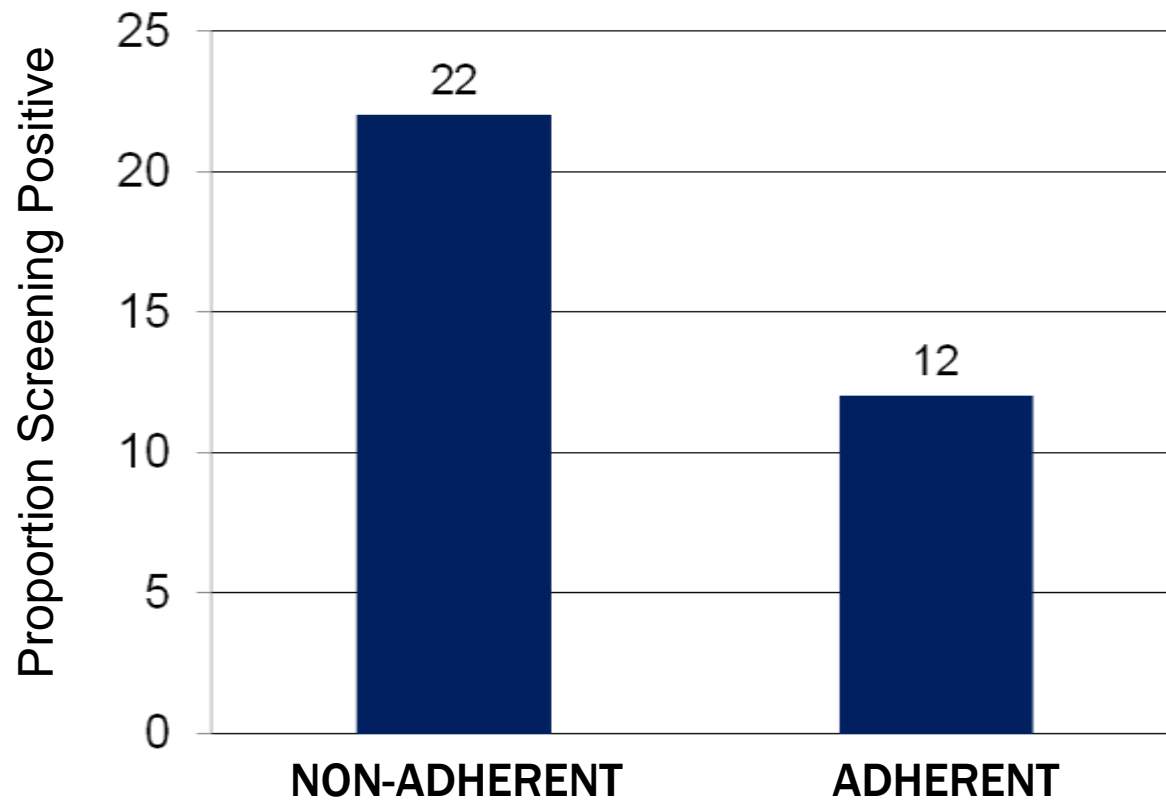
Anxiety

TIDES Group



N=1286 Adolescent
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Depression

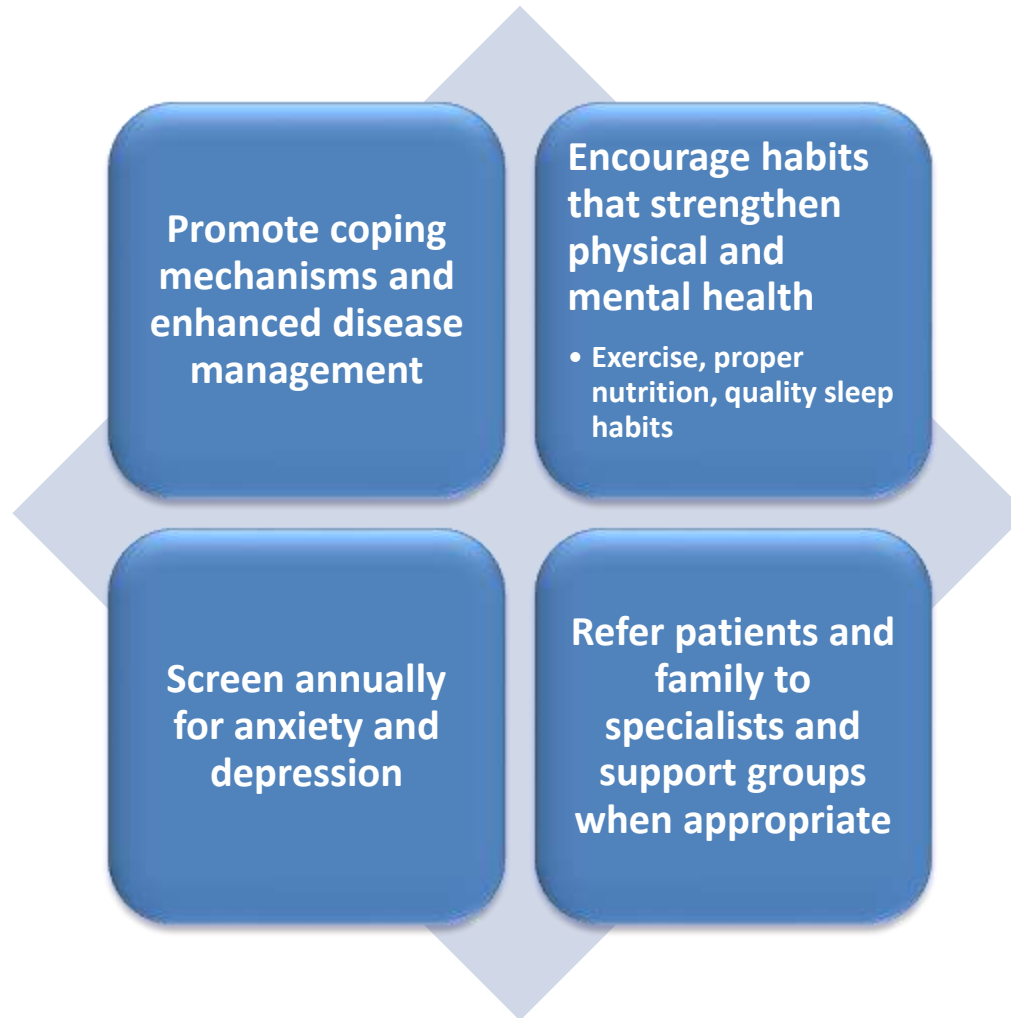


ORIGINAL ARTICLE

International Committee on Mental Health in Cystic Fibrosis: Cystic Fibrosis Foundation and European Cystic Fibrosis Society consensus statements for screening and treating depression and anxiety

Alexandra L Quittner,¹ Janice Abbott,² Anna M Georgiopoulos,³ Lutz Goldbeck,⁴ Beth Smith,⁵ Sarah E Hempstead,⁶ Bruce Marshall,⁷ Kathryn A Sabadosa,⁶ Stuart Elborn,⁸ the International Committee on Mental Health

Improved Adherence in the Context of Mental Health Issues



Motivational Interviewing

- | |
|--|
| • Active listening |
| • Empathy |
| • Collaborative problem-solving |
| • Non-confrontational and nonjudgmental dialogue |
| • Evoking motivation for change |
| • Promoting autonomy of decision-making |

Educational Strategies:

Action Steps



Check if patient / parent has questions or concerns about treatment



Review the dosing schedule for medications



Discuss the consequences of nonadherence



Provide written dosing instructions



Ask patient / parent to repeat dosing instructions



Explain what to do if a dose is missed

Behavioral Strategies: Action Steps

**Include the patient /
parent in decisions
about changes to the
treatment regimen**

**Ask about barriers that
make it hard to follow
treatment regimen**

**Help patient / parent
plan dosing times to fit
his / her daily routine**

**Suggest strategies to
remember to take
medications**

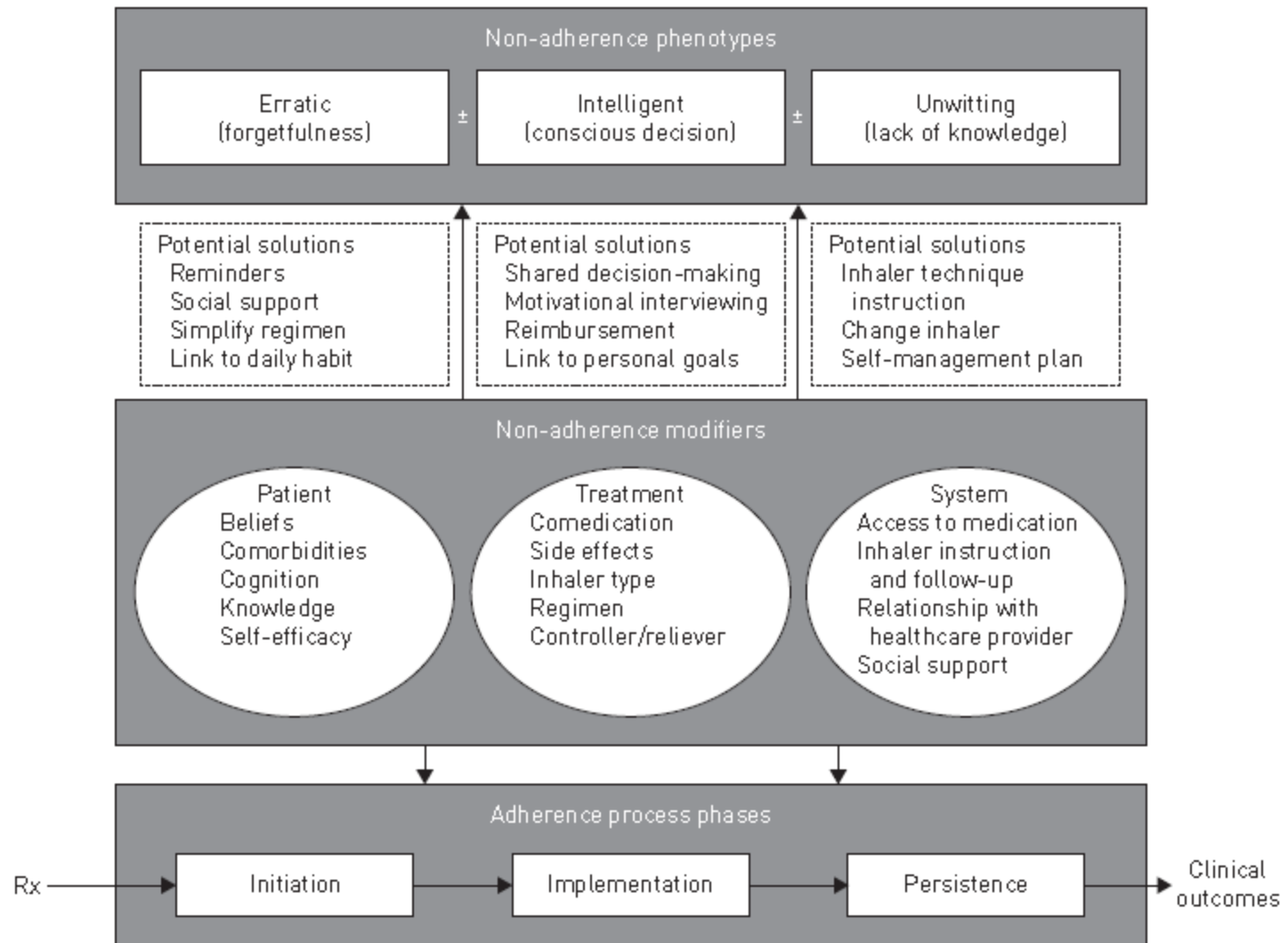
**Encourage the use of
reminder systems**



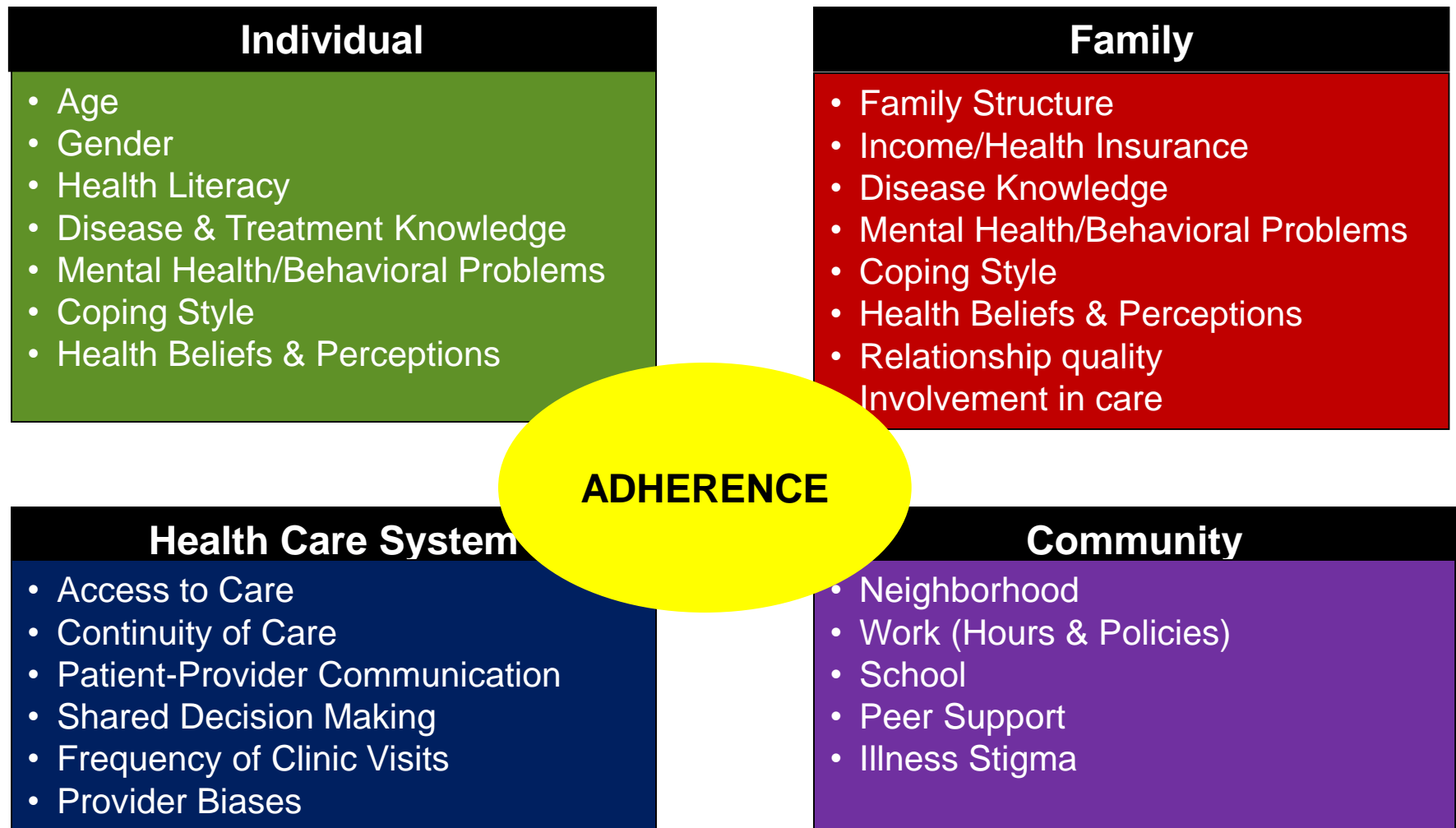
EDITORIAL
EUROPEAN LUNG CORNER

Urging Europe to put non-adherence to inhaled respiratory medication higher on the policy agenda: a report from the First European Congress on Adherence to Therapy

Job F.M. van Boven^{1,2}, Federico Lavorini³, P.N. Richard Dekhuijzen⁴,
Francesco Blasi⁵, David B. Price ^{6,7} and Giovanni Viegi^{8,9}



Adherence is Complicated



Summary

- Treatment burden for patients with CF is exceedingly high, irrespective of age or disease severity.
- The burden associated with complicated and cumbersome treatments, combined with competing life demands, can sabotage an otherwise effective treatment plan.
- A key component of clinical success for patients hinges on their proper adherence to treatment.
- The paradigm for improved adherence focuses on healthcare team-driven initiatives and patient-inclusive decision making.