

How Family Physicians Already Do So Much for Medication Safety

Richard Young, MD
Director of Research and Associate Program Director
John Peter Smith Hospital Family Medicine Residency
Fort Worth, Texas

U.S. Co-Chair NAPCRG CASFM Complexity Science Working Group

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Background

- Funded by a grant from AHRQ
- Co-principal investigators:
 - Yan Xiao, PhD – UTA
 - Ayse Gurses, PhD – Johns Hopkins
 - Kimberly Fulda, DrPH – UNTHSC-Fort Worth
- Other key voice in this project
 - Kathleen Sutcliffe, PhD – Johns Hopkins
 - Bloomberg Distinguished Professor with appointments in the Carey Business School, the School of Medicine (Anesthesia and Critical Care Medicine), the School of Nursing, the Bloomberg School of Public Health, and the Armstrong Institute for Patient Safety and Quality.

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Background

- **Objective:** To understand actions by primary care teams to improve medication safety in ambulatory settings.
- **Data Sources and Setting:** We interviewed 21 primary care physicians (PCPs) and their team members at four primary care sites serving patients with mostly low socioeconomic status in Southwest U.S. during 2019-2020.

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Background

Study Design:

- Qualitative study
- One-on-one, semi-structured interview
- Questions guided by concepts from collaborative care and systems engineering models.

Data Collection

- Grounded theory approach.
- Actions taken by primary care professionals to improve medication safety were categorized according to key principles from the high reliability organization framework.

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How Do Family Physicians Improve Medication Safety?

Primary Findings:

- PCPs and their teams:
 - Making standard-of-care medical decisions
 - Patient shared decision making
 - Educating patients and their caregivers
 - Providing asynchronous care separate from office visits
 - Providing clinical infrastructure
- Related findings
 - Most of the actions required customization at the individual level, such as limiting the supply of certain medications prescribed and simplifying medication regimens in certain patients.

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Findings

- The high reliability organization principles were enacted by individualizing at the encounter and patient levels to anticipate risks and to **fit to patient work systems** to mitigate risks and to build resilience.
- The PCP teams' actions reflected their safety organizing efforts in interacting with many other agents in multiple settings that they **cannot control nor easily coordinate**.

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High Reliability Organizing

- High reliability organizing is enacted through practices and processes consistent with a set of principles:
- Sensitivity to operations
- Reluctance to simplify
- Preoccupation with failure
- Deference to expertise
- Commitment to resilience.

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High Reliability Organizing

- An earlier understanding of reliability in HRO is that it describes “what one can count upon not to fail in doing what is expected.”
- A recent and more nuanced understanding of HRO is that reliability is an ideal that is never fully achieved, a journey rather than a single destination.
- HRO is comprised of two major “logics”
 - A logic of anticipation/prevention
 - A logic of resilience/containment.

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Family Physician's Actions

Implementation of high reliability organizing measures

High Reliability Organizing (HRO) Principles:

- Sensitivity to operations
- Reluctance to simplify
- Preoccupation with failure
- Deference to expertise
- Commitment to resilience

Implementation of HRO Principles:

- Sensitivity to operations:
 - Monitor decision-making of physicians
 - Monitor decision-making of nurses
 - Monitor decision-making of other staff
 - Monitor decision-making of patients
 - Monitor decision-making of other staff
- Reluctance to simplify:
 - Monitor decision-making of physicians
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- Preoccupation with failure:
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- Deference to expertise:
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Conclusions

- While primary care teams anticipate potential failure modes and proactively address risk factors, they have to respond to influences from other work systems, with which the primary care teams have few effective and reliable coordinating mechanisms.
- The primary care teams have to deal with conflicts and confusions among **distributed systems** with little ability to control the nature, frequency or magnitude of inputs from other systems.

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Conclusions

- Although a logic of anticipation is important, our findings suggest that if primary care teams are to maximize reliability in the midst of complex systems, **resilience should be privileged.**
- **A long list of protocols and rules is not the answer to this reality.**
- **Even if it were possible to write procedures for every situation, too many rules can reduce the flexibility to react to unexpected surprises.**

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Final Conclusions

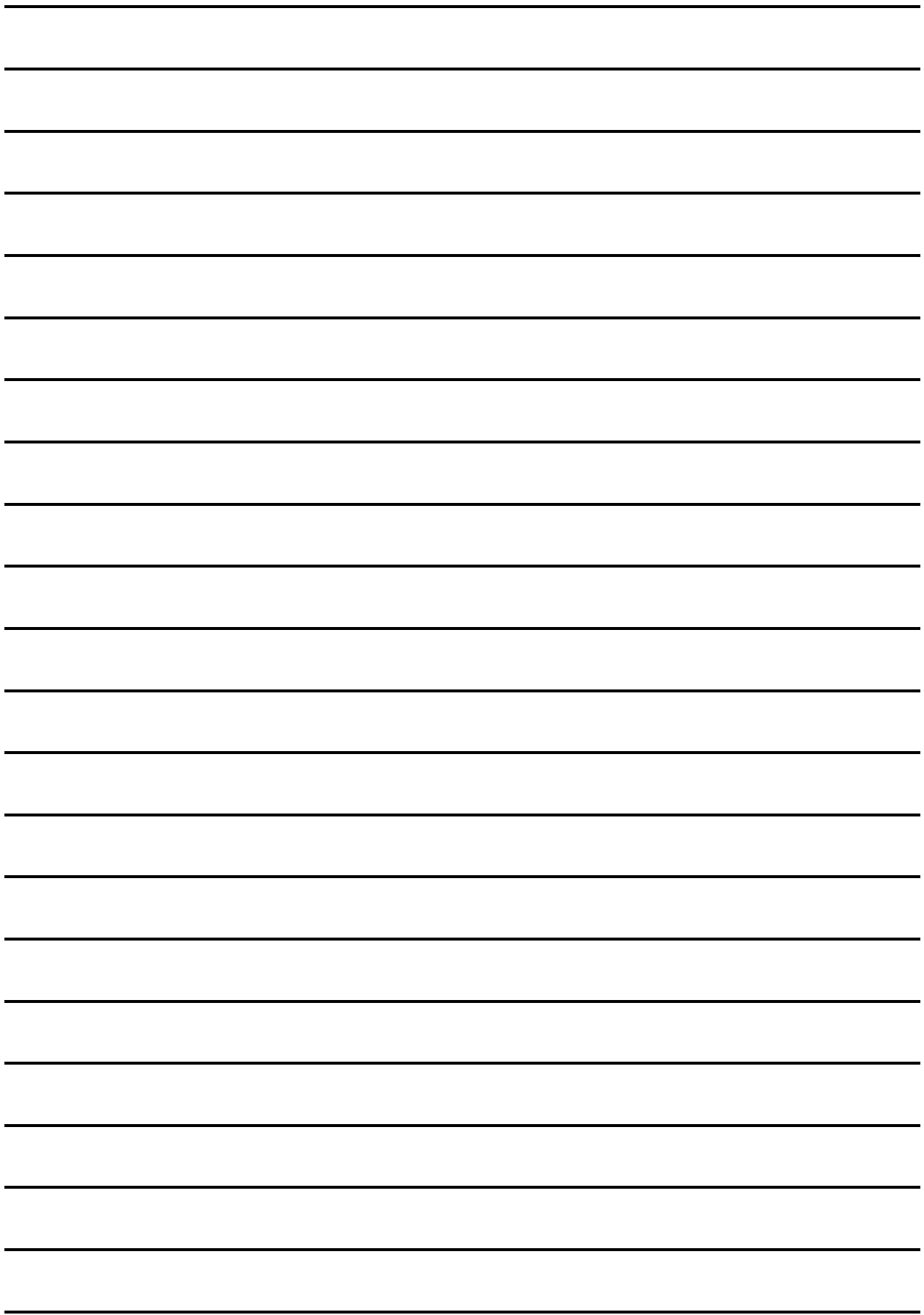
- Primary care teams take many actions to shape medication safety outcomes in community settings.
- To improve medication safety, primary care work systems require different strategies than those often used in more self-contained systems such as hospital inpatient or surgical services.
- **A value of family medicine is to be a source of resilience for the entire healthcare system.**

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Thanks!



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Primary Care Perspectives on Surgical Interventions for OSA

Angel Ogbeide, DDS
Devan Munk, DMD
Justin Clemow, DMD, MD
Stacy Ogbeide, PsyD, ABPP, CSOWM

Presented at the
Texas Academy of Family Physicians
2022 Annual Session & Primary Care
Summit

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Introduction

- Obstructive sleep apnea (OSA) has significant implications for cardiovascular health, mental illness, quality of life, and driving safety (Slowik).
- The long-standing gold standard for treatment of obstructive sleep apnea by most providers is continuous positive airway pressure (CPAP).
- A comprehensive systematic literature review conducted by Rotenberg, Murariu, and pang in 2016 showed that over a twenty-year period, the non-adherence rate of the CPAP was 34.1%. The study further added that there was no significant improvement over that time frame and that behavioral intervention improved adherence rates only by about 1 hour per night on average (Rotenberg).



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This study adds...

Information on assessments of the surgical knowledge on OSA interventions of family medicine trainees to provide faculty with data on deficiencies that impact patient care and outcomes.

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Purpose



The purpose of this study is to examine family medicine residents' understanding of surgical interventions available for OSA patients.



Increase collaboration between specialties



Evaluate ways to enhance resident's educational experiences during training years

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Research Methods

A 20-question survey was created to assess Family Medicine residents' knowledge about the surgical options for treatment of obstructive sleep apnea.

The survey questions were designed to elicit both demographic information as well as understanding of treatment options for obstructive sleep apnea

Invitations were sent via email to family medicine residents across the United States to complete the 20-question online survey using Qualtrics.

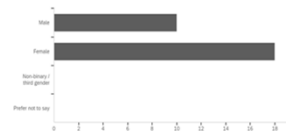
Sample size of 28 residents with all three cohorts represented.

Data was analyzed using Microsoft Excel.

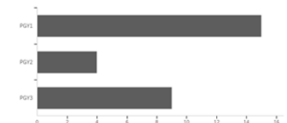
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Results: Demographics

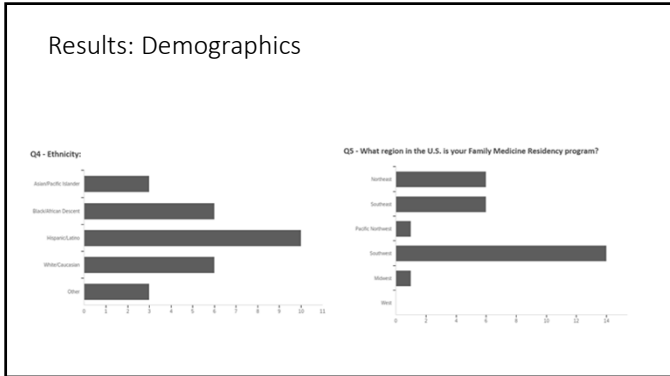
Q3 - Gender:



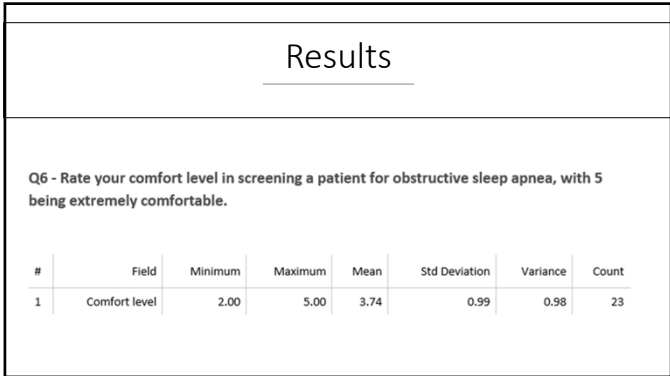
Q1 - What is your year in training in your Family Medicine Residency?



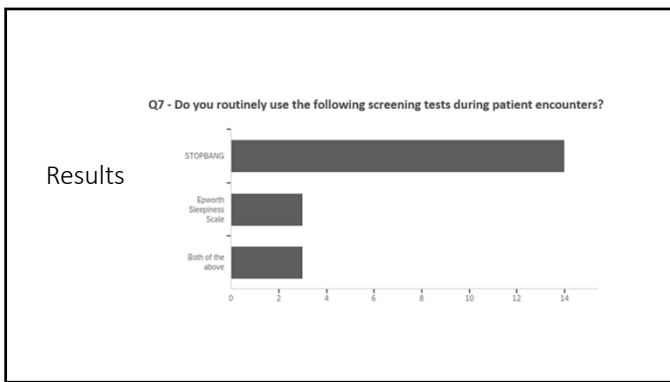
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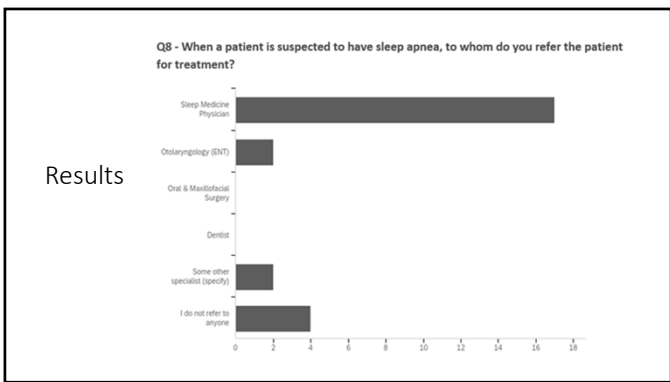
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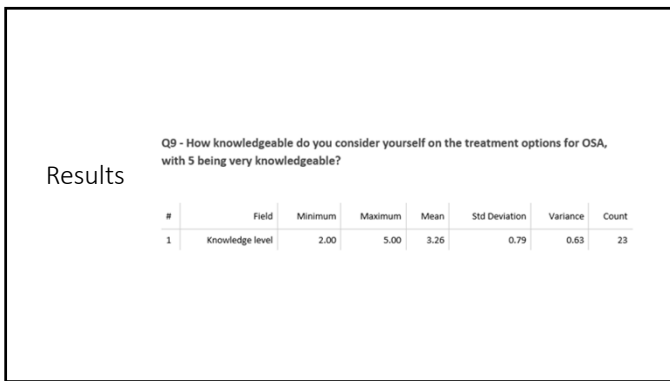
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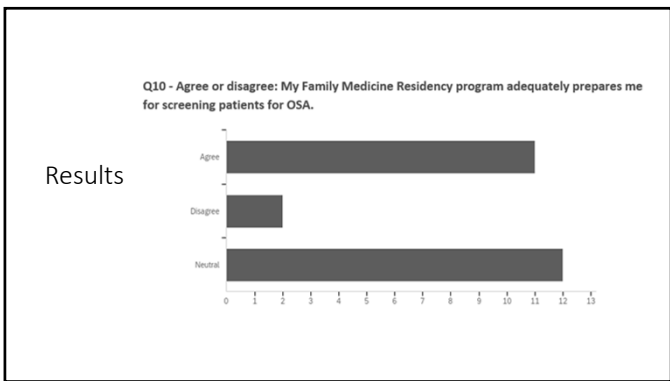
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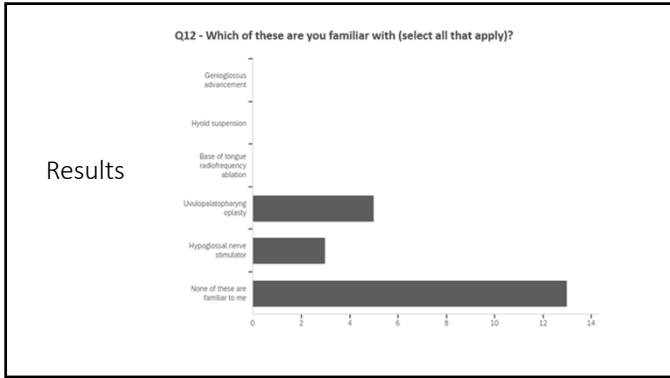
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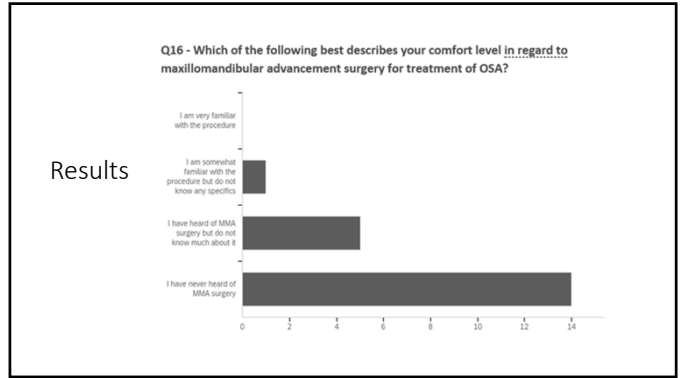
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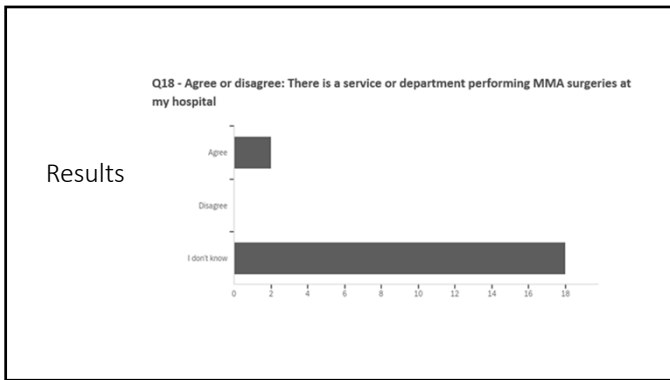
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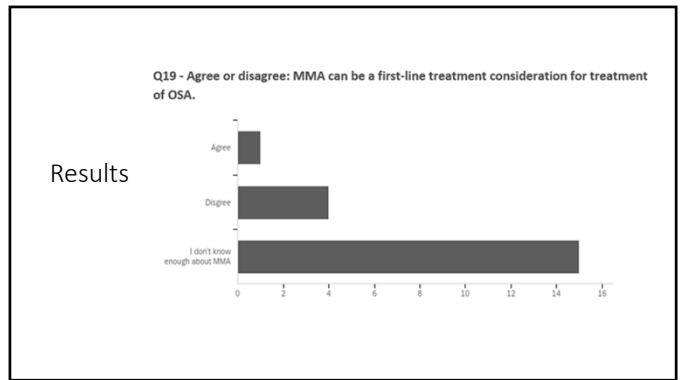
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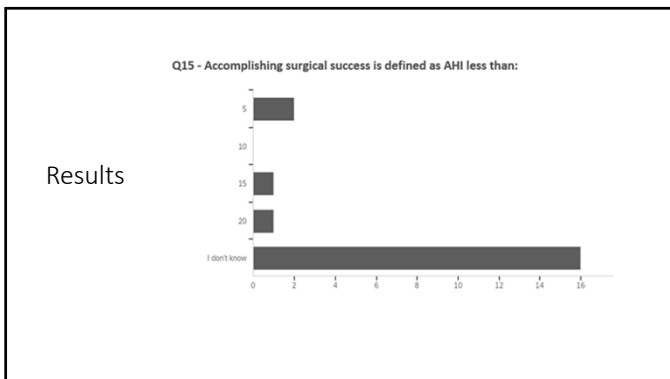
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Discussion/Conclusion




There is an overwhelming deficit in knowledge of basic surgical options for OSA among family residents.



Collaborative Grand rounds



Collaborative clinical experiences



Conference lectures

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Questions?

- **Contact Me:**

- Angel Ogbeide, DDS

- Email: angelogbeide@gmail.com

- LinkedIn:

- <https://www.linkedin.com/in/angel-ogbeide-dds/>

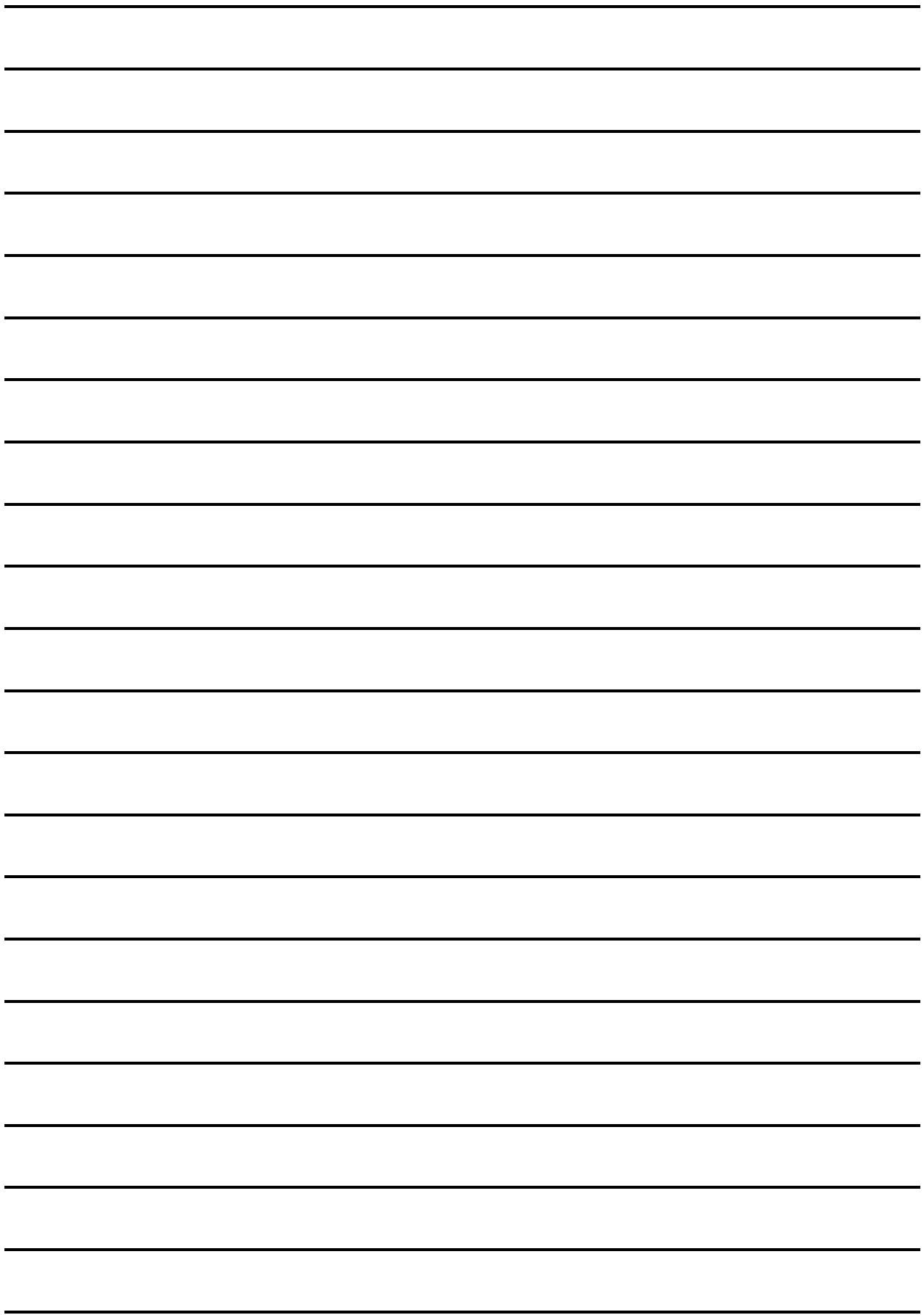


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References

Available upon request

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Chronic Kidney Disease (CKD) Patient Navigator

Jamal Islam, MD, MS
Clinical Professor
Department of Family Medicine
University of Texas Medical Branch, Galveston

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From Idea to Research

- Ideas for research:
- Range of sources such as
 - personal or professional experience
 - a theory
 - the media
 - other research studies

2

Personal and Other Research Studies

- CKD patients were not even identified in problem list
- Progress notes does not reflect patient has CKD
- Harmful medications being prescribed
- Dose not being adjusted
- Inconsistent Follow-up on patients with CKD
- Patient unaware they had CKD
- Nephrologist not involved with care even when GFR below 30

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CKD Definition

Defined as an eGFR < 60 mL/min/1.73 m² for > 3 months

AND/OR

Evidence of kidney damage, including persistent albuminuria

CKD is typically a progressive disease

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Chronic Kidney Disease CDC report 2021

- 15% of US adults or 37 million people, are estimated to have CKD.
- As many as 9 in 10 adults with CKD **do not know** they have CKD.
- About 40% adults with severe CKD **do not know** they have CKD
- Every 24 hours, **360** people begin dialysis treatment for kidney failure.

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RISK FACTOR and COST

- In the United States, diabetes and high blood pressure are the leading causes of CKD, accounting for **3 out of 4 new cases**.
- Other risk factors include heart disease, obesity, a family history of CKD, inherited kidney disorders, past damage to the kidneys, and older age.
- In 2019 Treating Medicare beneficiaries with CKD cost **\$87.2 billion and** Treating people with ESRD cost an additional **\$37.3 billion**.

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Chronic Disease Management

- A team-based approach to manage patients with chronic disease has shown to improve outcome
- Patient navigators can help activate and guide a patient as they move through the complex health care system. Navigators can also help to prepare a proactive team.

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Hypothesis

- A Navigator working with activated patient and proactive health care team will be able to decrease CKD progression

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Role of CKD Navigator

- Identify patients with CKD
- Educate patients on CKD and Self-Management
- Update the problem list
- Ensure routine visits to primary care provider (PCP)
- Ensure timely lab is done
- Review all medications including over the counter drugs
- Identify potential nephro-toxic drugs, ensure renal dosing
- Coordinate referrals

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Pilot Research Project

- **Population:** Patients with CKD (any stage) followed in Family Medicine residency program out-patient clinic.
- **Intervention:** CKD Navigator
- **Comparison:** Same population (Cohort study before and after)
- **Outcome:** Primary: Decrease in CKD progression (eGFR slope)
Secondary: Improvement in CKD self-management
Improvement in risk factor markers BP,A1c
Consult nephrologist when eGFR \leq 30

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Funding

TEXAS ACADEMY OF FAMILY PHYSICIANS' FOUNDATION

- The purpose of the TAFPF Research Grant Program is to support research of benefit to Family Medicine. To be eligible to receive a TAFPF Research Grant, the principal investigator must be a family physician in Texas or plan to conduct the research in Texas at one of the following locations: Family Medicine Residency Program
Department of Family Medicine
Family Medicine organization or
association Family Medicine office

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Thank You

QUESTIONS?

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