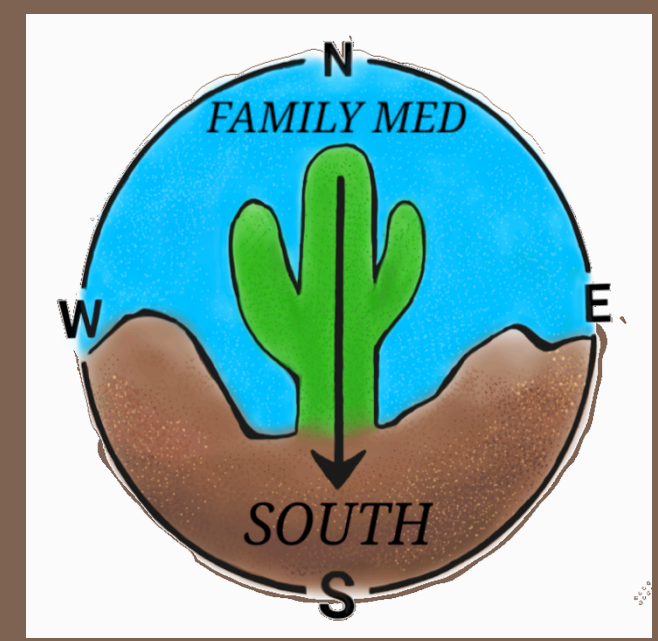


USPSTF Screening Guideline Table: Improving Screening and Teaching



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ABSTRACT

- USPSTF (United State Preventive Service Task Force) publishes screening recommendations to which our residency clinic adheres
- Prior residents have developed a tool to easily visualize recommendations based on age
- Qualitative and quantitative data was collected on the Banner University Family Medicine South Campus clinic/ residents before and after implementing this teaching tool
- No statistically significant change in screening tests ordered among 3rd year residents nor interns
- Statistically significant improvement of screening tests ordered by 2nd years may be due to new clinical tool
- Pre and post-questionnaires suggest improvement of residents' confidence:
 - In their knowledge of age-related screening recommendations
 - In their ability to teach medical students about screening tests

BACKGROUND/ PURPOSE

- USPSTF's age-related screening recommendations are important in comprehensive primary care
- A version of the One-Page Adult Preventive Health Care Schedule table (as seen on the right) was published in the AFP journal in May 2016
- Purpose;
 - Improve the clinic's adherence to the USPSTF screening recommendations
 - Improve residents' confidence and knowledge of screening guidelines
 - Improve residents' confidence in teaching medical students

METHOD

- Introduction of the USPSTF Screening Guidelines Table at the South Campus Clinic and instruction on its use (8/26/2016)
- Retrospective data on specific screening tests ordered was collected through Epic for the 6 months before (start 1/24/2016) and the 6 months after (end 2/26/2017) introducing the tool
- 3 marker orders were used to evaluate screening adherence:
 - Lipid Panel
 - Hepatitis C Ab
 - Referral to GI for screening colonoscopy
- Data collected:
 - 3rd and 2nd years: number of orders placed for each marker
 - Interns: number of orders placed for each marker by current interns (those with access to the Guidelines Table) compared to interns of the prior year
- Qualitative data on confidence collected by questionnaire before and 6-months after the introduction of the Guidelines Table
- T Square analysis of quantitative data was used to assess for significance

REFERENCES/AKNOWLEDGEMENTS

- Dr Kyle Meehan and Dr Lynne Tomasa and Dr Judith Gordon for their help with this research
- Co-authors of the original version of the preventive schedule Paul Swanson, Coya Lindberg, Cynthia Carillo, MD, and Joshua Clutter, MD,
- "Recommendations for Primary Care Practice." Recommendations for Primary Care Practice - US Preventive Services Task Force. N.p., Web. 2016.
- Swenson, Paul F., and Mark H. Ebell. "Introducing a One-Page Adult Preventive Health Care Schedule: USPSTF Recommendations at a Glance." Introducing a One-Page Adult Preventive Health Care Schedule: USPSTF Recommendations at a Glance May.2016 (2016): 738-40.

USPSTF Screening Recommendations (Published Guidelines as of January 30, 2016)

To be used in conjunction with USPSTF recommendation statements for additional details (see accompanying tables and references)
Visual adaption by Swenson PF, Lindberg C, Clutter J, and Carrillo C

Only grade A/B recommendations are shown

Age	18	20	21	24	25	35	40	45	49	50	55	65	70	74	75	79	80
Alcohol misuse [1]	(B)																
Depression [2]	(B)																
Hypertension [3]	(A)																
Obesity [4]	(B)																
Tobacco use and cessation [5]	(A)																
HIV virus infection [6]	(A)									(A) if at increased risk							
Hepatitis B virus infection [7]	(B) if at increased risk																
Syphilis [8]	(A) if at increased risk																
BRCA gene screening [9]	(B) if appropriate family history																
Chlamydia and gonorrhea [10]	(B) if sexually active									(B) if at increased risk							
Intimate partner violence [11]	(B) child-bearing-aged women																
Cervical cancer [12]										(A) Pap every 3 years or ≥30 years then 5 years with HPV cotesting							
Lipid disorder [13]										(B) if increased CAD risk	(A)						
Abnormal Glucose/Diabetes[14]										(B) if increased CAD risk	(A) if increased CAD risk						
Hepatitis C virus infection [15]	(B) if at high risk									(B) birth years 1945-1965							(B) if at high risk
Colorectal cancer [16]										(A)							
Breast cancer [17]										(B) biennial screening							
Lung cancer [18]										(B) if 30 pack-years and current or former (quit in last 15 years)							
Osteoporosis [19]										(B) if ≥ 9.3% 10 year fracture risk	(B)						
Abdominal aortic aneurysm[20]										(B) if an "ever smoker"							

USPSTF Preventive Medications Recommendations

Prevention breast cancer [21]	(B) if increased risk and only after shared decision making
Folic acid supplementation [22]	(A) if capable of conceiving
Aspirin for CVD risk [23]	(A) if benefit of aspirin > risk
Fall prevention (vitamin D) [24]	(B) if community dwelling and increased fall risk

USPSTF Counseling Recommendations

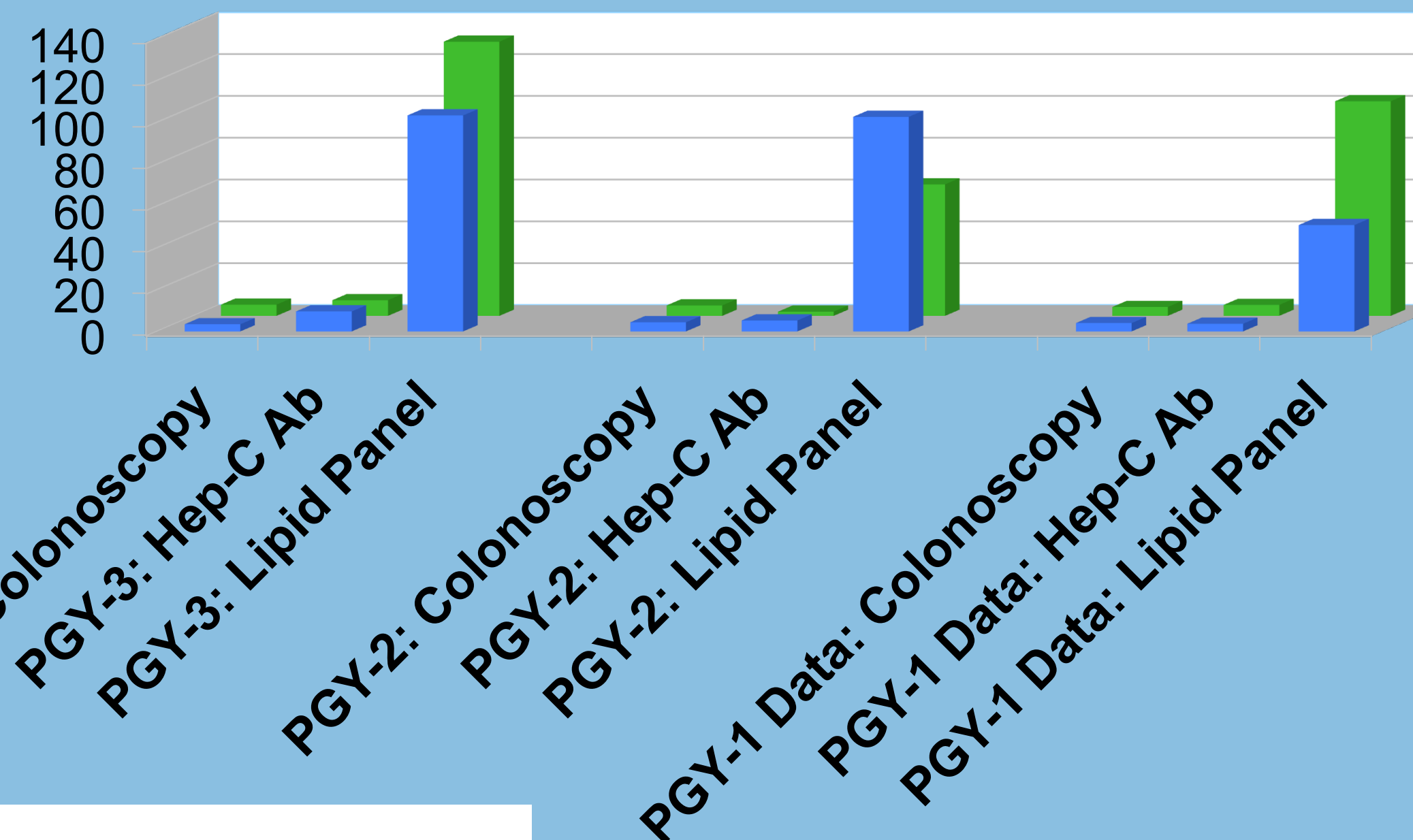
STI prevention [25]	(B) if at increased risk
Diet/activity for CVD prevention[26]	(B) if overweight or obese and with additional cardiovascular disease risk
Skin cancer prevention [27]	(B) if fair skinned

Legend	Normal risk	With specific risk factor
Recommendation for men and women		
Recommendation for men only		
Recommendation for women only		

Recommendation grades	
A	Recommended (likely significant benefit)
B	Recommended (likely moderate benefit)
C	Do not use routinely (benefit is likely small)
D	Recommended against (likely harm or no benefit)
I	Insufficient evidence to recommend for or against

QUANTITATIVE RESULTS BEFORE AND AFTER INTRODUCING THE USPSTF SCREENING TOOL

NUMBER OF SCREENING ORDERS BY RESIDENTS BEFORE AND AFTER THE INTRODUCTION OF THE USPSTF SCREENING GUIDELINE TABLE

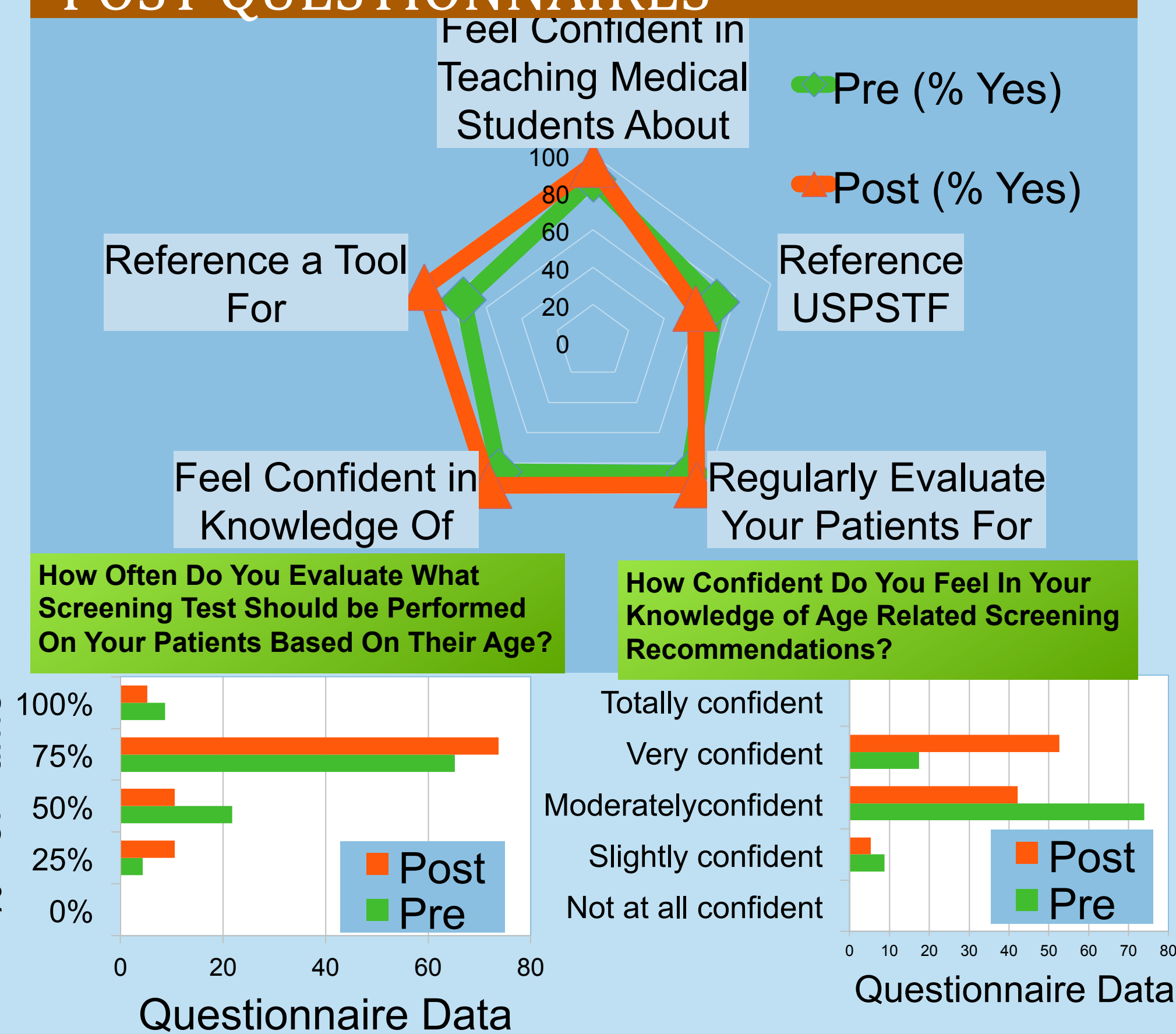


■ Following Screening Tool Implementation

T-Square Statistical Analysis

Test	T Score	P Value	Conclusion
PGY-3 Screening Colonoscopy	1.1656	0.15	No Significant Difference
PGY-3 Hep-C Ab	0.4224	0.5	No Significant Difference
PGY-3 Lipid Panel	1.4031	0.1	No Significant Difference
PGY-2 Screening Colonoscopy	0.2901	0.1	No Significant Difference
PGY-2 Hep-c Ab	2.1209	0.05	Statistically Significant
PGY-2 Lipid Panel	2.2358	0.025	Statistically Significant
PGY-1s w/ and w/o Screening Tool: Screening Colonoscopy	0.1866	0.5	No Significant Difference
PGY-1s w/ and w/o Screening Tool: Hep-C Ab	0.6428	0.5	No Significant Difference
PGY-1s w/ and w/o Screening Tool: Lipid Panel	0.9169	0.2	No Significant Difference

QUALITATIVE RESULTS FROM PRE/ POST QUESTIONNAIRES



CONCLUSIONS

- Quantitative Data reveals:
 - No statistical change in the number of times third years order age-related screening tests
 - No statistical change in the number of times interns ordered the 3 marker tests this year compared to the prior year
 - Statistically significant improvement in 2 of the 3 screening tests among the second years
- Qualitative Data reveals
 - Improvement of residents' confidence:
 - in knowledge about age-related screening recommendations
 - In ability to teach medical student
 - Reported % of evaluating patients for screening tests needed based on their age