

**When should the Interventional Cardiologist
Stop doing Procedures.
Is it only Age?**

A. Pichard MD.

Slide 1

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a pichard, 10/12/2016

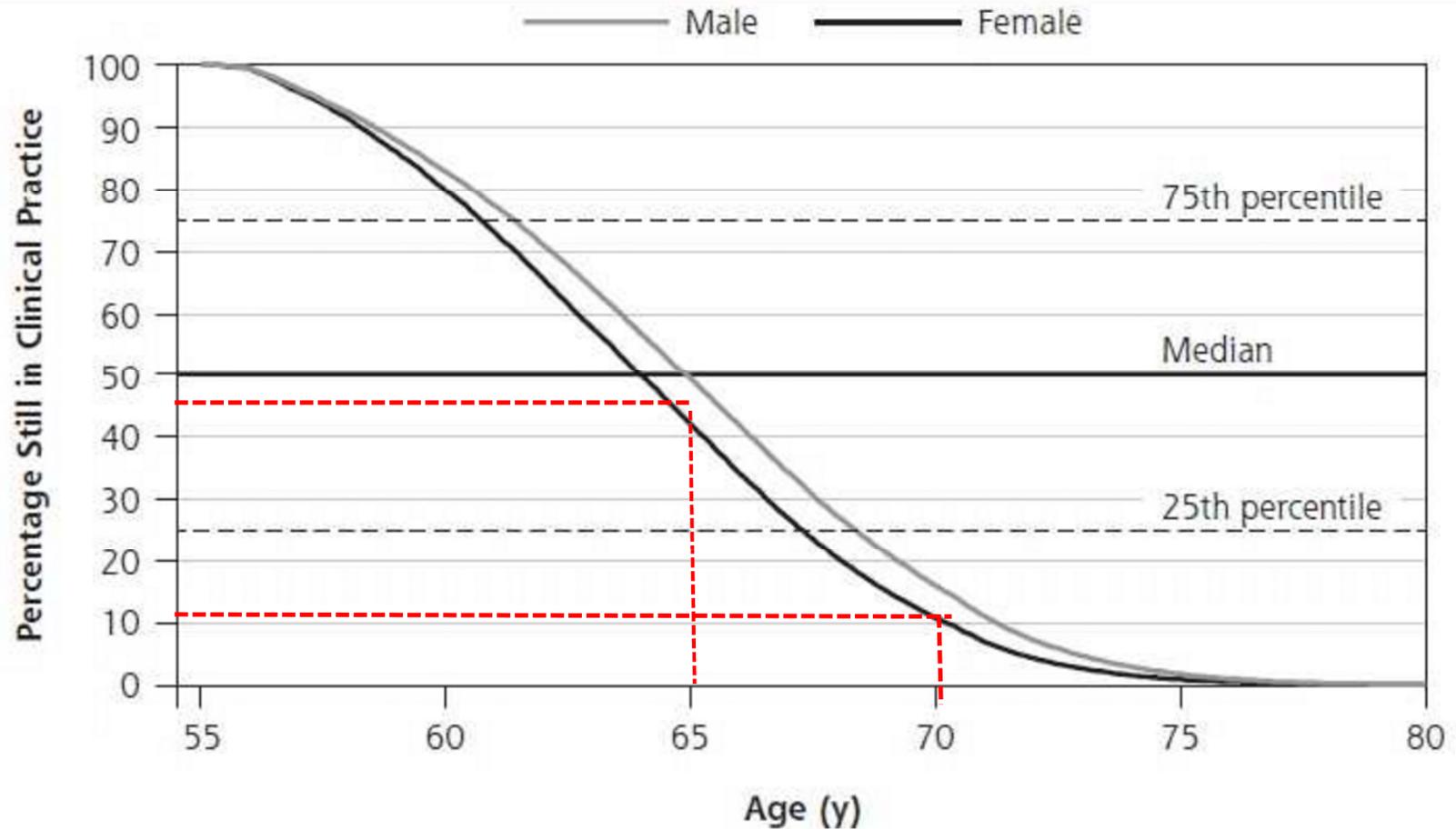
Disclosures

I, Gus Pichard, DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation

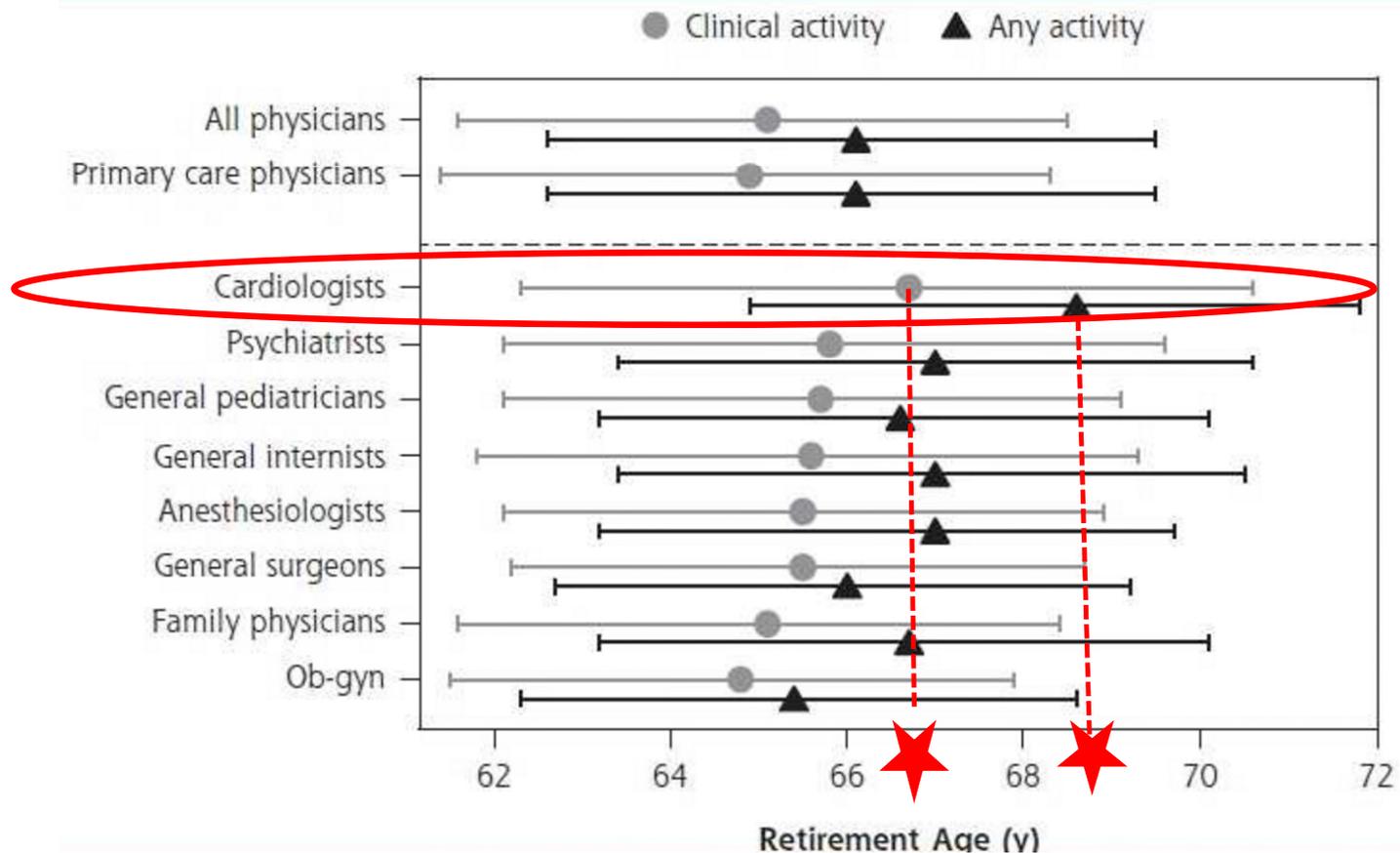
Doctors Retirement General Mc Arthur

**Old doctors never retire, they just fade away!.
Despite having greater than average financial
resources and more burdensome than average work
load, many doctors seem to have a hard time knowing
when it is time to call it quits.
I know doctors who continue to practice into their 70s
and 80s.
Some continue to work until the day they die. Why is
this?**

Mean Age of Retirement for Physicians



Mean Age of Retirement by Specialty



Active Cardiologists by Age

2014 MedAxiom Annual Survey

	MEDIAN AGE	% >60	%>64
Electrophysiology	50	12%	3%
Invasive	52	18%	7%
General/Non-Invasive	56	34%	23%
Interventional	54	29%	13%
All Cardiologists	53	28%	15%

TABLE 3

CARDIOLOGY AGE QUARTILES	OVERALL		2013 BY SUBSPECIALTY			
	2012	2013	EP	INVASIVE	GENERAL	INT
Age 46 and below	31%	28%	42%	32%	28%	26%
Age 47 - 58	41%	40%	42%	47%	35%	40%
Age 59 - 70	25%	28%	16%	20%	30%	32%
Age 71 and over	3%	4%	0%	1%	7%	2%

Background

Interventional Cardiology (IC):

1. Is a most exciting, rewarding and stimulating activity.

Many of us have been totally dedicated to it, often giving up other interesting and appealing components of life.

2. IC is also a demanding, challenging job:

Long hours are common, tiring procedures occur, night time work is usually required, stressful situations cannot be avoided.

Staying up-to-date requires extensive reading, professional interaction and attendance at clinical and scientific meetings.

Is there an Age Limit for IC?

- **Some jobs have mandatory retirement age:**
 - 65 for Airline pilots.
 - 57 for firefighters.
- **No US age-related cutoffs for physicians.**
- **25% of US licensed U.S. doctors are older than 65.**
- **Federal law forbidding age discrimination makes it impossible to require physicians retirement or withdrawal of privileges based mainly on age. The Age Discrimination in Employment Act (ADEA), 29 U.S.C. § 621, et seq,**

Reasons to stop active IC work.

1. Physical limitations

2. Declining expertise

3. The sense of “mission accomplished”:

- allow your own Team to continue and enhance the work initiated.**
- the wisdom of stopping “at the peak” without having to experience any form of decline.**
- having the vision and enthusiasm to embrace other exciting aspects of life outside of the Cath Lab (or outside of Medicine).**

Impediments for the IC to stop Cath Lab Activity

- **Losing identity: many ICs see their own value only in performing procedures.**
- **Missing the satisfaction derived from doing procedures.**
- **The resistance to change.**
- **The fear of the irrevocable nature of the decision.**

“How different can it be to arrive at work at 6 am to engage with highly educated and highly paid staff to take care of complex situations compared with sleeping-in late so as not to wake the dogs and make them bark? “

Opportunities for Cardiologists after Retirement.

Carl Pepine, *JACC* 2003;42:1316-1317

- **Sharing your wealth of knowledge through teaching;**
- **Participation in an office-based practice;**
- **Nonprofit/volunteer work (domestic, international, legislative, cause-oriented);**
- **Research;**
- **Part-time hours in a practice situation.**

Opportunities for Interventional Cardiologist after Retirement.

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For many of us, cardiology is not only a career but a lifetime endeavor.

Let's recast retirement as an opportunity to change what we're doing, or how we're doing it—but not stop altogether.

Our professional long-term career investments in ourselves are too valuable not to recycle.

Data on Aging Surgeons

The Physiological Processes of Aging.

Greenfield, Chair of Surgery at the U Michigan from 1987 to 2002

Teaching and Research interest in the Aging Surgeon.

Two components of Aging:

(1) Wear and Tear.

There is a gradual decline starting at age 55-60: first to go is strength, then eyesight, then dexterity, and finally cognition.

The individual and his/her colleagues usually do not notice the changes until the deficits become serious.

Knowledge, experience and reputation compensate for somatic decline.

(2) Programmed Cell Death. There is a limited number of mitosis for all organ systems.

What are Surgeons doing about Age.

We all know 80-year-olds who can play an intense game of tennis and others who can't even walk to the mailbox. The same is true for surgeons.

Being old: it is not only chronological age, “feeling old” is what counts.

The Aging Surgeon Program (Dr Mark Katlic, MSH Baltimore) is an evaluation of physical and cognitive function for older surgeons.

- It protects surgeons from arbitrary decisions based on their chronological age,
- protect patients from unsafe surgeons,
- ameliorate hospitals' liability risk.

The Aging Surgeon Program.

Dr Mark Katlic, MSH Baltimore.



Day 1:

- **General physical exam and hearing screen**
- **Neurological exam**
- **Physical/occupational evaluation A**
- **Neuropsychology evaluation 1**

The Aging Surgeon Program.

Dr Mark Katlic, MSH Baltimore.

Day 2:

- Ophthalmology evaluation
- Physical/occupational evaluation B
- Neuropsychology evaluation 2
- Exit interview



Biodex Balance System



Touching Blocks



Crawford Board



Connecting Numbers



Vision Coach I



Vision Coach II

Stanford Program for Physicians older than 75

Age 75 was chosen arbitrarily, guided by data showing:

Cognitive functions decline slowly from age 60 until age 75, when it begins to decline at a faster pace.

These cognitive functions include

- inductive reasoning,
- spatial orientation,
- perceptual speed,
- numeric ability,
- verbal ability,
- verbal memory.

Stanford Program for Physicians older than 75

Objectives:

- patient safety
- physician well-being.

The screening process has 3 components:

- Peer assessment by 3 colleagues on the medical staff (chosen from among 6 recommended by the practitioner).
- Comprehensive history and physical exam.
- Cognitive screen performed by a neuropsychologist (Stanford Department of Neurology).

Only 5-10 percent of U.S. hospitals do any kind of screening of late career physicians.

IC Credentialing and Privileging

Blankenship et al. CCI 2015; 86:655–663

Privileges for procedures are given at the time of initial hospital credentialing, and continue indefinitely. This creates potential medico-legal liabilities for Institutions and risks for patients.

The Joint Commission addressed these concerns by requiring re-credentialing every 2 years and adding yearly OPPE (Ongoing Professional Practice Evaluation) and FPPE (Focused Professional Practice Evaluation) if needed.

The Joint Commission does not allow exemptions due to Board Certification, experience, reputation or “grandfathering.”

Re-Privileging

Blankenship et al. CCI 2015; 86:655–663

Board certification is time limited and should be considered a default requirement for re-privileging.

Should senior physicians who decline to recertify but have extensive experience be denied privileges?: no consensus.

Each institution needs to develop policies regarding this issue.

Also, there is a consensus that annual volumes required for competency may change over a career, such that lifetime experience may compensate for lower annual volumes. (Bass TA. Certification and Competency in Interventional Cardiology. Circulation CV Interv 2012;5:450–453).

Is there Life after the Cath Lab?

Most of us entered Medicine with a spirit of “SERVICE”.

The main objective of our profession has been “improving the health and wellbeing of other human beings”.

Side benefits were: intellectual stimulation, fun and excitement, visibility, recognition, income security, etc.

The path to fulfillment and real happiness after the Cath Lab: Keeping the original SERVICE objective, applying it to the new life, and do not getting sidelined by pursuing the side benefits of the active years (visibility, recognition, income generation, etc.).

Conclusions

There is a right time to stop active Cath Lab work.

There is a lot of wisdom involved in this decision. It should be a positive, constructive decision, not a defeat.

There is “life” after the Cath Lab: One should embrace it with enthusiasm and vision and continue to contribute to life in exciting but different ways.

The end

However, there are many data to support the value of evaluating practitioners as we age. In some complex procedures, the patients of surgeons older than 60 have higher mortality rates than those of younger surgeons (Waljee, *Annals of Surgery* 2006). Most concerning is the fact that the preponderance of evidence from a systematic review of physician self-assessment suggests that physicians have a limited ability to accurately assess their own competency (Davis, *JAMA* 2006).

Stanford School of Medicine: [Dean's Newsletter](#)

SHC / LPCH: [Late career practitioner policy and FAQ](#)

[The New York Times: As Doctors Age, Worries About Their Ability Grow](#)

[Ann Weinacker, MD](#)

aweinacker@stanfordmed.org

10. Greenfield LJ, Proctor MC. When should a surgeon retire? *Adv Surg.* 1999;32:385–393. [[PubMed](#)]
18. Rovit RL. To everything there is a season and a time to every purpose: retirement and the neurosurgeon. *J Neurosurg.* 2004;100:1123–1129. [[PubMed](#)]
19. Trunkey DD, Botney R. Assessing competency: a tale of two professions. *J Am Coll Surg.* 2001;192:385–395. [[PubMed](#)]

American Society of Plastic and Reconstructive Surgeons, 395 surgeons provided evaluable responses to a survey about their practice patterns pertaining to recurrent melanoma. This study found definite age-related differences in the ordering of certain tests to detect the possible spread of the cancer in patients who had an operation to remove their tumor. Older surgeons ordered the most modern imaging studies (positron emission tomography [PET] scans) to a greater extent, but the older surgeons also ordered more of a chemical test no longer believed to be helpful (5-S-cysteinyl dopa). Younger surgeons ordered fewer PET scans and more chemical tests currently believed to be helpful (selected serum transaminases). It is not possible to say that the methods used by either the older or younger surgeons are actually preferable [[14](#)].

In a meta-analysis, Choudhry et al. [[6](#)] searched the medical literature for evidence of a relationship between physician age and quality of medical care. They initially found 245 potentially helpful articles, but after rejecting the irrelevant, they ended up with 59 articles for study. Their study did not concentrate on surgeons; all types of physicians were included. Of the articles found, half (52%) reported all measures of quality of care declining with increasing physician years in practice. For the other half of the articles, the results were less clear, but only 7% reported increasing quality of medical care with increasing years in practice.

Greenfield and Proctor [[10](#)] identified vision, hearing, motion, and dexterity as physical attributes of a surgeon that inevitably decline with age. Reaction time, the time needed to move in response to a stimulus, has been found to decline only slowly.

Trunkey and Botney [19]: 19. Trunkey DD, Botney R. Assessing competency: a tale of two professions. *J Am Coll Surg*. 2001;192:385–395. [PubMed]] have developed a series of tests, together named the “MicroCog,” designed to detect “impaired competence occurring late in a physician’s career.” The tests measure “reactivity, attention, numeric recall, verbal memory, visiospatial facility, reasoning, and mental calculation” [19]. According to the overall MicroCog scores, at all ages, physicians (not necessarily surgeons) perform better than nonphysicians, but even physicians by age 75 lose 25% of their starting score. The decline is very rapid by age 60. The data also show a decline in overall MicroCog scores for older physicians (not necessarily surgeons), both working and retired. At all ages, but especially at older ages, retired physicians score lower than working physicians.

Breast reconstruction immediately after extirpative surgery for cancer is a relatively modern development. Callaghan et al. [5] surveyed 498 specialized breast surgeons in the United Kingdom. More than three-fourths answered. They reported “older surgeons were significantly less likely to perform immediate reconstruction (...Odds ratio = 5.18), and were significantly more likely to believe that immediate breast reconstruction has disadvantages” [5].

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The closest that surgery now gets to an assurance of competence is individual certification by one of the boards of the American Board of Medical Specialties.

Resistance to change is an impediment to the decision to retire.

It would be very difficult to imagine two occupations more different than that of a busy surgeon as compared with that of a retiree. How different must it be to arrange flowers to impress one's wife compared with rearranging internal organs to save the life of a deathly ill patient? How different can it be to arrive at work at 6 am to bark limb-preserving orders to a highly educated and highly paid staff who execute the orders instantly compared with sleeping in late so as not to wake the dogs and make them bark? It must be very frightening to embark on such a large change not knowing if one can tolerate the new circumstances and knowing that the decision to retire is, for all practical purposes, irrevocable.

To everything there is a season and a time to every purpose: retirement and the neurosurgeon.

[Rovit RL et al.](#). [J Neurosurg.](#) 2004 Jun;100(6):1123-9.

Abstract

Neurosurgery has designed a rigid curriculum that must be followed precisely by those who wish to enter the specialty. A similar process at the other end of the practice cycle has never been formalized except for mandatory retirement from certain administrative positions at a particular age. Basic considerations for strategic decision making about voluntary retirement from neurosurgery, especially operative neurosurgery, are investigated. Statistical data from the US Census Bureau and sources in the medical literature were reviewed regarding life expectancy and retirement ages. Age-related differences in verbal and performance intelligence quotients, attention span, verbal memory recall, and visuospatial facility were surveyed. A questionnaire was sent to 29 recently retired academic neurosurgeons about their age and reasons for retirement along with postretirement activities; 22 responses were received. Analysis of the data indicates that surgeons are now retiring at the age of approximately 60 years, whereas life expectancy is approximately 80 years. An individual thus may have 15 to 20 productive years after leaving active neurosurgical practice. Reasons for retirement among the 22 responding neurosurgeons included decreasing personal satisfaction and financial rewards, a desire to pursue other activities, local ground rules mandating age-specific retirement, the general sense that enough is enough, and, overall, a strong desire to stop performing surgery while at the top of one's game. The process of age-related competence assessment of commercial airline pilots is outlined, and a similar process of assessment of practicing surgeons may be warranted, with consideration for mandatory retirement from operative neurosurgery.

Credentialing and Privileging

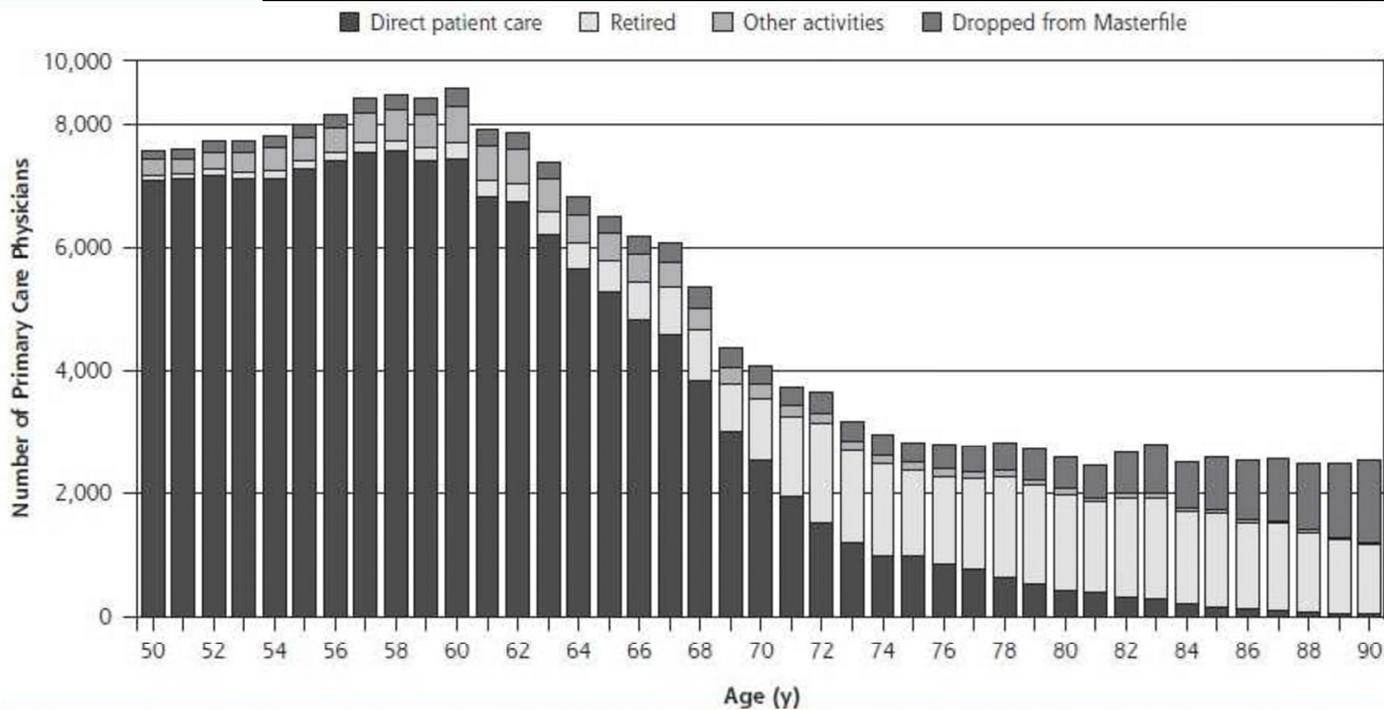
Blankenship et al. CCI 2015; 86:655–663

The privileging process should ensure that adequately trained physicians are allowed to perform services and procedures with adequate results. The awarding of privileges means that the physician can provide care before, during, and after procedures reflecting the six core competencies of patient care including medical knowledge, practice-based learning, interpersonal and communication skills, professionalism, system-based practice, and technical proficiency (Table II)

When do Primary Care Physicians Retire?

Petterson et al. Ann Fam Med. 2016;14(4):344-349.

78,000 Primary Care Physicians. AMA files 2010-2014



Results The 2014 Masterfile included 77,987 clinically active primary care physicians between ages 55 and 80 years. The median age of retirement from clinical activity of all primary care physicians who retired in the period from 2010 to 2014 was 64.9 years, (IQR, 61.4–68.3); the median age of retirement from any activity was 66.1 years (IQR, 62.6–69.5). However measured, retirement ages were generally similar across primary care specialties. Females had a median retirement about 1 year earlier than males. There were no substantive differences in retirement ages between rural and urban primary care physicians.

To paraphrase General MacArthur, old doctors never retire, they just fade away. Despite having greater than average financial resources and more burdensome than average work load, many doctors seem to have a hard time knowing when it is time to call it quits. I know doctors who continue to practice into their 70s and 80s. Some continue to work until the day they die. Why is this?

I think that some docs feel that it is somehow ignoble to leave the profession, that they would be abandoning their patients if they retire. Certainly many doctors enjoy what they do, deriving a sense of satisfaction from their work. They take pride in their skills that have taken thousands of hours to master. Some enjoy the social status, diminishing though that it is, that comes from being a doctor. Some have matched their lifestyle to their income, and think they can't do without the money that they are making. Some are hooked on the adrenaline rush that comes from opening a clogged artery in the middle of the night and saving a life, or ablating an arrhythmia and changing someone's life for the better.

Doctors are Older

Although the overall physician population has grown 188 percent between 1970 and 2008, according to the AMA, the physician population over age 65 has grown by 408 percent in the same period. Economic factors may be keeping many physicians on the job longer, according to data from The Doctors Company, a medical malpractice insurance firm. The company found that the portion of physicians reporting satisfaction with retirement plans has dropped 18 percent since 2006, and the average age at which an internist retired had increased from 62 in 2002 to 70 in 2009.

International NY Times

Sept 6, 2016

20% of americans 65 and older are working: some of them want to, most of them have to!

These older people represent a vast well of productive and creative potential: deep knowledge, well-honed interpersonal skills, better judgement than young ones and more balanced perspective.

>1.5 million over 50 are looking for jobs. Institutional practices have a dumb and destructive obsession with youth, and discriminate against age.



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