Dermatology Workforce: Stability and Shifting Sands

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Data Sources

AAD Practice Profile 2002

1425/4090 Returned (34.8%)

AAD Practice Profile 2005

1619/5371 Returned (30.0%)


American Academy of Dermatology Association

Dermatology Practice Profile Survey

Biographical/Demographic Information

Galderma Board Review 1999-2007

1999	223/273	(82%)
2000	204/267	(76%)
2002	191/289	(66%)
2003	180/211	(80%)
2004	171/231	(74%)
2005	192/256	(75%)
2006	137/261	(52%)
2007	163/266	(66%)

DBM 2004 Survey (n=600)

Merritt Hawkins 2004 Urban Survey (n=269)

American Medical Association

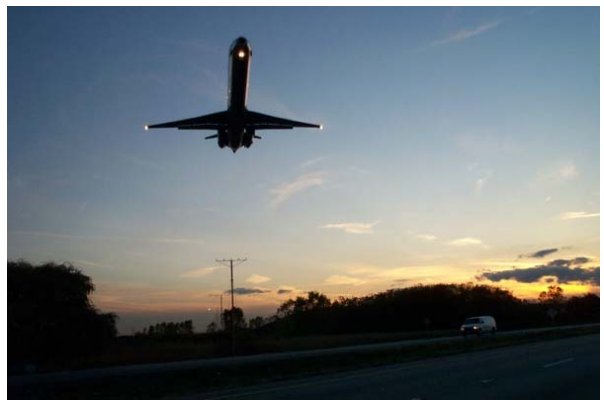
American Academy of Dermatology

American Osteopathic Association

American Osteopathic College of Dermatology

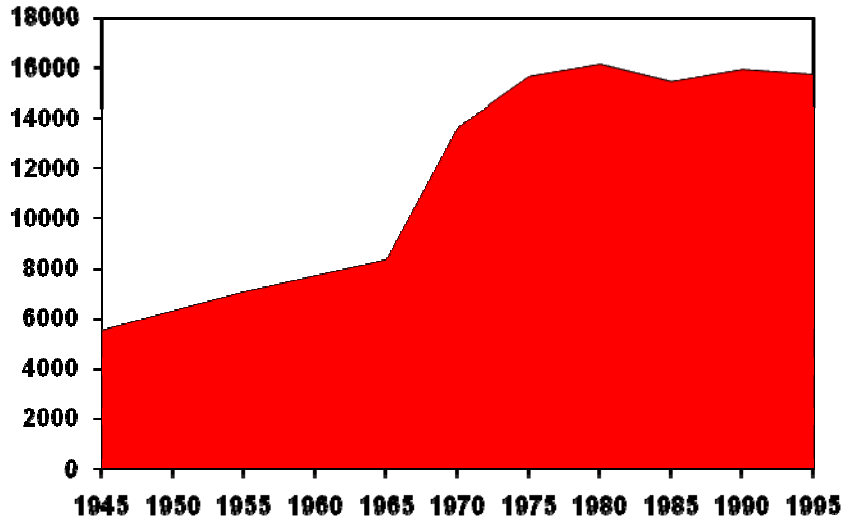
American Academy of Physician Assistants

American Academy of Nurse Practitioners



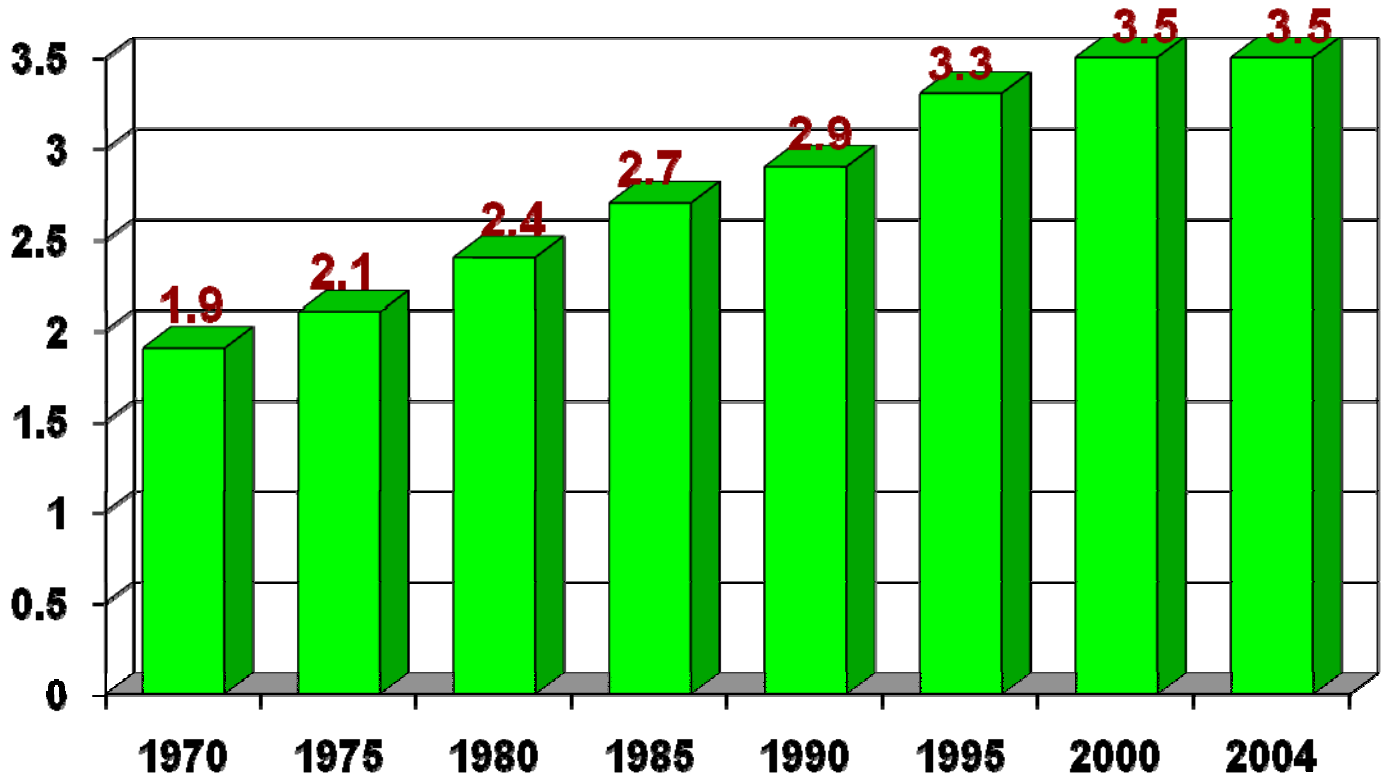
More Doctors, Please!

- **1950s: Pop Boom**
  - **Public outcry for more physicians**
- **Mid-1960's**
  - **MD shortage predicted**
- **1963: Health Professions Educational Assistance Bill**
  - **medical schools and students doubled**
  - **stabilized in 1981**



Residency positions continued to increase, driven by unrestricted Graduate Medical Education (GME) – increased 31% between 1985 and 1994

Total Active Dermatologists in US Per 100K Pop. = about 10K



In 1980's and early 1990's projections were that we'd need 2.3-3.2/100K

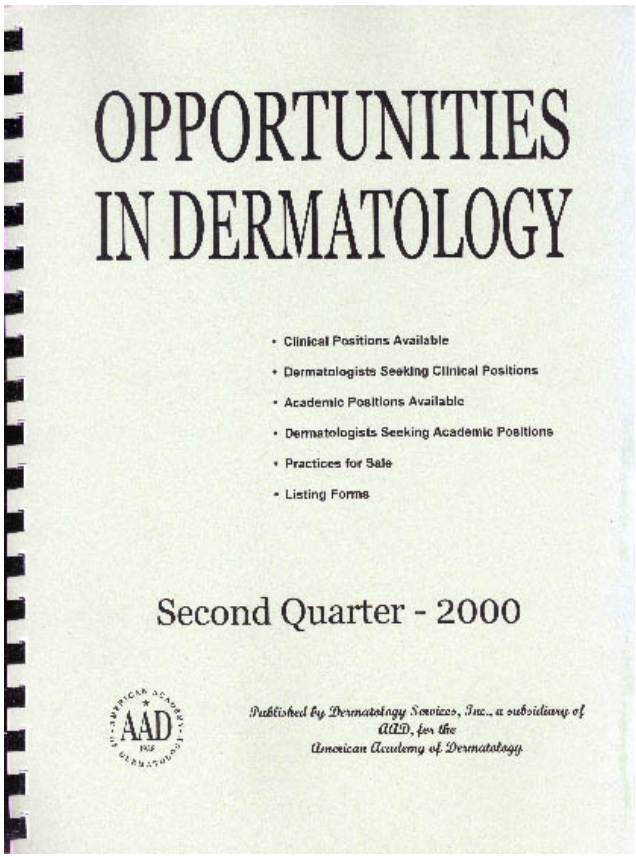
Source: AMA Physician Masterfile

Predictions?

“<u>Will dermatologists also be driving cabs in the year 2000?</u>”

- **–Robert S. Stern, MD. Dermatologists in the year 2000. *Arch Dermatol* 1986; 122:678**

Anecdotal Support for a Undersupply in late 1990's leads to documentation in 2000-2002



- Wait-times
- Ease in job hunting
- Recruiting Difficulty
- Increasing numbers of non-physician clinicians

Areas where shortage likely most acute

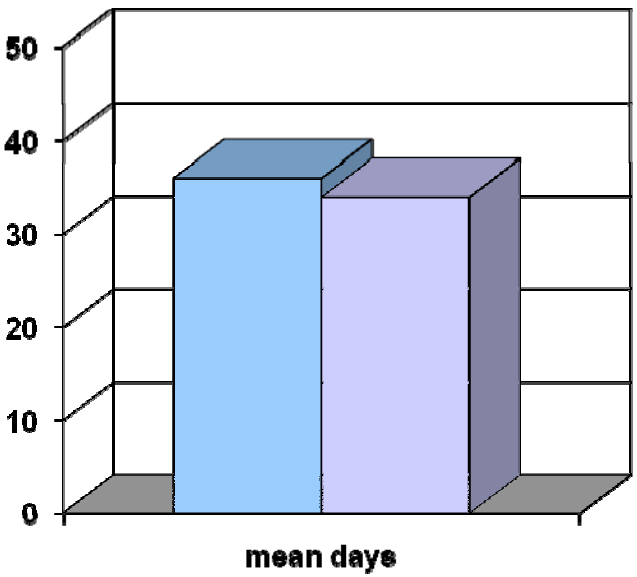
- Medical dermatology
- Underserved areas
- Training programs
- Minnesota

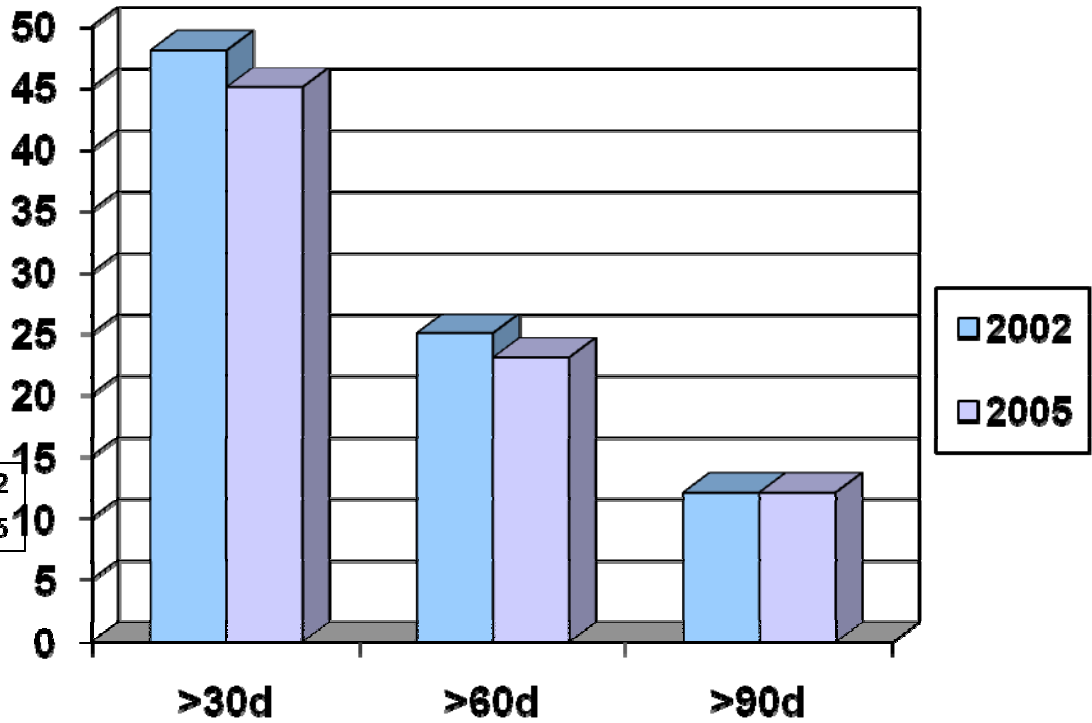
Except Manhattan
and Omaha, Nebraska

New Patient Wait-Times

1996 AAD Practice Profile Survey

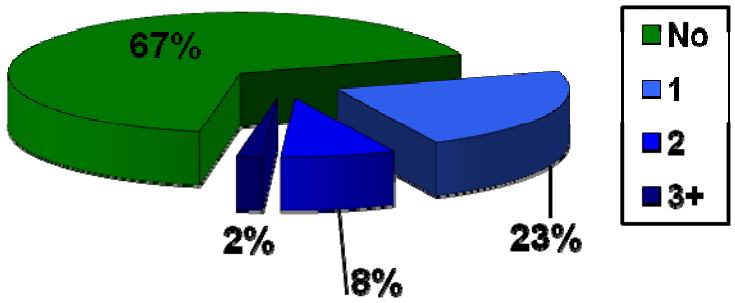
18% 30+ days





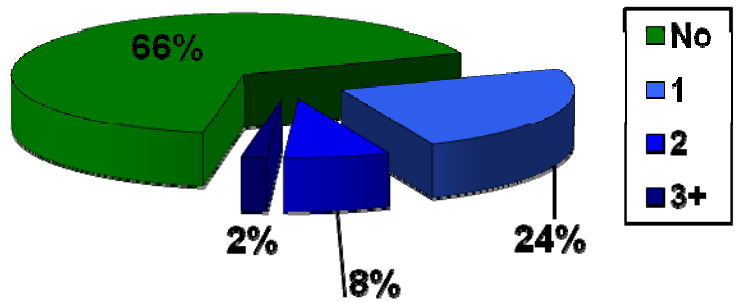
Currently Seeking Associates?

AAD/A 2002 Practice Profile



- Mean time looking:
  - 16 months
- Mean Wait Time:
  - 53 days if looking
  - 28 days if not

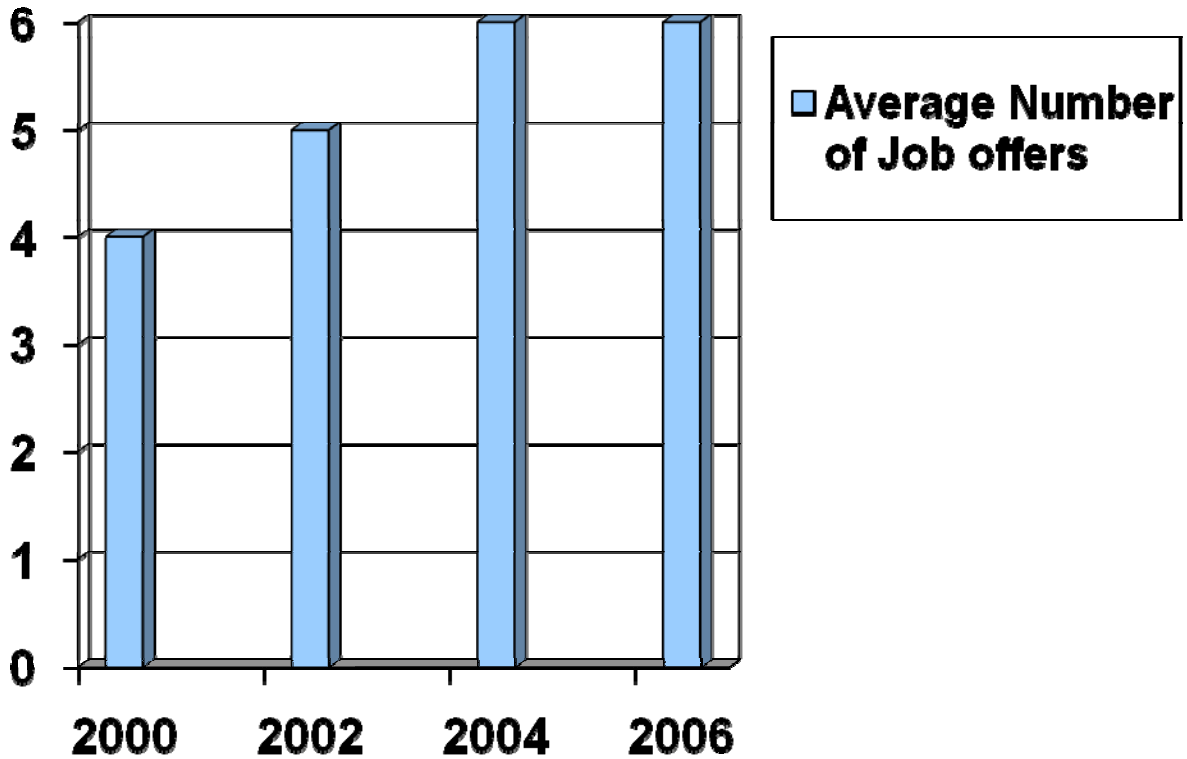
AAD/A 2005 Practice Profile



- Mean time looking:
  - 20 months
- Mean Wait Time:
  - 50 days if looking
  - 27 days if not

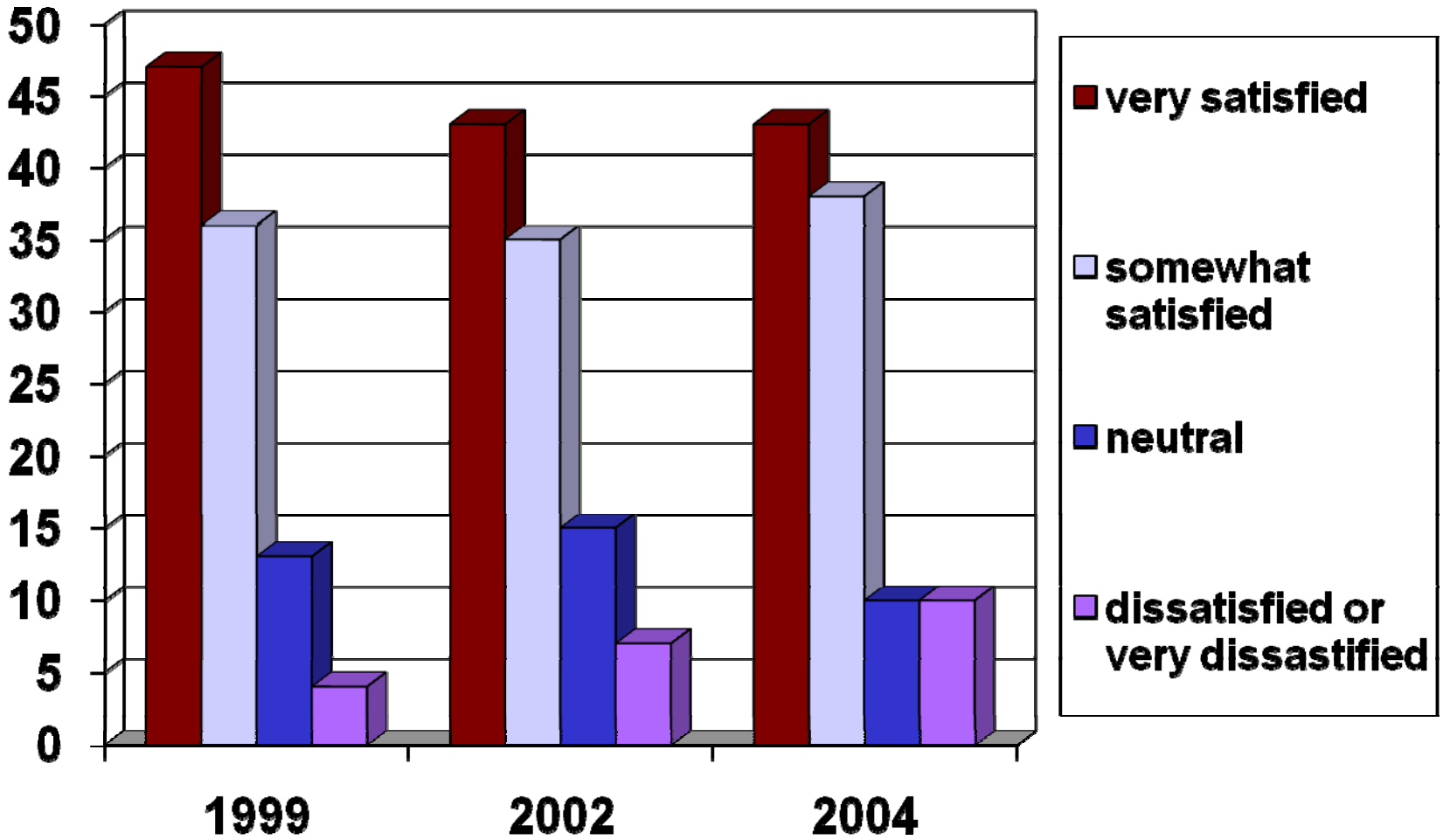
Job Choice

	1999	2000	2002	2004
more than one offer	91%	81%	89%	92%
more than four offers	50%	37%	37%	49%



Recent Trainee Surveys

Job Choice Satisfaction



Recent Trainee Surveys

Some Factors Affecting Workforce

- Decreasing supply
  - residency cuts in mid ‘90’s, general steady state
  - expanding scope of practice
  - generational differences
  - gender
  - fellowship
  - early retirement
- Increasing demand
  - aging population
  - more liberal HMO policies
  - expansion of services (surgery and cosmetics)

Tremendous popularity among medical students

Figure 2

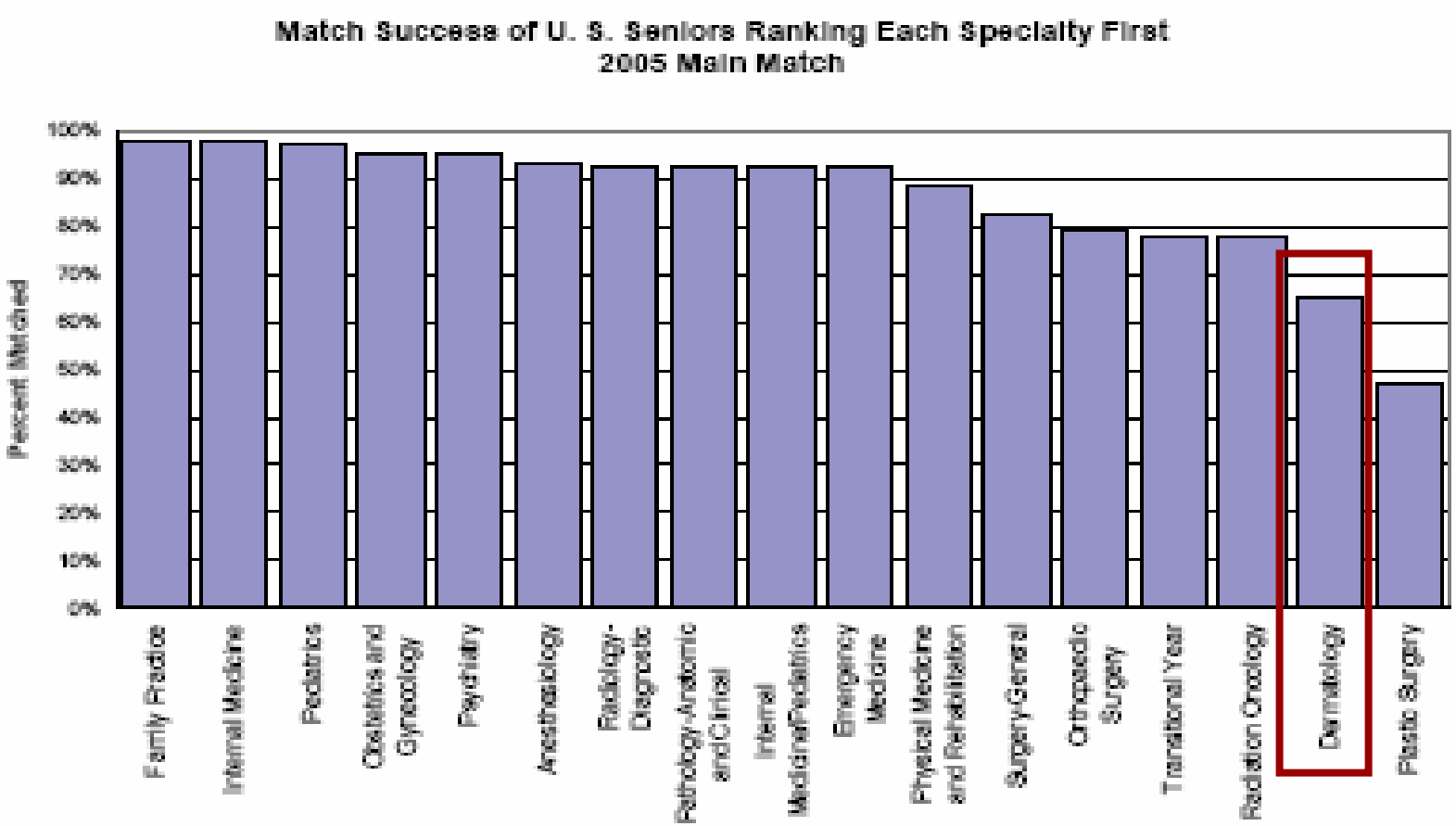
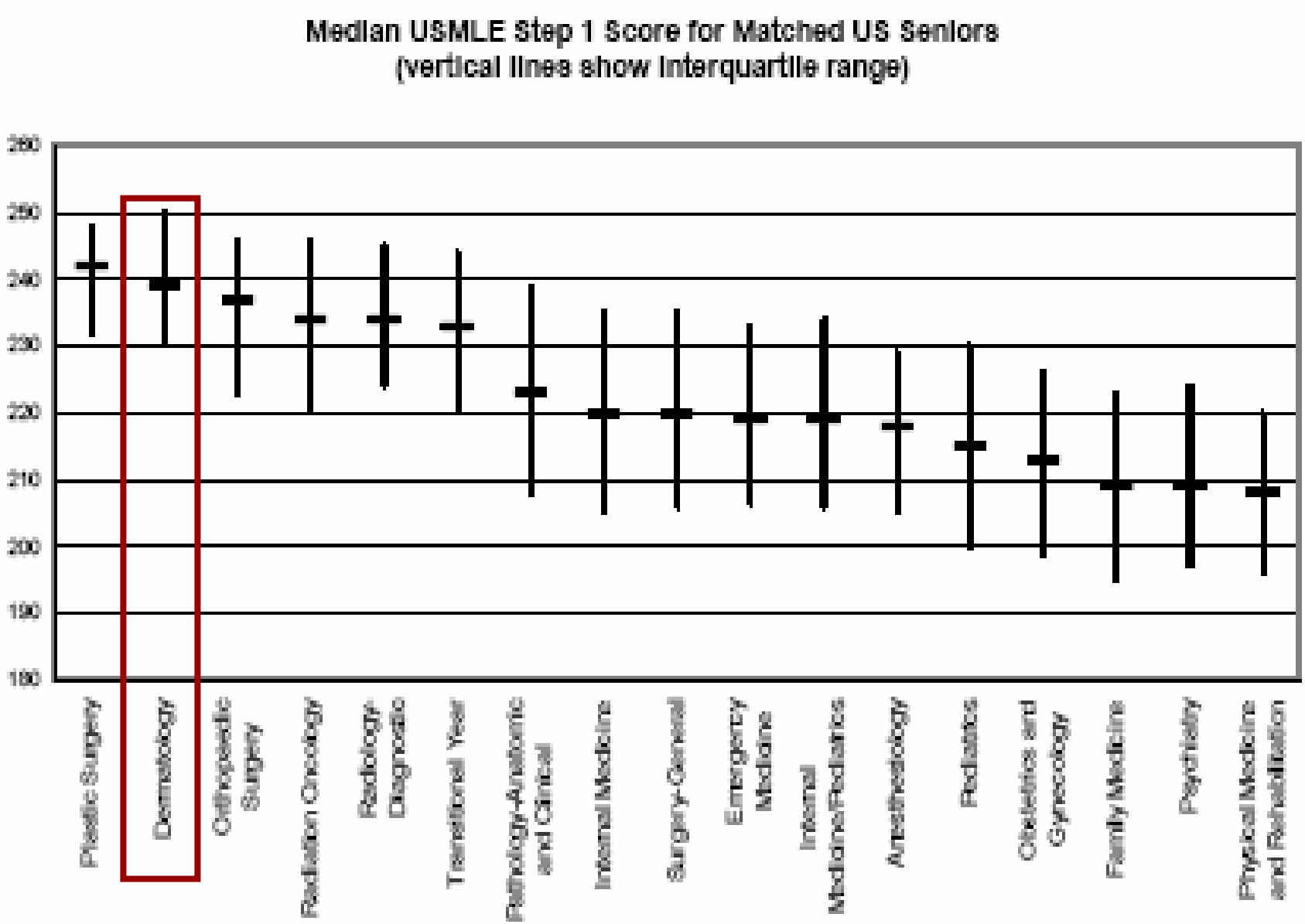
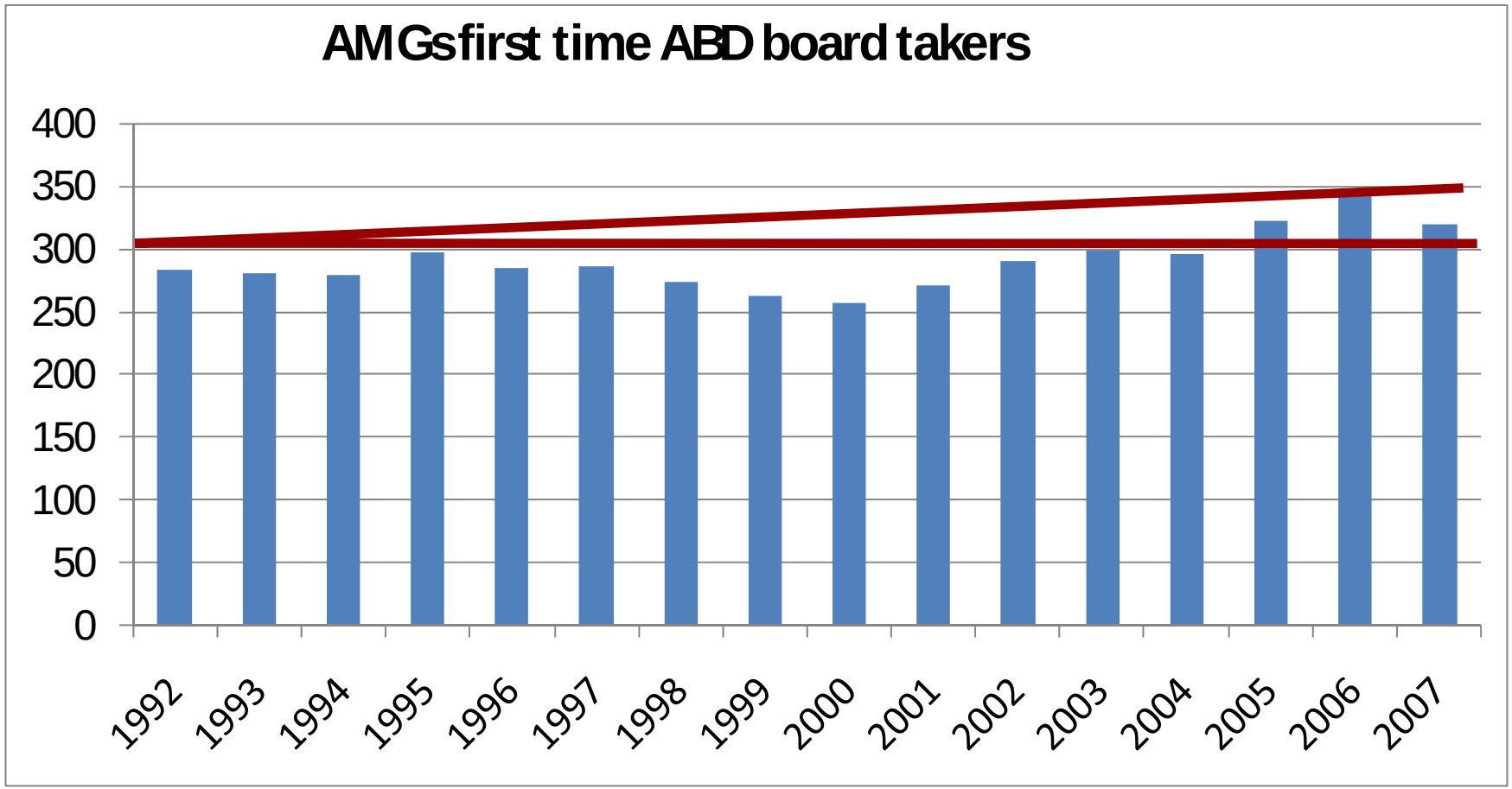


Figure 4


Median USMLE Step 1 Score for Matched US Seniors
(vertical lines show interquartile range)
260
250
240
230
220
210
200
190
180
Plastic Surgery
Dermatology
Orthopaedic Surgery
Radiation Oncology
Radiology-Diagnostic
Transitional Year
Pathology-Anatomic and Clinical
Internal Medicine
Surgery-General
Emergency Medicine
Internal Medicine/Pediatrics
Anesthesiology
Pediatrics
Obstetrics and Gynecology
Family Medicine
Psychiatry
Physical Medicine and Rehabilitation

But number of spots not changing



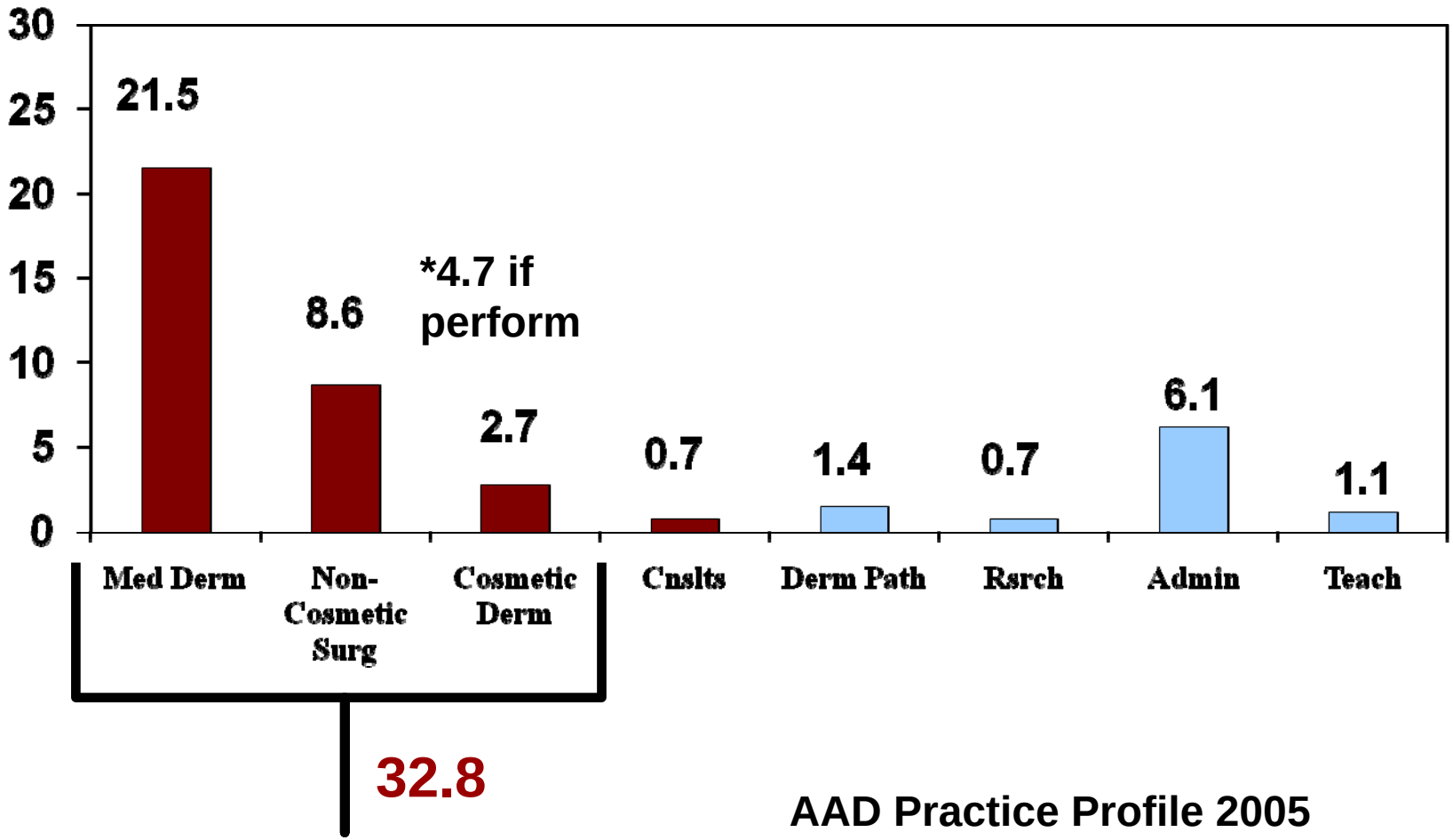
US POP GROWTH UP 19%

Practice Work Patterns

Pt Care Workload	1996	2002	2005
Avg pts/ week	135	141	142
Avg pt days/week	4.4	4.1 (32 hours)	3.9 (32 hours)
Avg pts/day	30.7	34.4	34.4
Avg weeks/yr	46.5	47.2	47.3
Avg pts/year (calculated)	6287	6665	6717

AAD Practice Profile Survey 1996, 2002, 2005

Scope of Practice
Average Hours/Week



AAD Practice Profile 2005

Fellowship Training

	1999	2000	2002	2004	2005
Current	**15%**	**20%**	**19%**	**21%**	**19%**
Completed	**11%**	**5%**	**8%**	**6%**	**2%**

Mohs (% of fellows)

41% 42% 37% 50% 35%

Mohs fellowships offered/year ~ 40-45

Equivalent to roughly 13-15% of graduating class

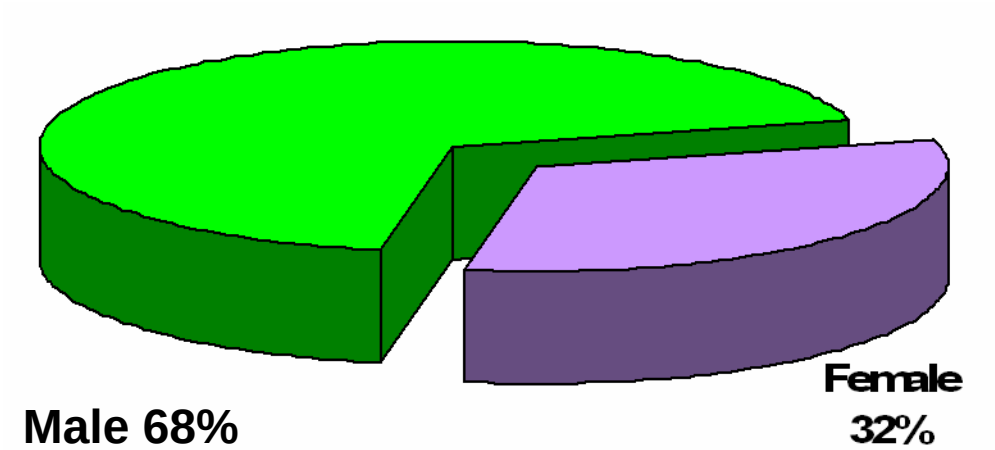
8% of the workforce is currently Mohs fellowship trained (AAD/A 2005)

18% of workforce says they currently practice some Mohs (AAD/A 2005)

Recent Trainee Survey

Dermatologists:Gender

Current Practice AAD/A 2005



Trainees

	1999	2000	2002	2003	2004	2005
Female	52%	56%	57%	60%	60%	65%
Male	48%	44%	43%	40%	40%	35%

2005 Patient Care Hours: 33.7 vs 28.9/week

Demographics recent trainees

	Men	Women
Raw Percent	**43%**	**57%**
Mean Age	**34**	**33**
Married	**64%**	**75%**
Parents	**37%**	**47%**

Mean number of children = 1.6

Mean age of children per family = 3.8 y.o.

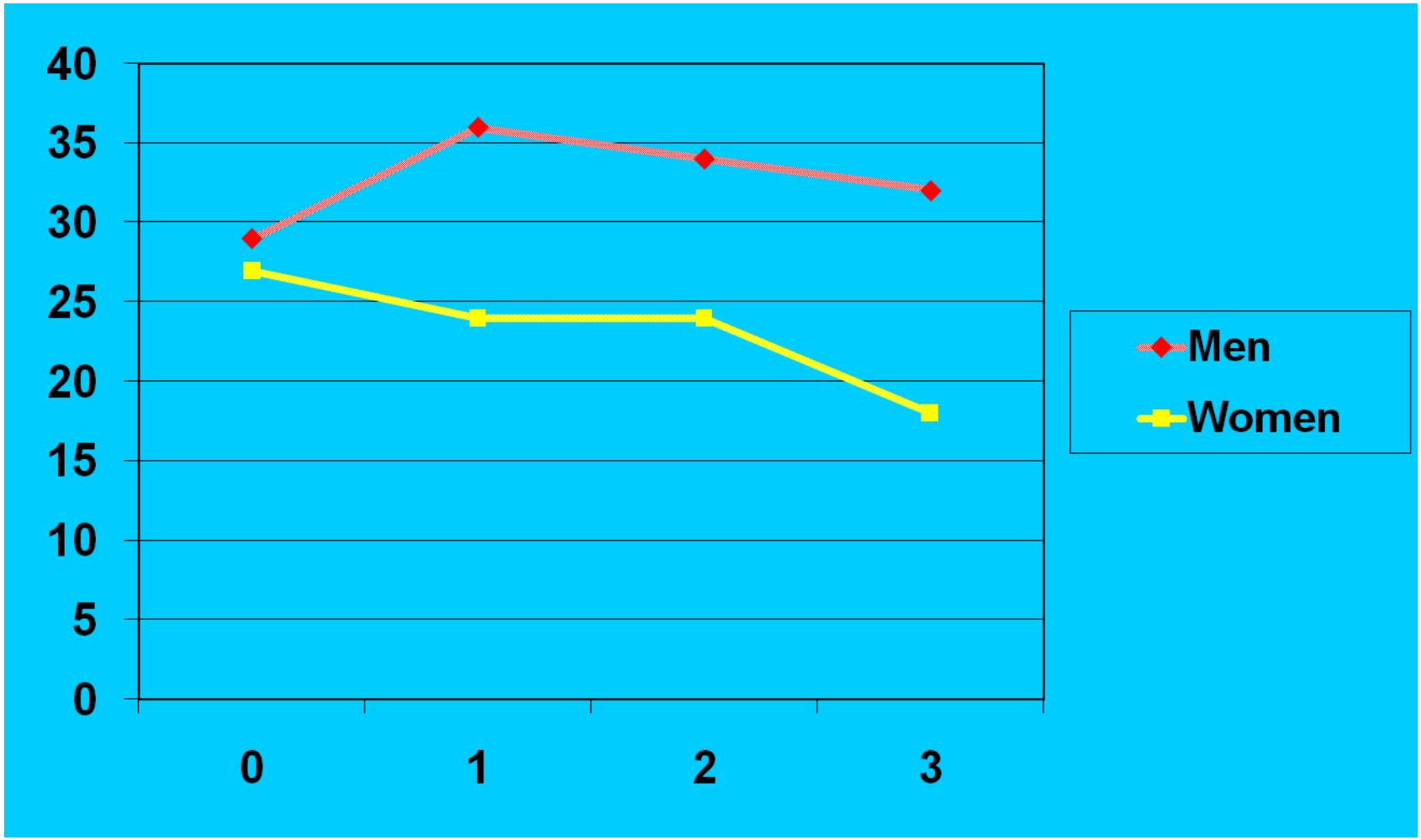
Recent trainee survey 2002

Hours Spent Seeing Patients per Week

	Men	Women	Significance
All	**30**	**26**	**p=0.01**
Parents	**34**	**24**	**p<0.01**
Non-Parents	**29**	**27**	**p=0.43**
Married	**33**	**28**	**p=0.02**

Recent trainee survey 2002

Patient Hours Per Week v. Number of Children



Recent trainee survey 2002

Scope of Practice

	Men	Women	Significance
Medical Derm	**22**	**25**	**p=0.30**
Surgery	**6**	**3**	**p=0.16**
Cosmetics	**3**	**4**	**p=0.86**

Recent Trainee Survey 2002

Generational Differences

- Baby Boom generation (born 1945–1962)
- Generation X (born 1963–1981)
- Differences and tensions have profound implications

Boomers (1945–1962)

- Work hard out of loyalty
- Expect long-term job
- Pay dues
- Self-sacrifice is virtue
- Respect authority

Generation X (1963–1981)

- Work hard if balance allowed
- Expect many job searches
- Paying dues not relevant
- Self-sacrifice may have to be endured, occasionally
- Question authority

X’ers con’t

- both parents likely to work outside the home
- parental divorce twice as prevalent
- parents suffer from “vacation deficit disorder.”
- witnessed their parents as victims of downsizing, loss of pensions
- less likely to put jobs before family, friends, or other interests

Practice Patterns by Age

	31-40	41-50	51-60	61-70	Overall
Hours see patients/week	31	32	34	32	32
Productivity (patients/hour)	4.4	4.5	4.5	4.8	4.5
Avg. pts/wk	133	138	150	146	141
Wait in days for new pts.	38	42	33	23	36
Wait in days for estab. pts.	24	23	19	15	21

2002 AAD Practice Profile Survey

Scope of Practice - Hours

	31-40	41-50	51-60	61-70	Overall
Medical derm hrs	26	27	29	31	28
Cosmetic hrs	5	6	5	4	5
Non-cosm. surg hrs	12	12	12	13	12

AAD Practice Profile 2002

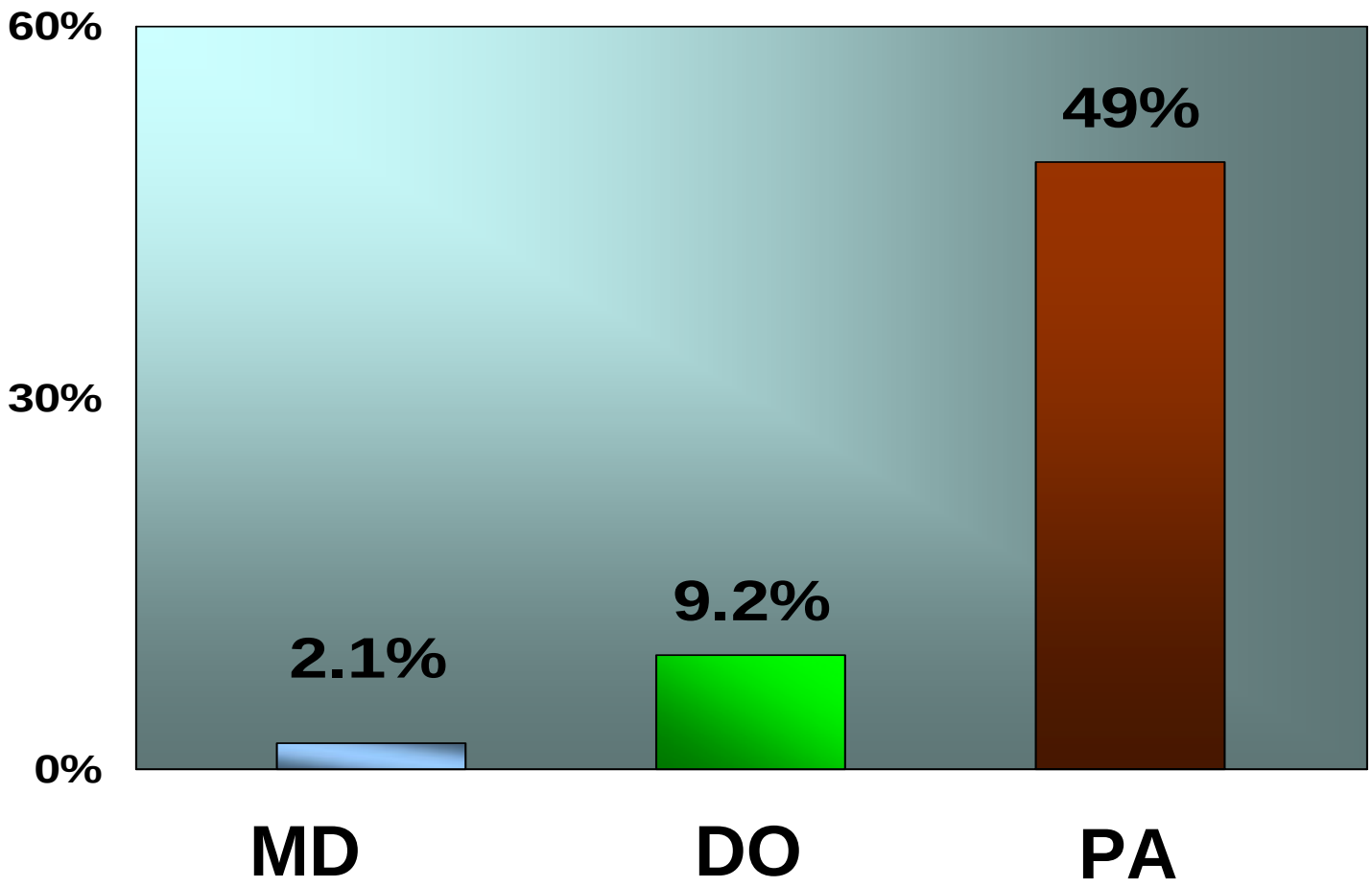
Mean Patient-Hours per week

Survey Year	Men	Women
1999	34	30
2000	31	25
2002	30	26

On average all four years, 8-12 hours per week were spent in practice-related activities

Board Review Survey 1999-2002

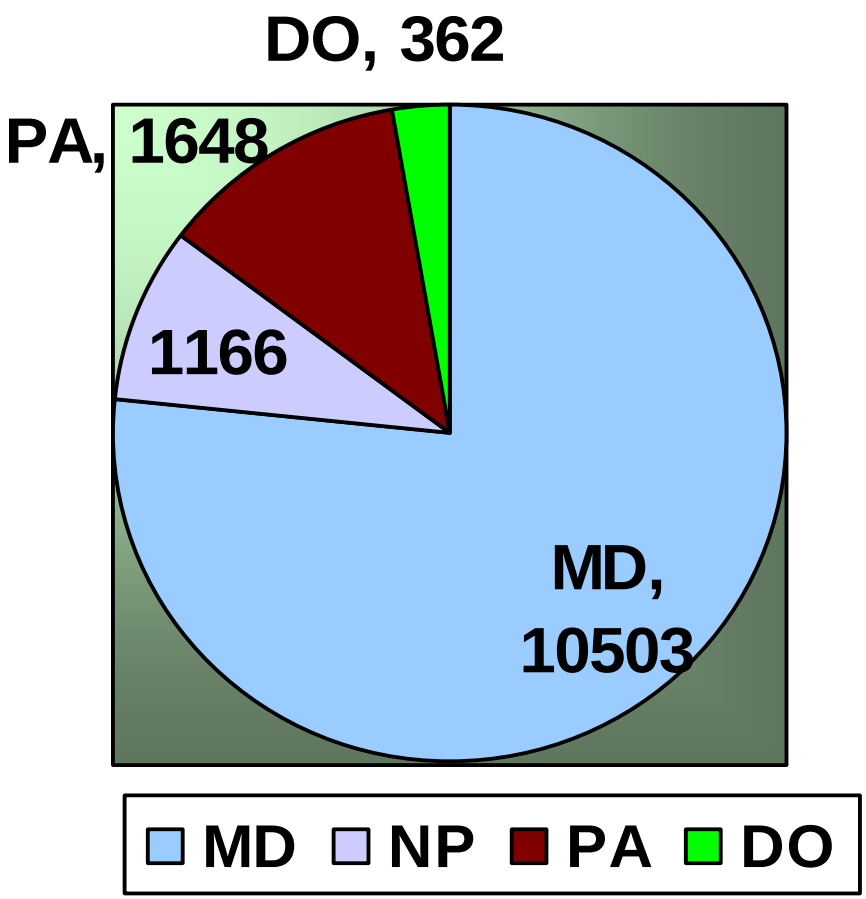
Entry into workforce growth, 2000-2004*



*Based on membership and survey data from the AMA (Physician Characteristics and Distribution in the US, 2005), AOCD (2004 Membership Directory), and AAPA (Nurse Practitioner Workforce Data Survey, 2004)

Dermatology Practitioners

Estimated Workforce Proportions 2004*



Non-MD dermatology practitioners:

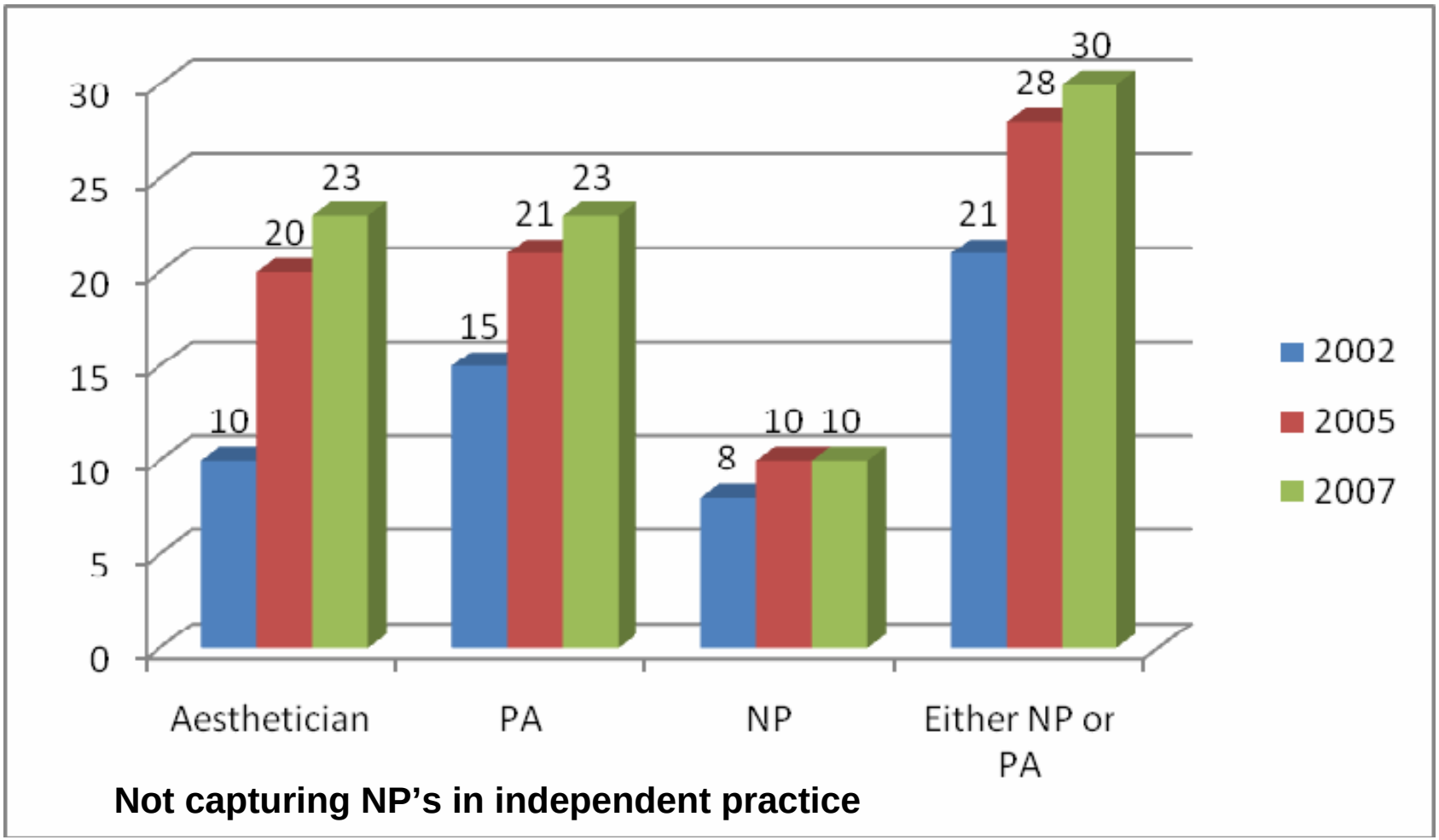
3176/13679

23% of total

NONDERM MD:??

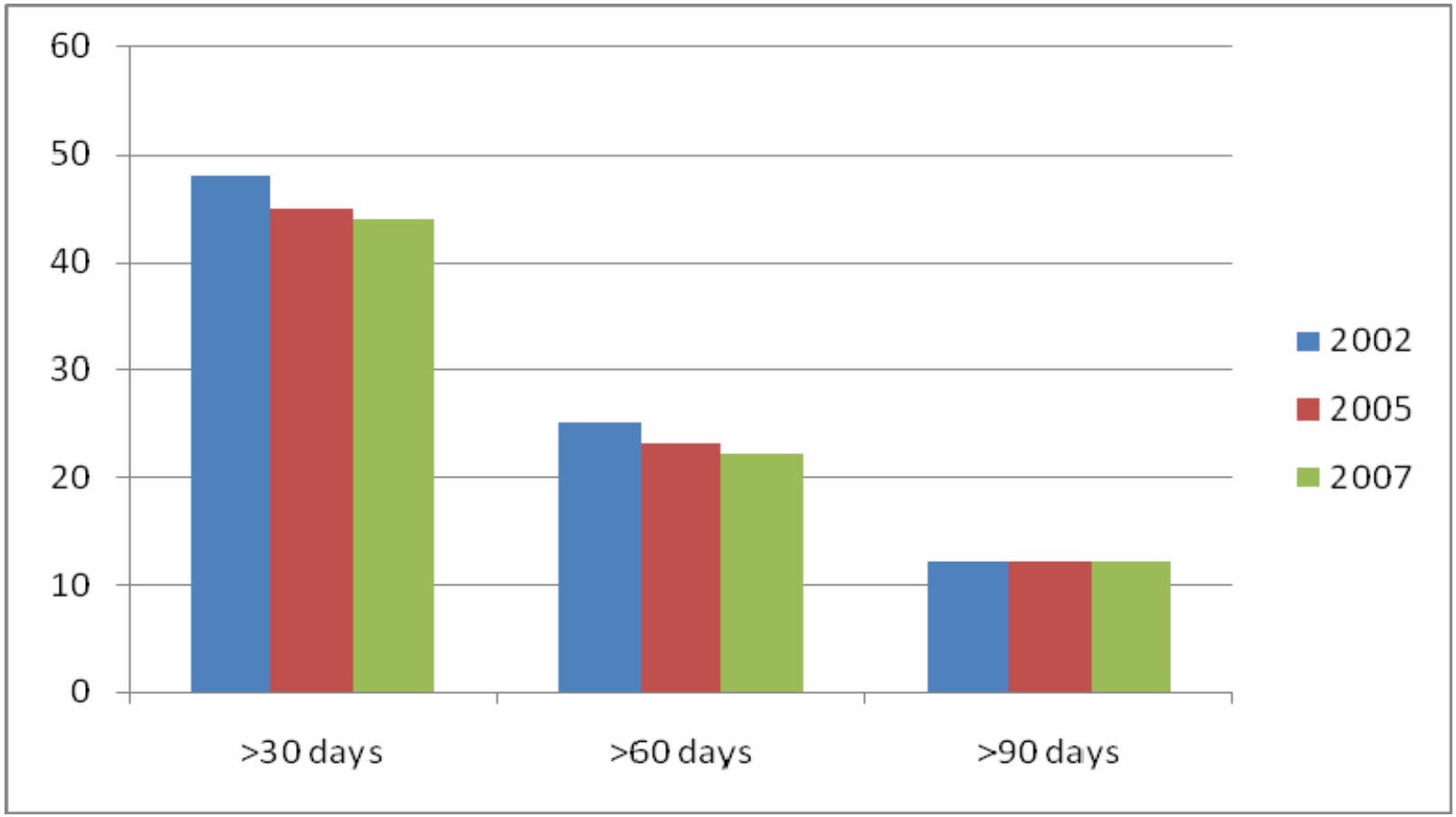
*Based on membership and survey data from the AMA (Physician Characteristics and Distribution in the US, 2005), AOA, AAPA (2004 Physician Assistant Census Report), and AANP (Nurse Practitioner Workforce Data Survey, 2004)

Proportion of practices with NPC's



Not capturing NP's in independent practice

Wait times unaffected



1996 AAD Practice Profile Survey: 18% 30+ days

Subsequent surveys

- MD’s (easy)
- DO’s
- PA’s
- NP’s (hardest to generate)

THANK YOU!

What to do the PA's say?

- 185 surveys returned from PA meeting at annual meeting in 2006
- 178 evaluable
- Average age=36
- Been a PA 6.5 years (mean)
- Been a Derm PA 4.2 years (mean)
- 12% with formal Derm PA training

Productivity – NP and PA

See on average 87 patients/week versus 150 patients/week for their supervising MDs

Time Spent (%)

Treating medical dermatology patients	Performing or assisting cosmetic dermatology	Performing or assisting in non-cosmetic surgery
77	**9**	**13**

AAD/A PPS 2005

Productivity

Time Spent (%)

	medical dermatology	cosmetic dermatology	non-cosmetic surgery
MD report 2005 PE	**77**	**9**	**13**
PA report 2006	**72**	**7**	**17**

Productivity

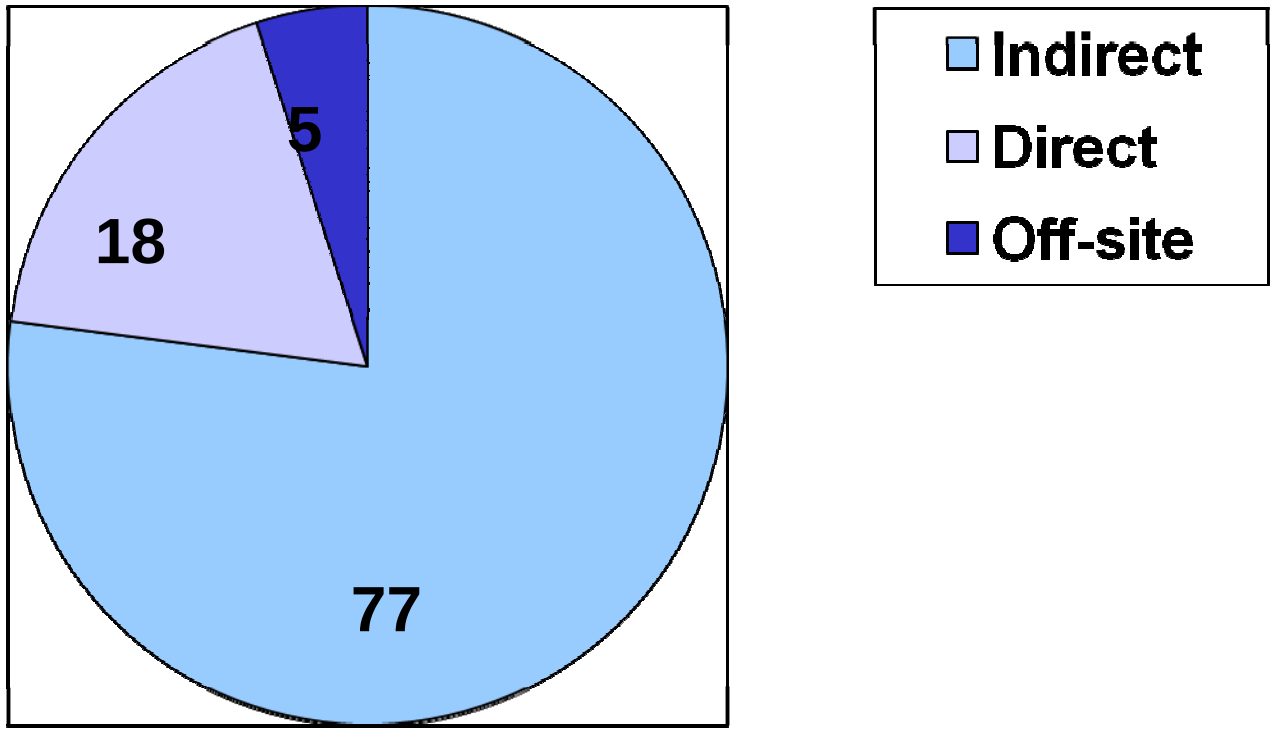
Per MD*: PE's see on average 87 patients/week

MDs see 150 patients/week

Per PA's: PA's see 114 pts/week

***AAD/A PPS 2005**

Level of supervision



Direct Supervision (All patients presented to MD)
Indirect Supervision (Physician available on-site)
Off-Site Supervision (Physician available by phone)

AAD/A PPS 2005

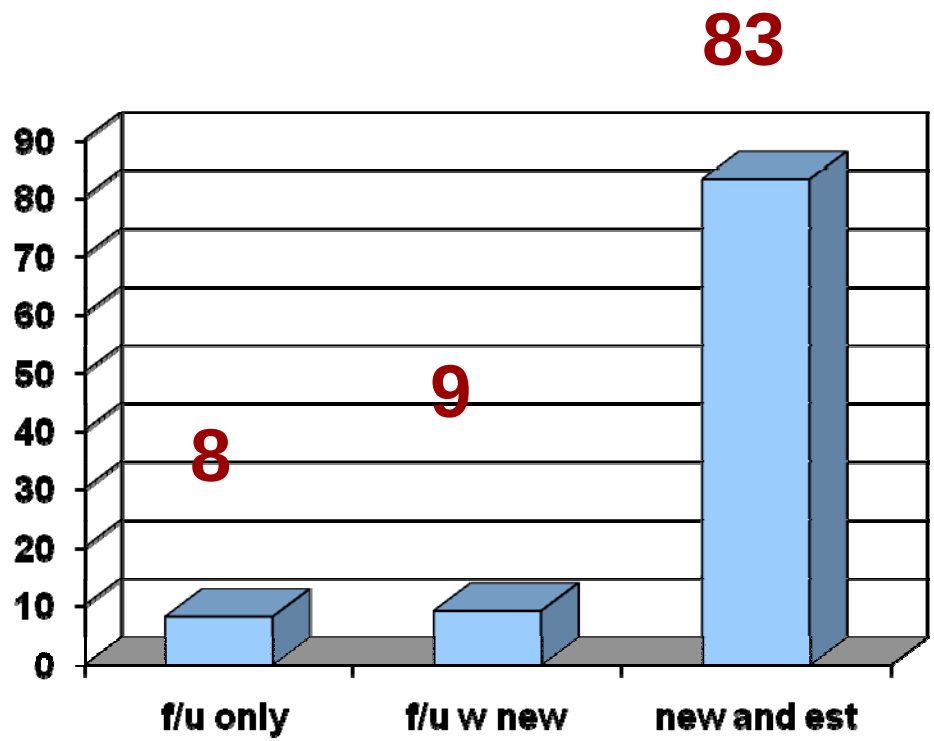
Independence

Types of patients seen by NPC in practice

F/U patients only

F/u pts w/new problems

Established and new pts

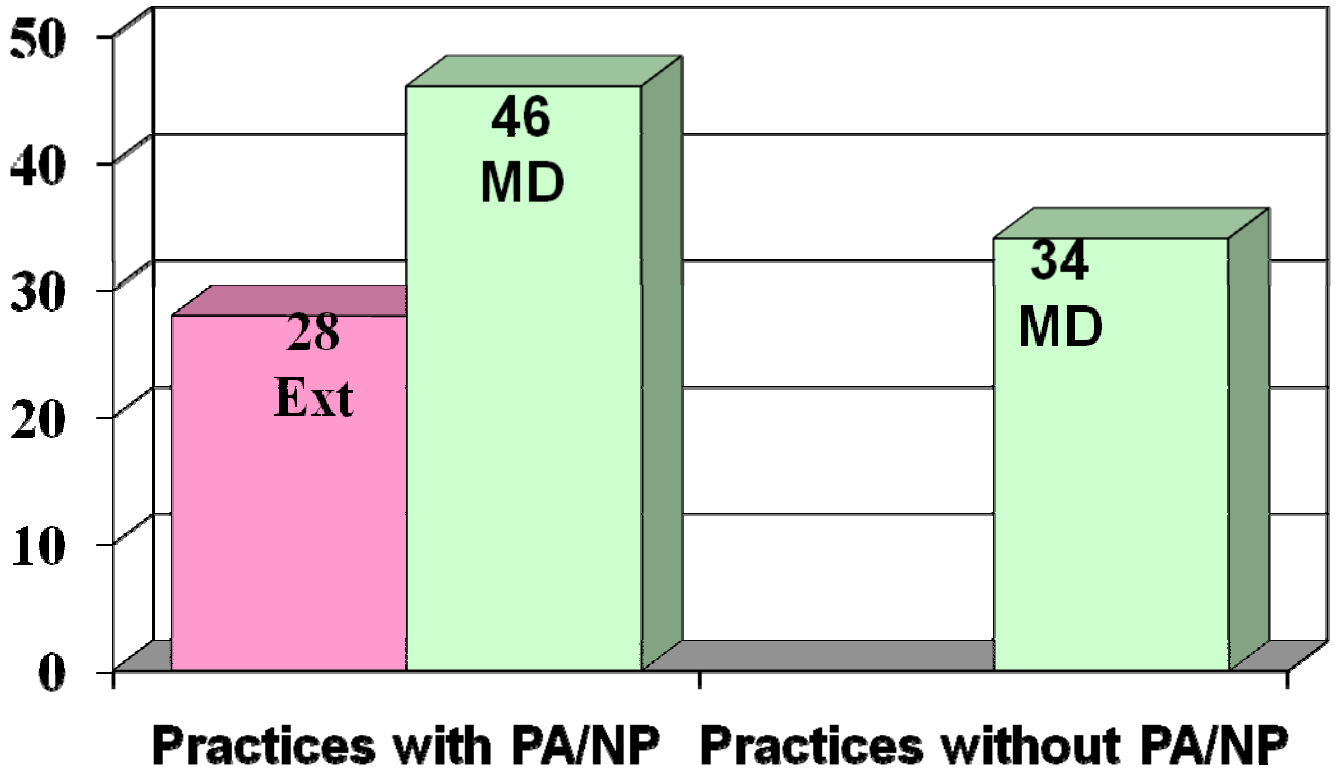


AAD/A PPS 2005

Training and autonomy level

- 75% feel comfortable with skills to see patients autonomously
- Increased comfort associated with training with dermatologist
- But not with overall duration of experience
- Average training: 6.6 months
  - 7.8 months in those feeling comfortable
  - 3.1 months in those not ($p<.05$)

Appointment Availability of Extenders?



Tsang MW, Resneck JS Jr, Even patients with changing moles face long dermatology appointment wait-times: a study of simulated patient calls to dermatologists. J Am Acad Dermatol. 2006 Jul;55(1):54-8.

What do the NP's say?

- 300 anonymous and voluntary surveys, based on previous surveys to MD's, DO's and PA's
- e-mailed to Nurse Practitioner members of the DNA in Oct 2006
- Response Rate: 65%

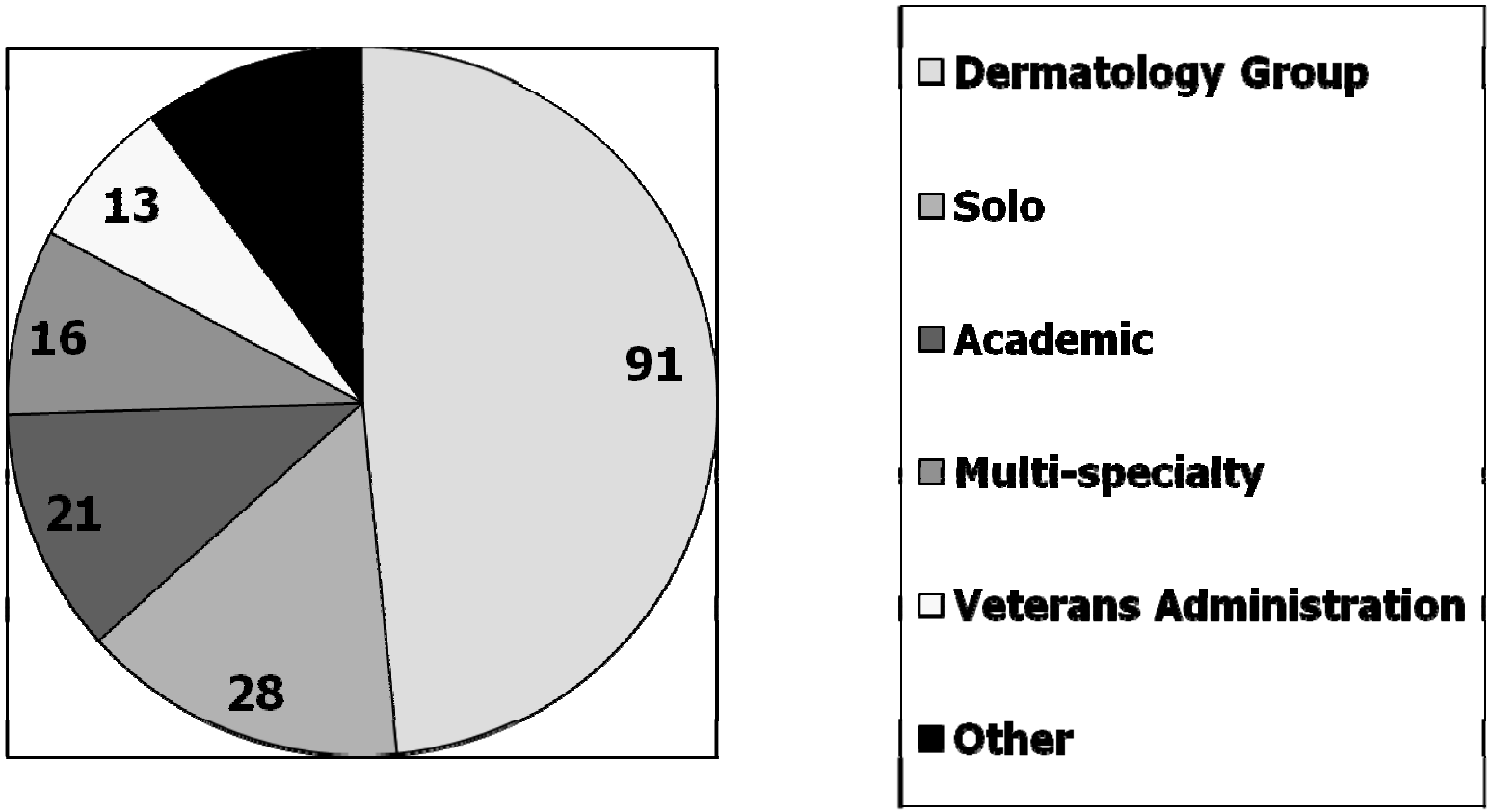
Demographics

- Most derm NPs female (93.9%)
- most commonly certified in family practice (n=121, 62%)
- age fairly equally distributed among the 30s, 40s, and 50s

Training

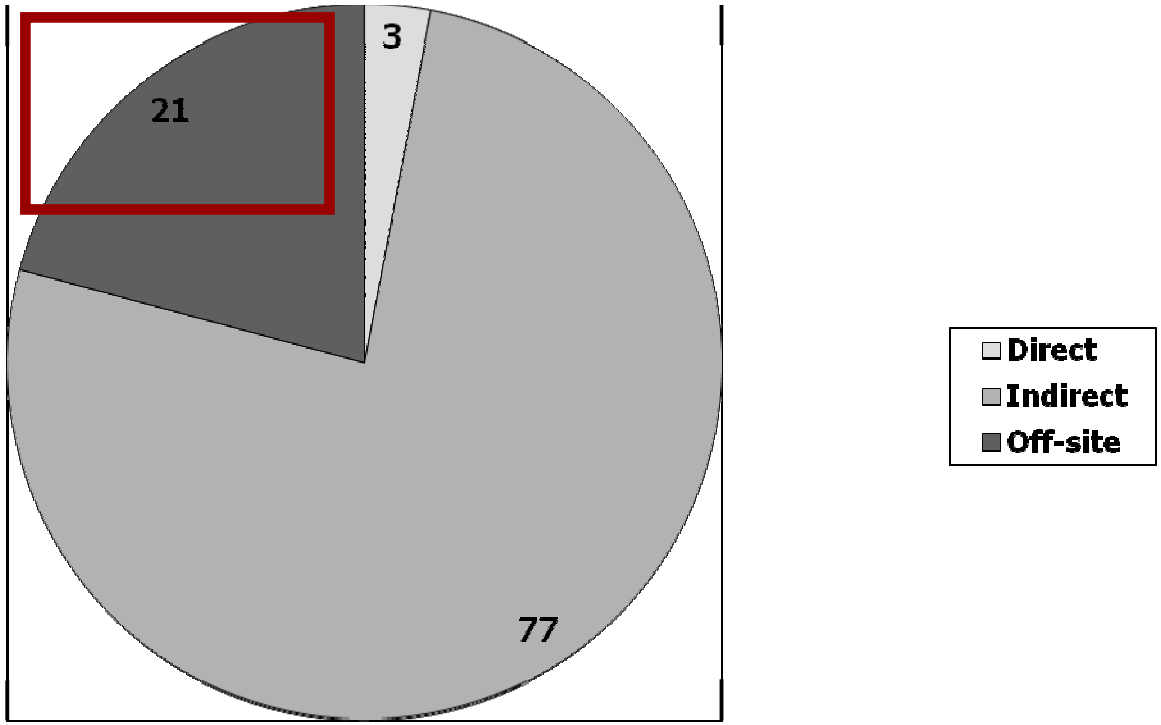
- Practicing as NP on average 9.6 years
- Dermatology NP on average 6.3 years
- (longer training as well)
- Past NP experience extensive outside derm
  - (n=59,37%) primary care
  - (n=18, 11%) ob-gyn
  - (n=12, 7%) pediatrics

Practice Type



Two female nurse practitioners (1%) reported working in a nurse practitioner practice only

Level of Supervision



Direct Supervision (All patients presented to MD)
Indirect Supervision (Physician available on-site)
Off-Site Supervision (Physician available by phone)

Productivity

	NP	MD
Mean Pt Care Hours/Wk	33.0	32.8
Mean Weeks/Yr	47.6	47.2
Mode Patient Visits/Day	10 to 25/day	Approx 35/day

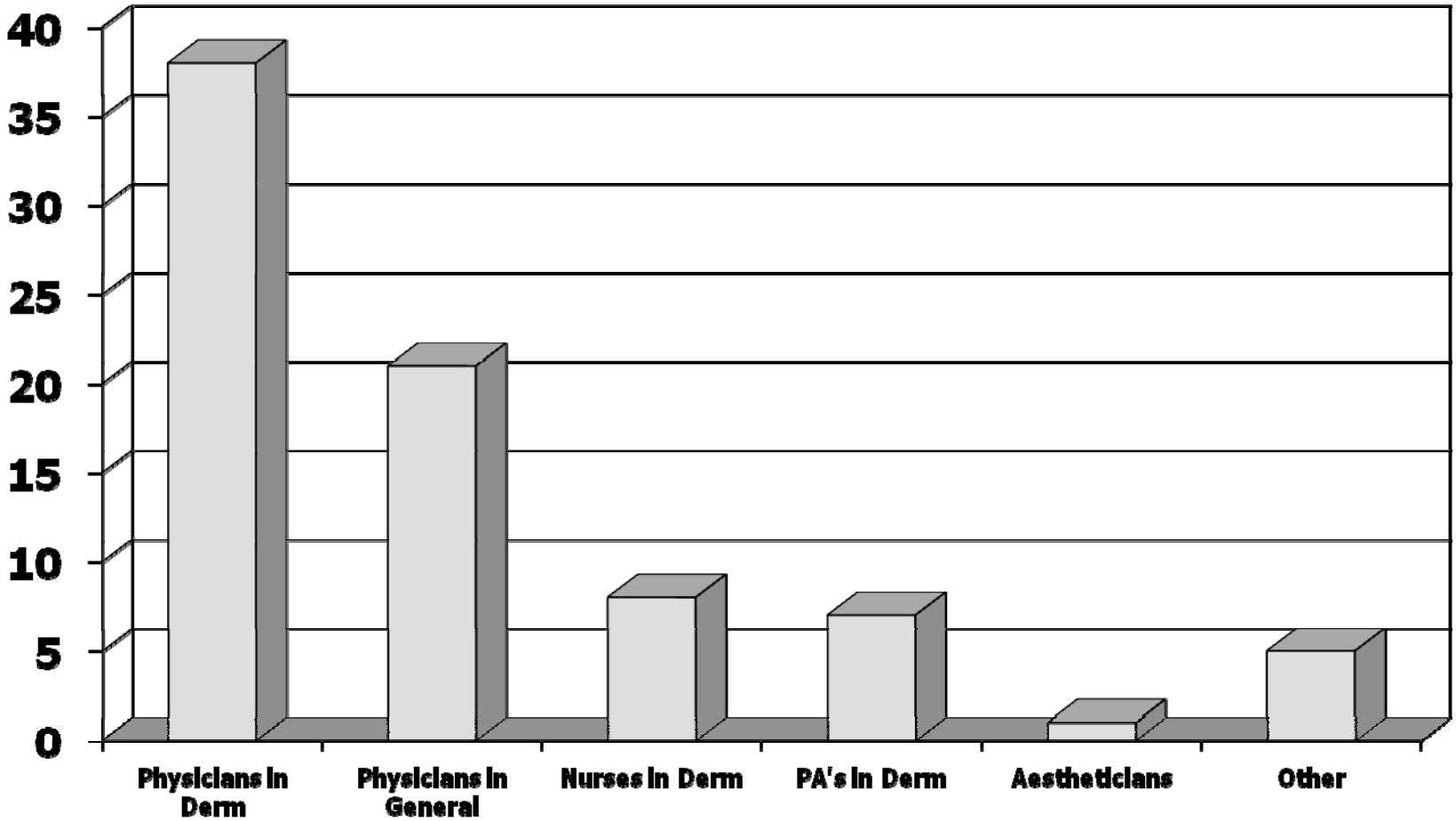
85% > 50% medical dermatology

NP view

- 47% percent (n=90) view their role as both an independent practitioner and a physician extender
- 42% (n=79) view their role as an independent practitioner.
- 6% (n=11) viewed their role as a physician extender

Perceptions of Lack of Acceptance

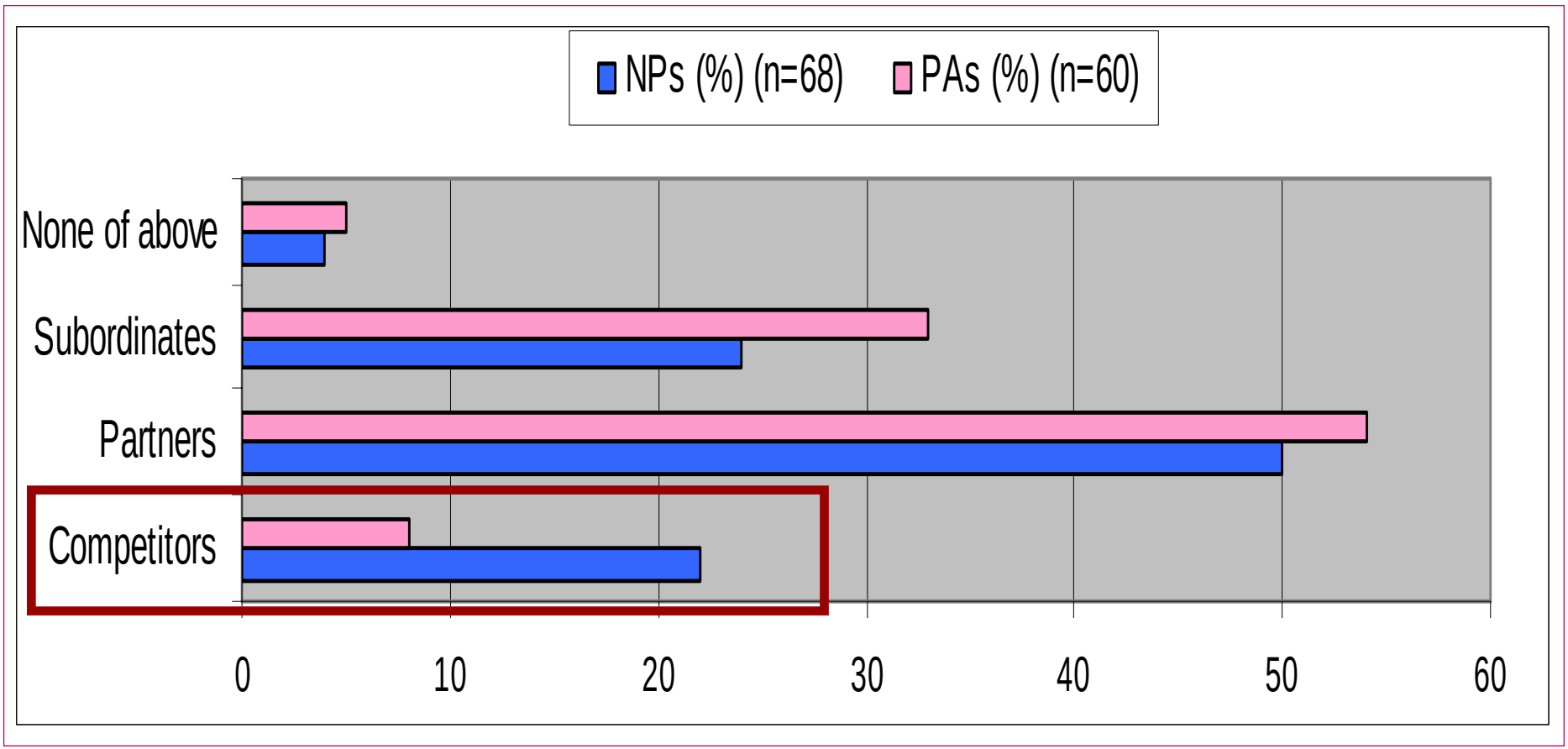
67% (n=125) report feeling accepted by other medical professionals; however, 33% (n=61) did not



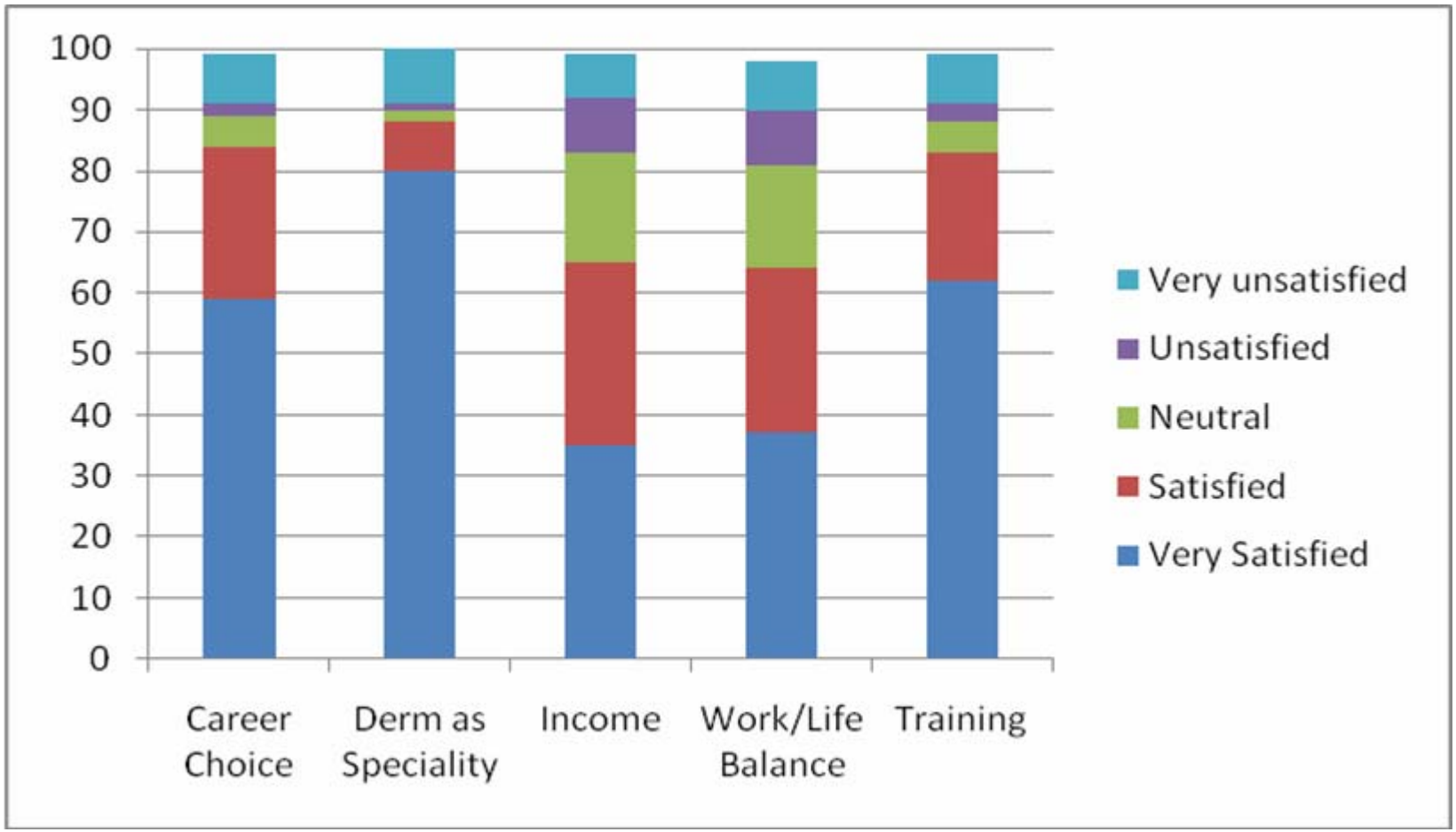
External understanding of roles

150 anonymous and voluntary surveys were distributed to medical clinicians attending a forum about NPCs at the American Academy of Dermatology Annual Meeting in San Francisco, California in March 2006.

MD View of Roles

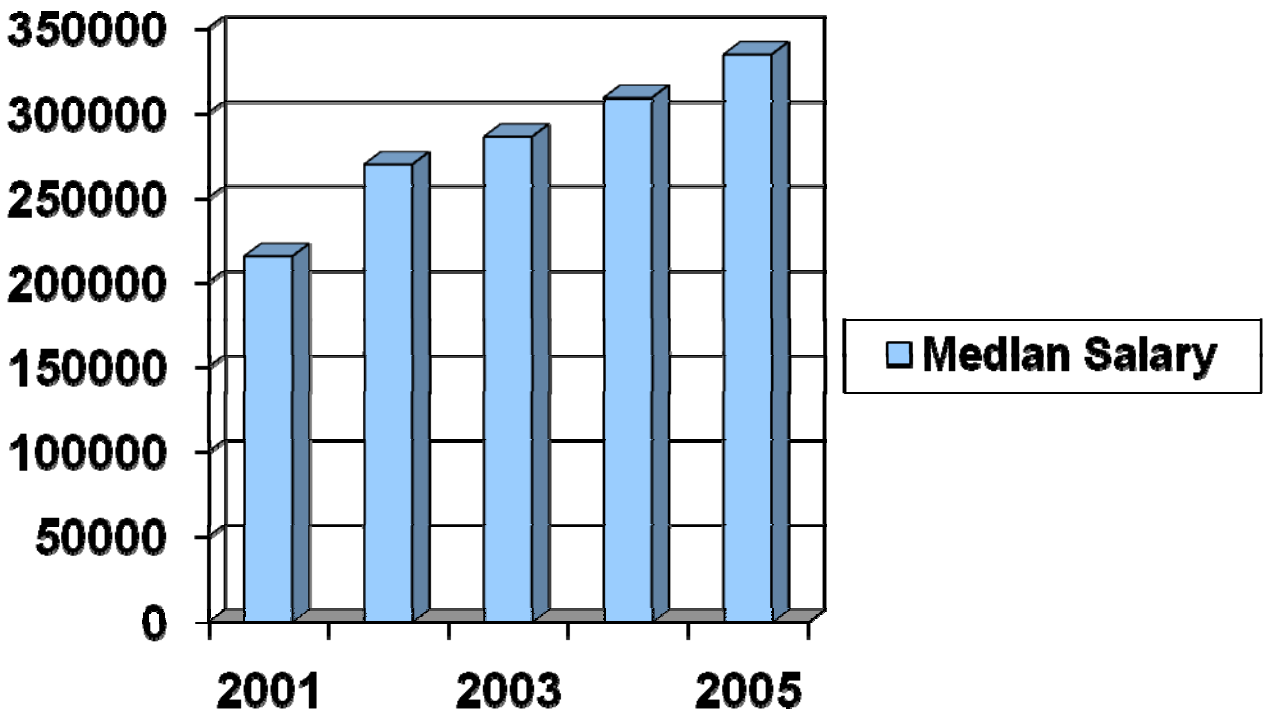


Derms are happy



Presumably everyone else is too???

Median Salary – MGMA 2006



343 derms; 10 % Mohs 36 clinical hours per week

55.3% increase versus 20 for other specialities

Significant US Physician Shortages Projected

- Cooper et al predict shortage of 50K by 2010; 200K by 2020
- Economic model based on GDP
- COGME now states shortage of physicians
- Calling for ~~15%~~ **30%** increase in med school grads by 2015
- May need to open 4-5 new schools to get additional 3,000 MD's
- ?Effects on applicant quality?

Distribution of office visits for skin complaints (excluding neoplasms) in U.S.

Year	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Total Office Visits						
In millions	74.93	72.85	73.48	76.6	76.23	81.75
Office Visits						
Dermatology	24.91	22.37	21.82	22.16	22.26	24.39
%	(33.2)	(30.7)	(29.8)	(28.9)	(29.2)	(29.8)
Office Visits						
Others	50.02	50.48	51.6	54.44	53.97	57.36
%	(66.2)	(69.3)	(70.2)	(71.1)	(70.8)	(70.2)

Source: IMS Health, IMS National Disease and Therapeutic Index™, 4Q 2000, -01, -02, -03, -04, -05.

Conclusions

- Significant US physician shortages projected
- Rapid growth of non physician clinicians is clearly occurring due to demand and low barriers to entry
- Likely will continue in short run
- Mostly appear to be emphasizing medical dermatology

Conclusions

- No appreciable changes in supply and demand…..yet
- 2007 data pending
- A great job!!
- Undergoing profound changes currently
- Important to maintain our identity