### MULTIDISCIPLINARY TEAM CHALLENGES IN SLEEP DISORDERS: A MIXED-METHODS APPROACH

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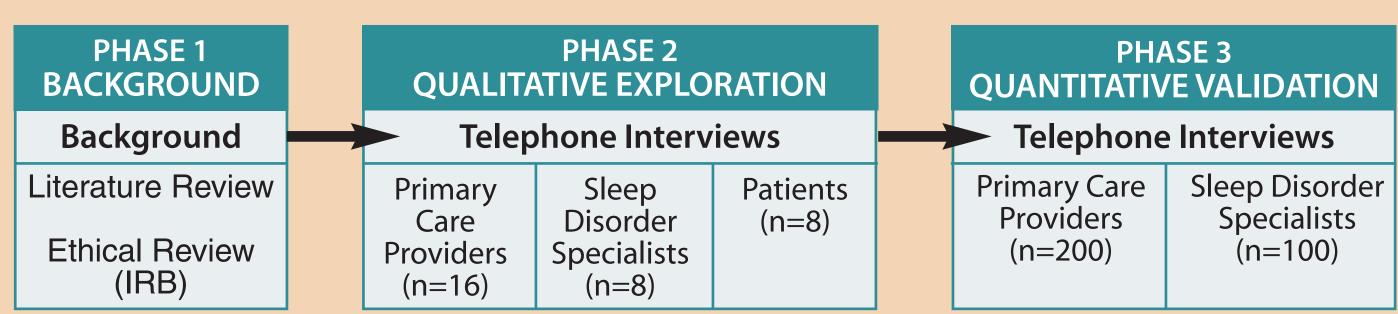
### **BACKGROUND**

- Sleep disorders affect 50-70 million Americans¹
- Sleep disorders have major impact on health<sup>2</sup>
- Sleep disorders are under-diagnosed and under-treated<sup>1,3,4</sup>
- Resources and infrastructure needed to provide effective care for SWD are lacking<sup>1</sup>

### **RESEARCH OBJECTIVES**

- 1. Assess primary care physicians' (PCP) and specialists' inter-professional challenges and educational needs in Sleep Disorders: Obstructive Sleep Apnea (OSA) and Shift Work Sleep Disorder (SWSD)
- 2. Provide evidence-based recommendations for educational interventions

### **METHOD**



# RESULT POOR INTEGRATION OF HEALTHCARE TEAM...

### CAUSES

- HCPs' roles and responsibilities regarding SWD are unclear
- Sub-optimal relationship with specialists:
   Poor coordination / communication
- Lack of information exchange
- PCPs' lack knowledge which patient should be referred and when
- PCPs' lack knowledge of who the sleeping disorder specialists are

### **IMPACT**

- PCPs not getting expert support when / where needed
- Delays or inappropriate referrals for SWD
- Care fragmented, uncoordinated
- Patients act as the primary communication hub of healthcare team

### ...POOR INTEGRATION OF HEALTHCARE TEAM

### SUB-OPTIMAL INTEGRATION ——— SUB-OPTIMAL CARE

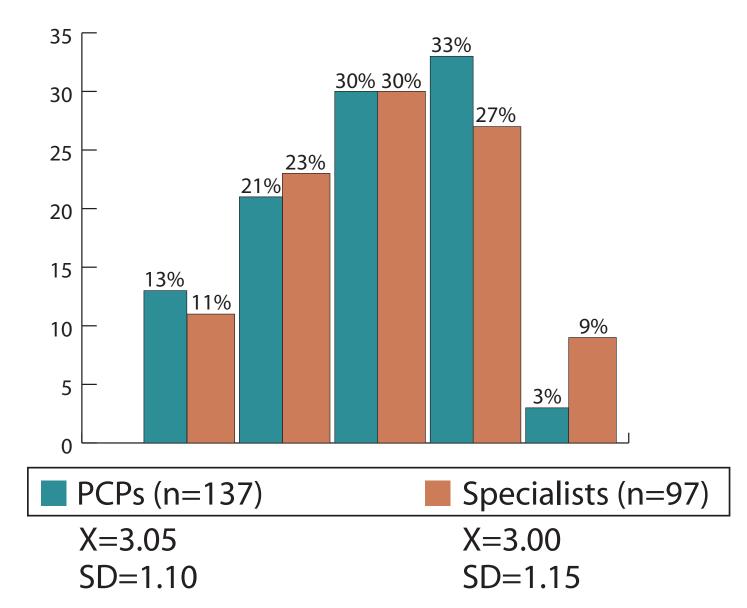
"I don't really feel educated enough to ask about it [OSA]. [...] I refer them over there [sleep clinic] and I assume, maybe wrongly, that they are going to follow-up."

"[...] it is criminal what has been done to these patients prior to them coming to see me. It's just a question of not really understanding what they [PCPs] where doing and just trying to manage things that they didn't have the training to manage."

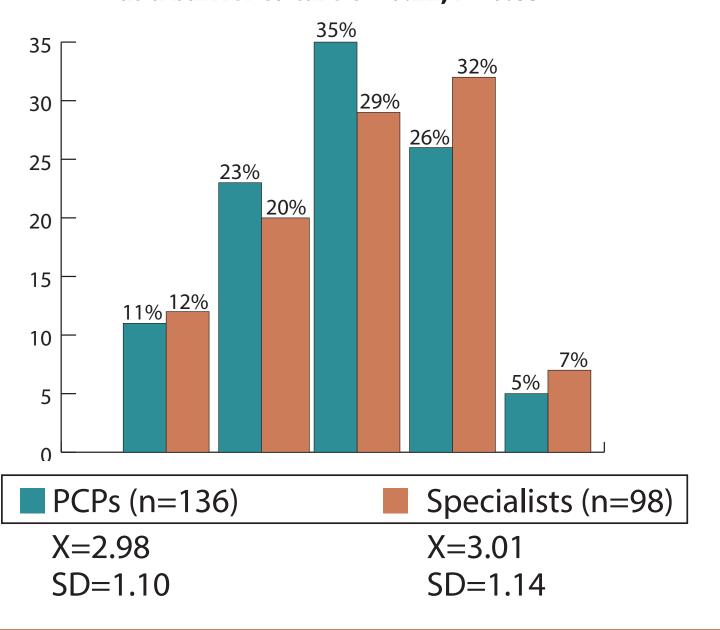
### PCP LACK OF UNDERSTANDING OF SPECIALISTS' ROLE

"I haven't used any sleep specialists for shift work disorder and I basically refer people to sleep specialists who have abnormal sleep habits related to medical conditions."

## 66% of PCPs & 66% of specialists identified PCPs' lack of role clarity in SWD as a barrier to care t=0.36, P=0.72



## 66% of PCPs & 68% of specialists see lack of coordination in treatment & management as a barrier to care t=-0.22, P=0.83



PCPs struggling to address SWSD alone, but: 39% of PCPs & 63% of specialists DO NOT refer for SWSD

No added value • Not a specialty

Training inconsistent, therefore not recognized/acknowledged

## PCPS' ATTITUDINAL BARRIERS TO REFERRING PATIENTS TO SLEEP SPECIALISTS

### CAUSES

- PCP perceptions of specialists:
- Assess and diagnose, do not treat or manage patients
- Know little more than PCPs about SWD
- Carry out unnecessary testing
- Shift Work Sleep Disorder
- PCPs refer for other sleep disorders (e..g OSA), but not SWSD
  - Sleep centers not seen as useful
  - PCP uncertainty regarding to whom they should refer SWSD

### IMPACT

- Mistrust of sleep specialists
- Minority of PCPs who refer patients to a limited group of sleep specialists
- PCPs report patients perceive no additional valueto seeing specialists

### **NEGATIVE PCP ATTITUDE TOWARD SPECIALISTS**"Specialists make the money and leave the hard stuff for the primary care physician."

PCP: SLEEP SPECIALISTS' CONTRIBUTION UNIMPORTANT
"I have sent people [with SWSD] to a sleep specialist and they came back with the same thing saying,
"Well you're doing just fine, just keep doing what you're doing." And I thought, 'Well that's kind of a waste'."

#### LACK OF RECOGNITION OF SLEEP MEDICINE AS A SPECIALTY

■ Sleep medicine is not well defined as a specialty ■ Lack of uniformity in training for sleep specialists

"I don't think they [PCPs'] see sleep as a unifying subspecialty. [...] They see it as fragmented."

## REFERRAL OF PATIENTS WITH SLEEP DISORDERS GAP ANALYSIS

Gaps between current level of knowledge related to referring patients with SD to sleep specialists and desired knowledge, rated on a 5-point Likert scale

Scale: 1 = Low; 5 = High	Current Level of Knowledge X (SD)	Desired Level of Knowledge X (SD)	GAP Average (SD)	t (P)
Referral of Patients with OSA PCPs (n=145)				
Which patients to refer to specialist	3.76 (0.91)	4.62 (0.60)	0.86 (0.91)***	-11.32 (0.000)
Which specialist to refer to	3.96 (0.94)	4.64 (0.63)	0.68 (0.96)***	-8.52 (0.000)
Referral of Patients with SWD PCPs (n=200)				
Which patients to refer to specialist	2.88 (1.18)	4.37 (0.81)	1.49 (1.24)***	-16.90 (0.000)
Which specialist to refer to	3.13 (1.21)	4.46 (0.79)	1.33 (1.31)***	-14.76 (0.000)
Referral of Patients with SWD Specialists (n=100)				
When to refer patient back to PCP	3.88 (0.96)	4.62 (0.68)	0.74 (0.79)***	-8.53 (0.000)

\*\*\*Statistically significant (p  $\leq$  0.001)

Educational Implications for Interprofessional Care	Target Group
Educational implications for interprofessional care	rarget Group
<ul> <li>Specialists in SWD: Lead and participate in inter-professional and collegial discussions with PCPs</li> <li>Characterize role and expertise of sleep medicine</li> <li>Build relationships with PCP colleagues</li> <li>Elaborate contribution of sleep medicine to PCP practice and clinical care, and to patient outcomes</li> </ul>	PCPs AHPs
<ul> <li>Engage PCPs, specialists, and AHPs in interdisciplinary regional workshops to:</li> <li>Enunciate sleep medicine as a specialty</li> <li>Enhance communication processes</li> <li>Clarify inter-professional roles and responsibilities</li> </ul>	Specialists PCPs
Disseminate guidelines for appropriate referrals for SWD  When to refer, to whom, for what purpose  Clinically relevant for PCP setting  Show value and strategy behind referrals	PCPs
Develop and distribute localized community lists of referrals, specialists, therapists to support interdisciplinary care	PCPs

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