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How Full is a Full Body Skin Exam?

Investigation into the practice of the full body skin exam as conducted by board-certified and board-eligible dermatologists

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Disclosures or Conflicts of Interest

- None



Objectives

- Background and motivation
- Study methods
- Highlight results from the study
- Discussion of findings
- Recommendations



Background

- Goal of a skin exam: Identify malignant or pre-malignant lesions
- Variability among practitioners
- Recommendations are divided
 - All surfaces including mucous membranes, conjunctiva, genitals ^{1, 2}
 - Only if patients have specific concerns ^{3,4}
- A full body skin examination implies **completeness**
- How does everyone do it?

1. Rogers H, Coldiron BM. Arch Dermatol. 2008.
2. Arndt K. Harv Health Lett. 2009.
3. Zalaudek I, et al. Arch Dermatol. 2008.
4. Chiaravalloti AJ, Laduca JR. J Clin Aesthet Dermatol. 2014.



Study Methods

- Survey study
- Approved by Botsford Hospital IRB
- Survey distributed to American Osteopathic College of Dermatology weekly email, Michigan Dermatology Society email, Michigan Dermatology Society Fall Meeting
- Overall results and graphics generated using SurveyMonkey



Survey Questions

DEMOGRAPHICS

- Dermatology board status
- Conduct skin exams and frequency
- Practice setting
- # of years in practice (vs resident)
- Sex

EXAM PRACTICES

- Use of visual aid
- Patient clothing set up during exam
 - Partially undressed
 - Completely undressed
 - Fully clothed

POTENTIAL BARRIERS

- Patient embarrassment
- Lack of time
- Lack of financial incentive
- Other (free text option available)

Full Body Skin Exam

Location of full body skin exam

* 6. How often do you inspect the following locations? (Please note that more than one answer is available per row)

| | Always | Defer to other provider | Do not check | Patient refuses | Other |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Scalp | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Face | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Orbit (iris, sclera, conjunctiva) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ears | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Inside the mouth | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Neck | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Hands | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Arms | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Chest | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Abdomen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Legs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Feet | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Female Breasts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Male Genitalia (penis and scrotum) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Female Genitalia (including mons pubis, vulva) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Anus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Results

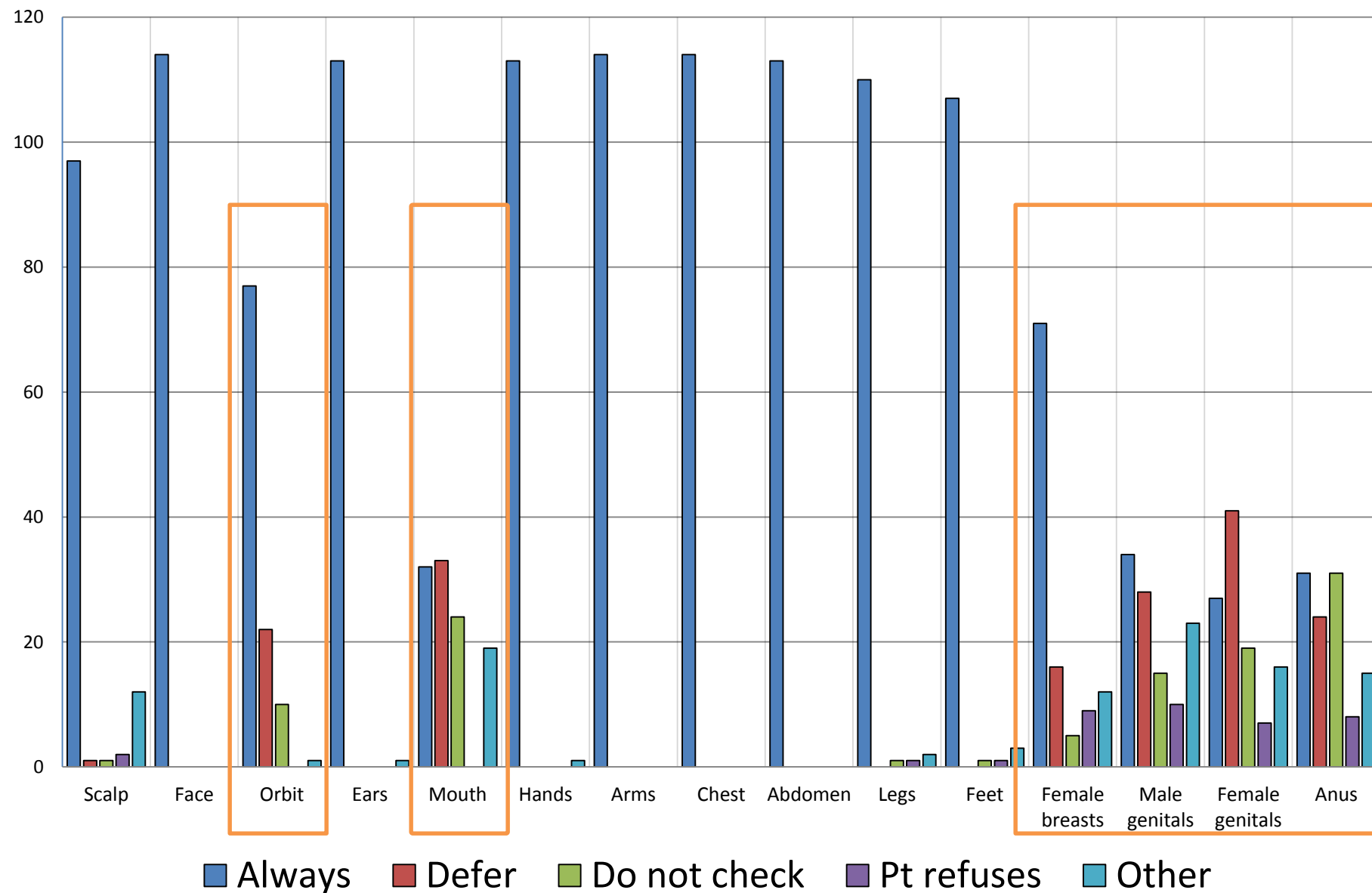
- 119 total surveys returned
- All were board-eligible or board-certified dermatologists who conducted full body skin exams
- 20 residents
- Mean years in practice 19.2 (SD 13.66)
- 57 females, 56 males

Potential barriers to performing a full body skin exam

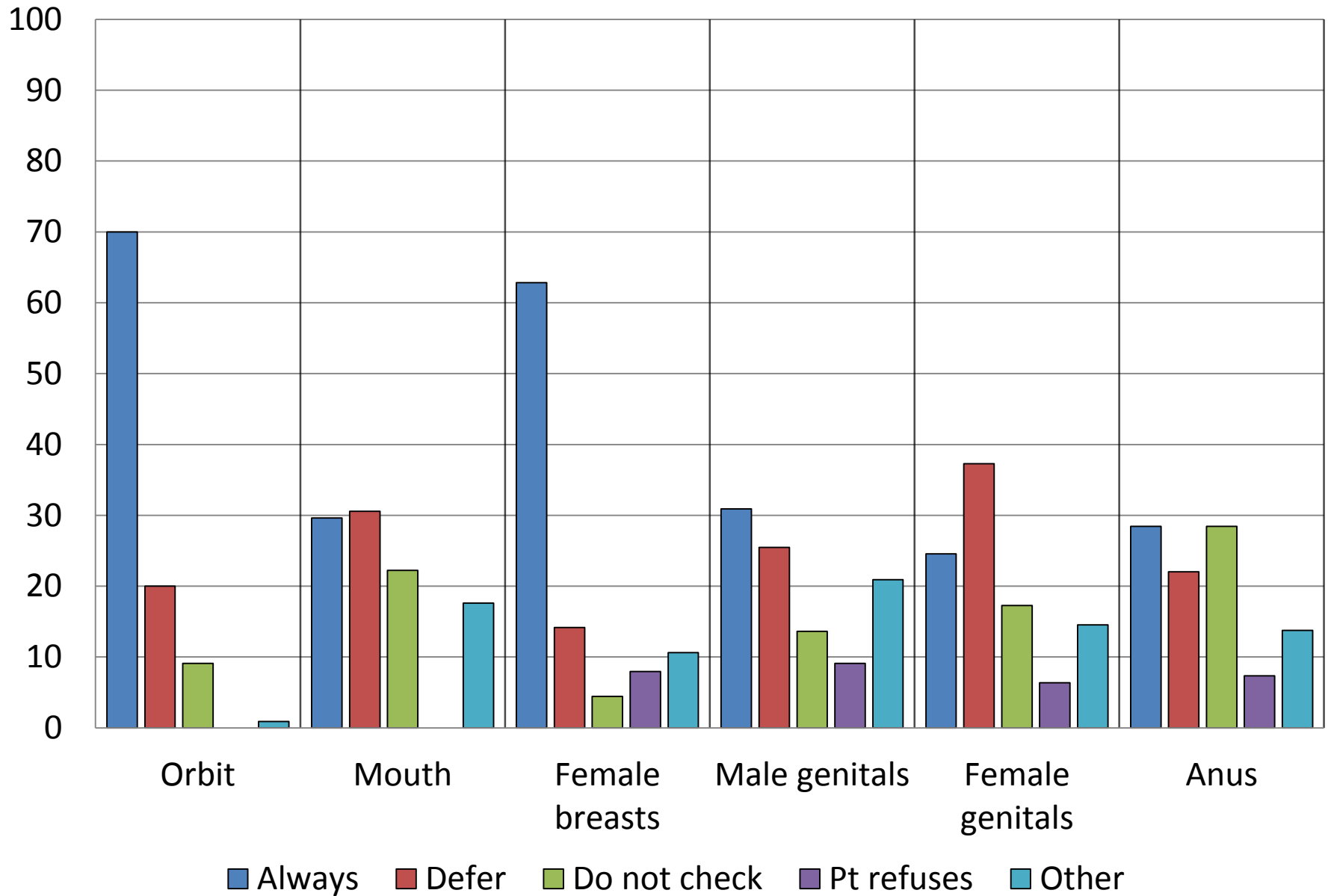
| POTENTIAL BARRIER | N | PERCENT |
|--|----|---------|
| Patient embarrassment* | 73 | 61.9% |
| Lack of time* | 21 | 17.8% |
| None | 10 | 8.5% |
| Patient refusal, decline, reluctance, resistance | 8 | 6.8% |
| Lack of confidence | 2 | 1.7% |
| Lack of financial incentive* | 1 | 0.8% |
| Legal restrictions | 1 | 0.8% |
| Fearful of sexual misconduct or accusations | 1 | 0.8% |
| Cultural resistance | 1 | 0.8% |
| Debility or Difficulty removing clothing | 1 | 0.8% |

Frequency of Locations Checked

(N=119)

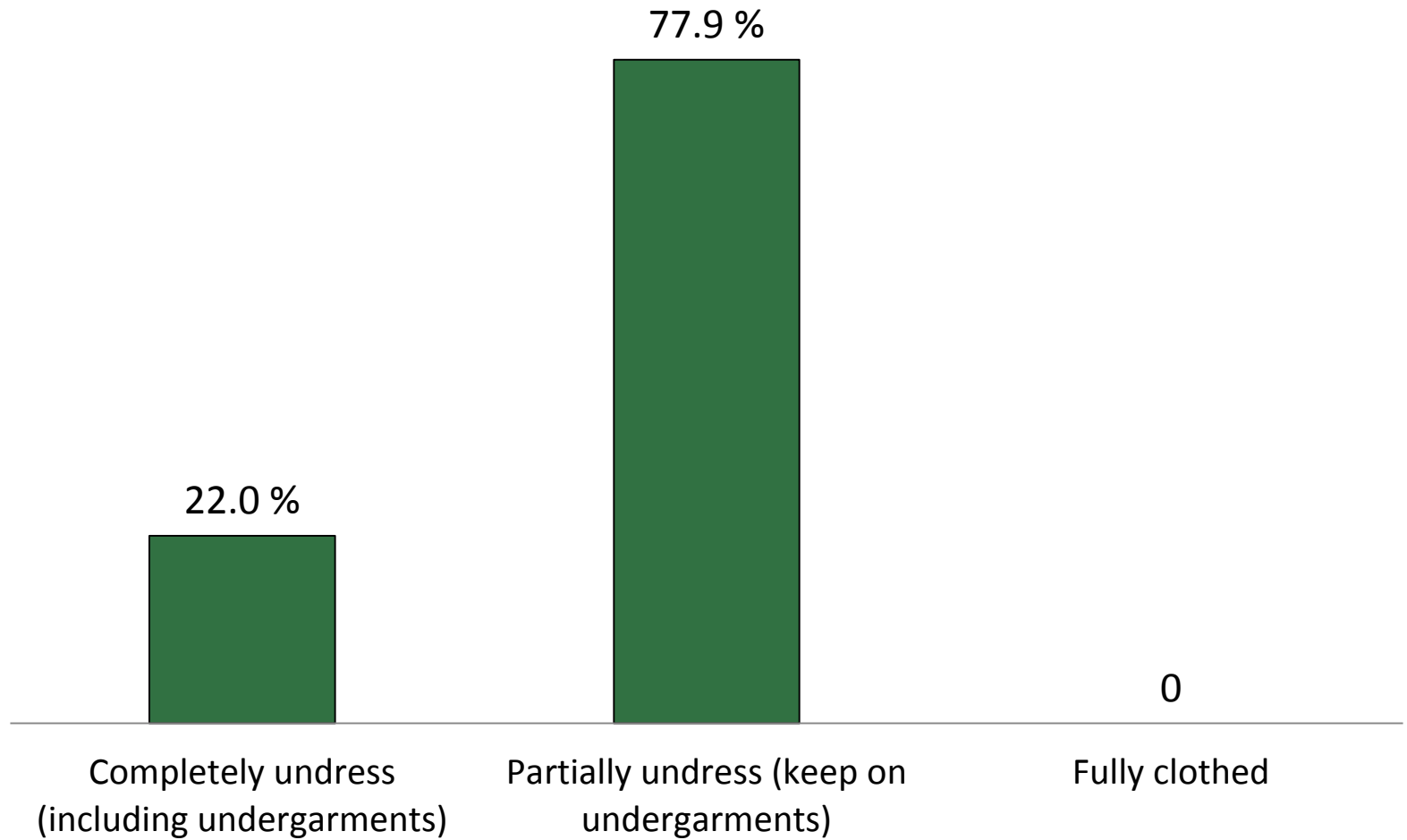


Percentage breakdown of SELECT LOCATIONS

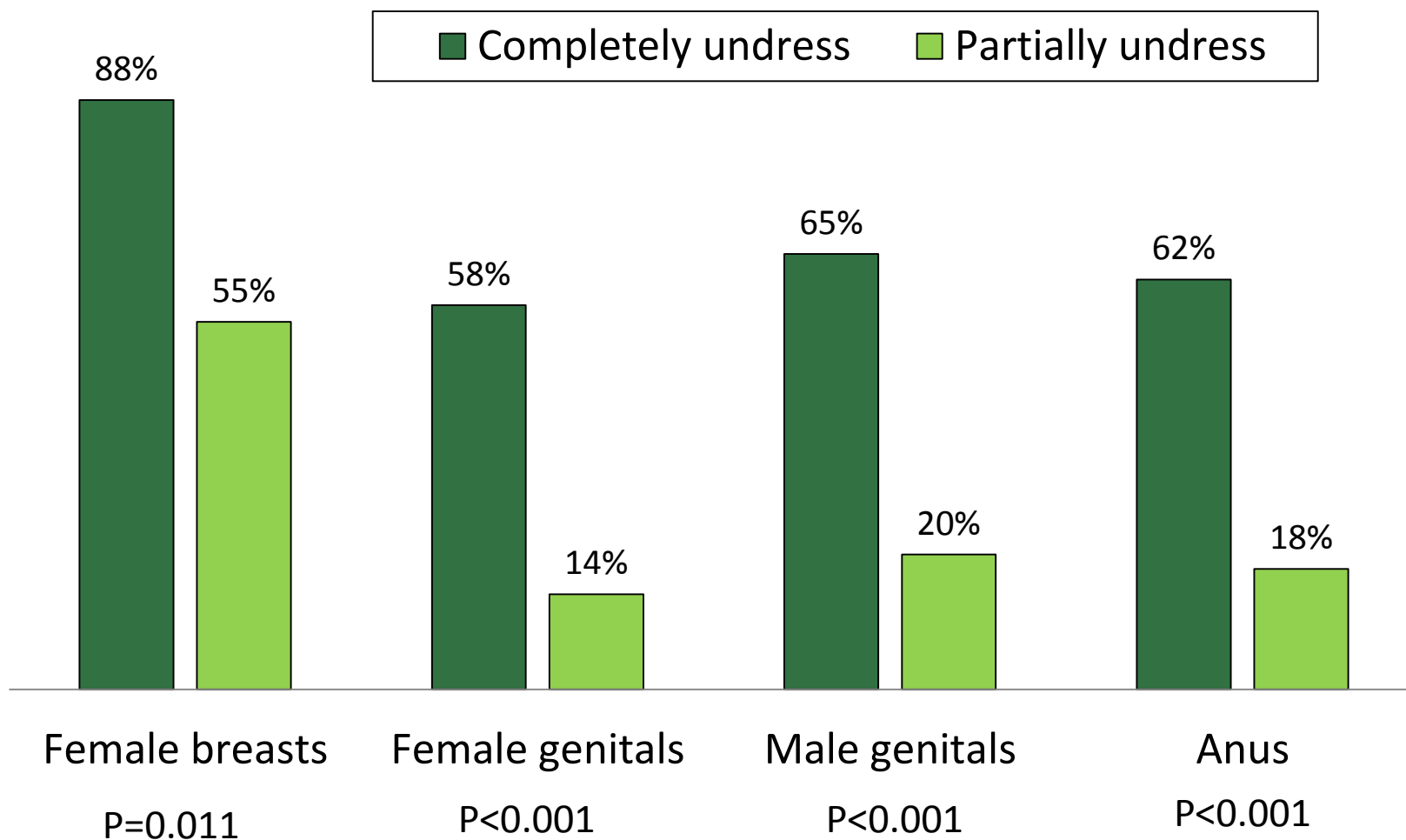




Patient clothing setup during examination



Relationship between patient's gowning status and frequency of checking covered areas

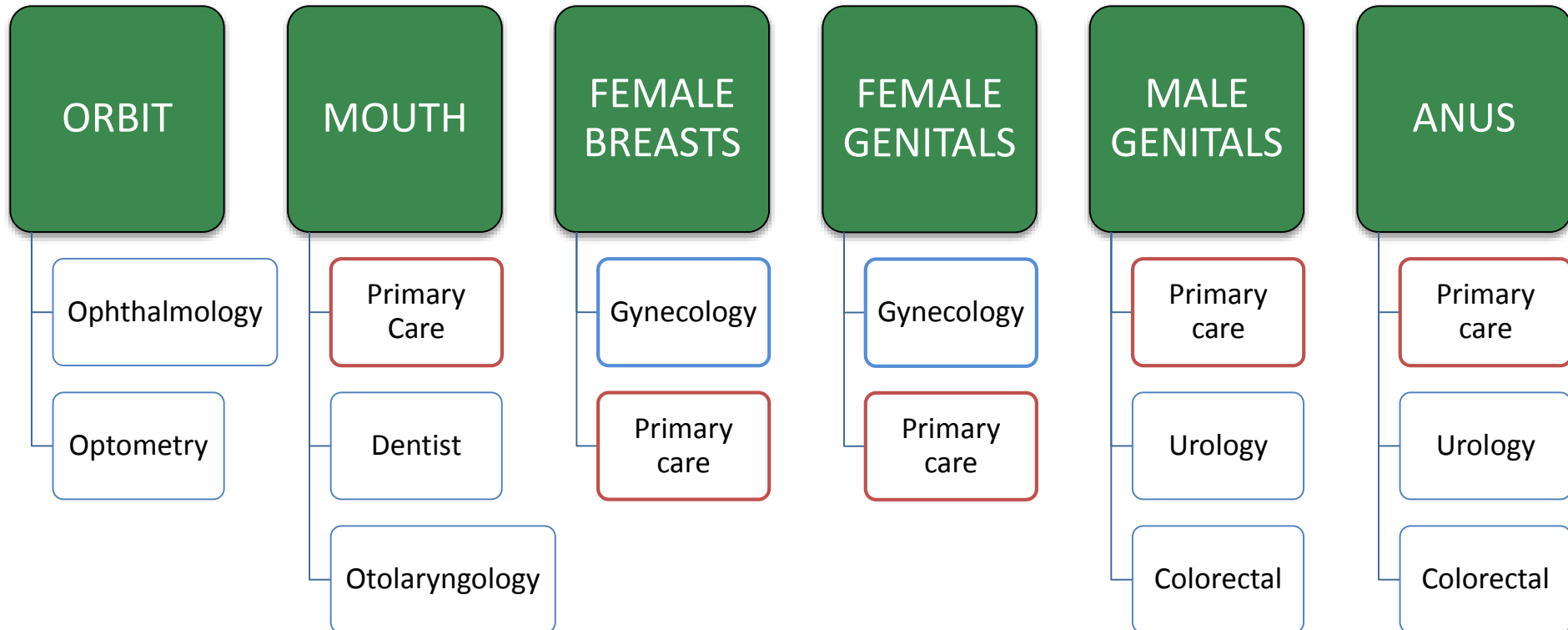




Discussion of Results



Which providers are we deferring to?





Skin cancer screening in primary care¹

- Primary care physicians' **lack of confidence** was cited as the most common barrier to doing a skin cancer screening
- 31% perform screening on high-risk patients
- 29% reported that skin cancer screening was emphasized in their medical training

Potential gaps in female pelvic examination

- New guidelines from American College of Physicians do not recommend screening pelvic exams on healthy, non-pregnant, asymptomatic adult women¹
- Routine cervical cancer screening (Pap smears) in women older than age 65 is not recommended²
- Median age of diagnosis of vulvar melanomas is 68 years³
- *There is no gynecologic equivalent specialist or regular genital exam for men*

1. Bloomfield HE, et al. Ann Intern Med. 2014.

2. Moyer VA; US Preventive Services Task Force. Screening for cervical cancer: US Preventive Services Task Force recommendation statement. Ann Intern Med. 2012.

3. Sugiyama VE, et al. Obstet Gynecol. 2007.

Potential pitfalls in deferring examinations to other providers

- Other providers may assume that since the patient is already under the care of a dermatologist, specific regions may not be checked
- Patients' false sense of confidence
- Patient may potentially be referred back to us for further evaluation and management
- Patients may NOT be referred back to us due to incomplete examination



Informed Deferral

- Inform the deferred provider(s) to check
- Inform the patient to follow up with providers
- Do not assume that other providers are checking your patients' skin

Potential barriers to performing a full body skin exam

| POTENTIAL BARRIER | N | PERCENT |
|--|----|---------|
| Patient embarrassment* | 73 | 61.9% |
| Lack of time* | 21 | 17.8% |
| None | 10 | 8.5% |
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| Cultural resistance | 1 | 0.8% |
| Debility or Difficulty removing clothing | 1 | 0.8% |

Addressing Barriers: **PATIENT EMBARRASSMENT**

- Low percentage of patients who refuse examination of “private” areas (breasts, genitals, anus)
- Previous survey showed a high rate of patient acceptance for full-body skin examination ¹
- Educating patients on what to expect prior to the exam may decrease concern ²
- Many ways to protect patient’s modesty ³

Addressing Barriers:

LACK OF TIME

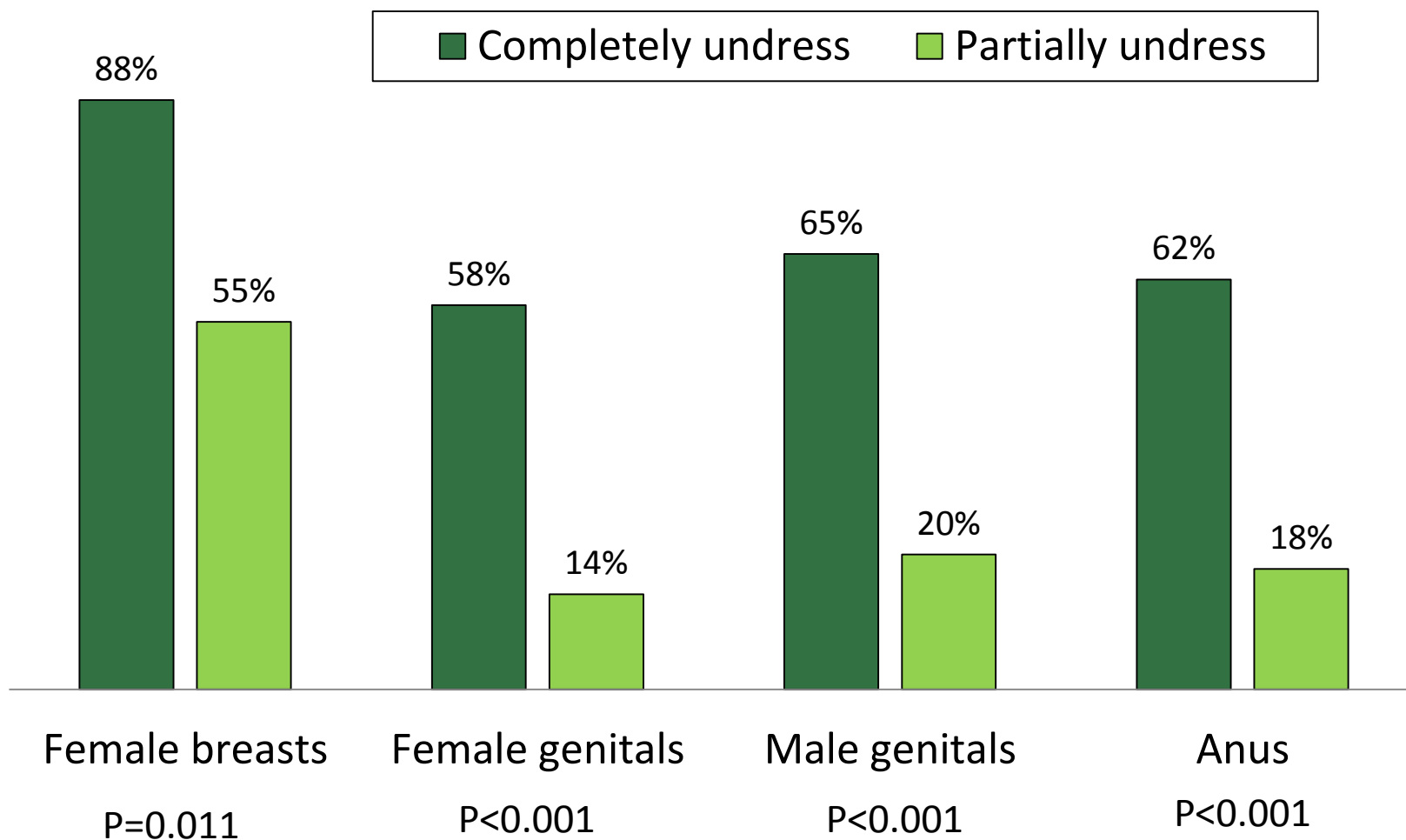
- Average time for full body skin exam
 - Range 70 seconds ¹ to 6 minutes ²
- The least commonly checked locations constitute <5% of body surface area
- Have patients get completely undressed which may expedite the exam

Addressing Barriers:

PATIENT REFUSAL, RELUCTANCE, DECLINE, RESISTANCE

- Educating patients on what to expect prior to the exam may decrease concern ¹
- Document patient refusal for any part of the exam after thorough education

Relationship between patient's gowning status and frequency of checking covered areas



Does a patient's gowning status affect the completeness of the exam?

- When patients were instructed to be completely undressed at the start of the exam, regions typically covered by undergarments (female breasts, genitals, anus) were more likely to be checked
- Potential reasons:
 - Anticipation, eliminating physical barriers, eliminating mental barrier?



Genital and anorectal melanoma

- Not all melanomas are associated with sun exposure, i.e. acral lentiginous, mucosal, ocular¹
- Despite the low incidence of mucosal melanoma, they are often invasive and thicker² when diagnosed and associated with poor prognosis³
- Genital and anorectal mucosal melanoma is associated with cutaneous melanomas and can run in families⁴



Changes in UV exposure habits

- Increase in recreational and artificial UV exposure due to artificial tanning, travel, fashion^{1,2,3}
- May see an increase in non-melanoma skin cancers in previously “sun-protected” regions⁴



Limitations

- Recall bias
- Only reflects those who took the survey
- Sampling which may not be reflective of habits of all USA and international dermatologists



Conclusion

As experts in skin diagnosis and management, when doing a full body skin examination, patients should be completely undressed and all skin surfaces including the orbit, oral mucosa, and genitals should be inspected.



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