

Health Promotion
Pilot Health Questionnaire
at Air New Zealand
AMSNZ & ASAM 2017
1ST SEPTEMBER

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Disclosure Information

Dr. Hardeep S Hundal

- I have no financial relationships to disclose.
- I work for AIR NEW ZEALAND as their medical officer.
- Dr Ben Johnston works for Air New Zealand as the chief medical officer.

Pilot Health Questionnaire: History

ICAO has implemented 2 standards.

1.2.4.2 (how topics of health promotion to be determine)

1.2.4.3 (health promotion standard)

11TH July 2016- STANDARDS become effective

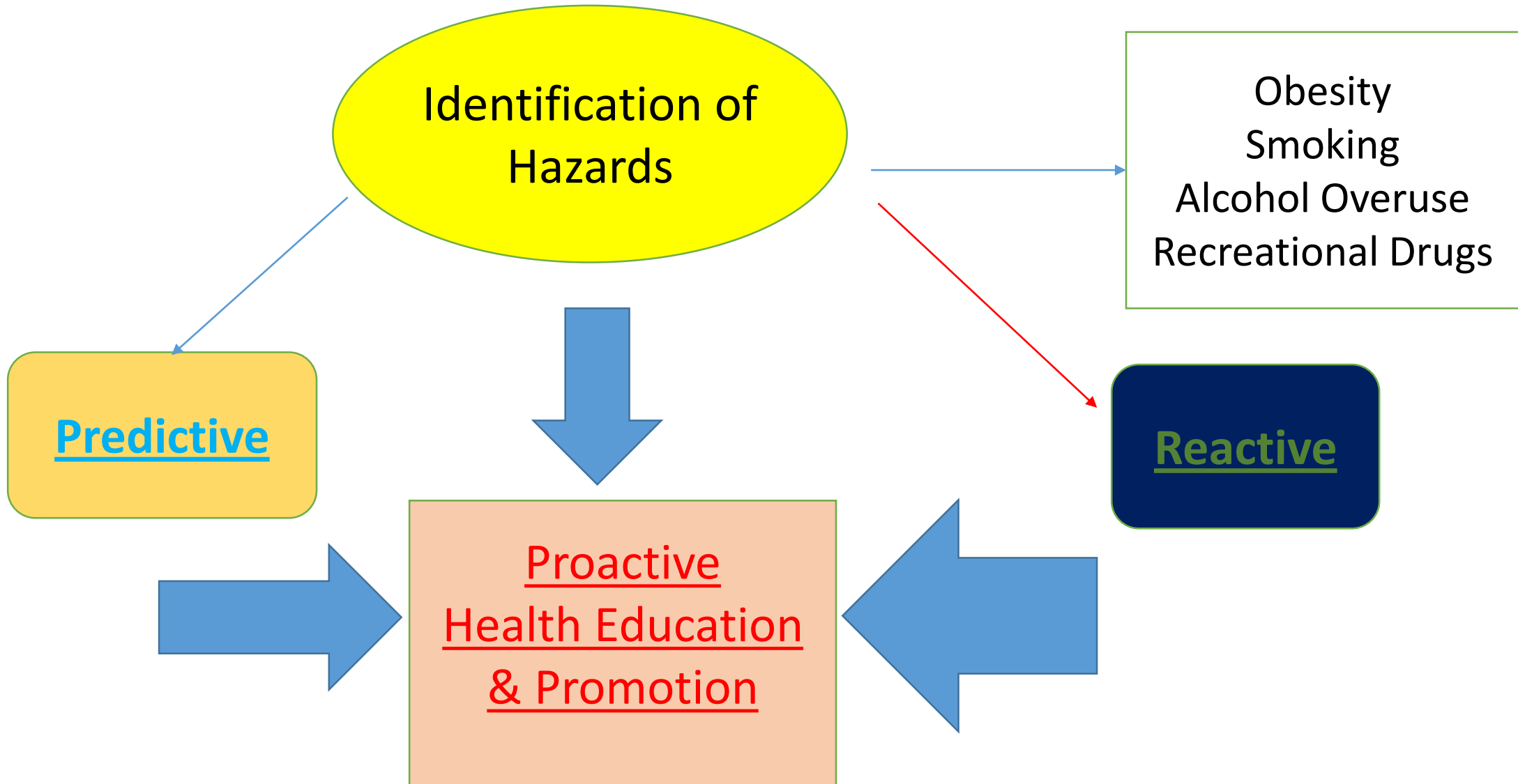
8th November 2018- STANDARDS will apply to member states.

Rationale: Raise from Recommendation to Standard – safety management principle mature acceptable to States.

Reference: Dr Ansa Jordaan. Health promotion Amendment. 2016 April.

Pilot Health Questionnaire

- Aeromedical Risk Management Process



Pilot Health Questionnaire

Objectives:

Prevention is better than cure - Maybe in regulatory aviation medicine too!

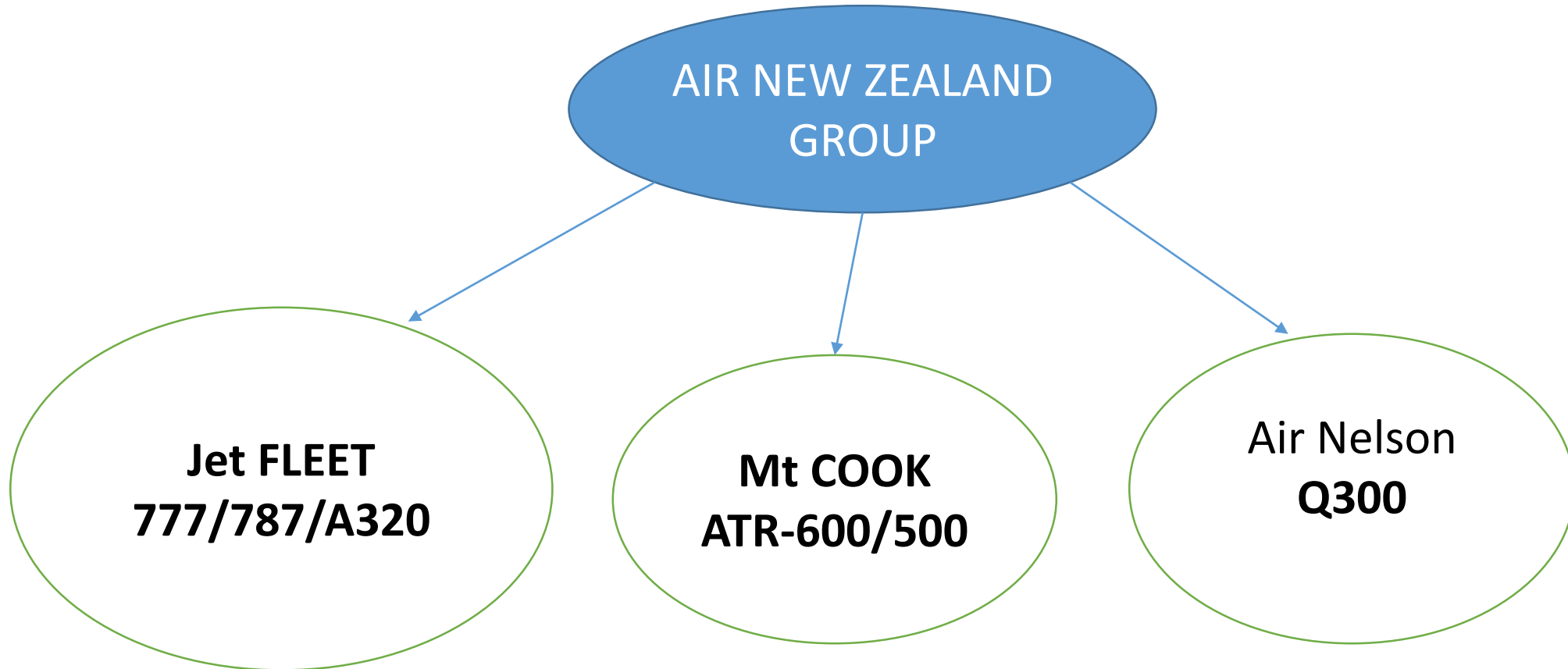
Health promotion is likely to enhance Flight Safety.

A study undertaken to review the attitudes and opinions of pilots regarding health prevention of diseases and health promotions during their annual aeromedical certification. Our colleagues at TAP Portugal initiated this study for their pilots. We thought our pilots were an older average age group and we wanted to understand their opinions.

The final outcome will be compared with our colleagues in Portugal.

Pilot Health Questionnaire:

AIR NEW ZEALAND PILOTS. (As of 31st August 2017)



Pilot Health Questionnaire: Demographics

Air New Zealand Pilots		Age < 30	Age 30-60	Age >60	Females	Airline Flight Instructors
JET FLEET	1075	19	783	146	39	43
MT COOK	264	0	186	8	26	22
AIR NELSON	233	51	172	10	39	26
Total	1572	70	1141	164	104	91

Pilot Health Questionnaire: Methods

A 5 week OBSERVATIONAL study with prospective data collection from pilots attending the Aviation Medical Unit at Air New Zealand in Auckland for their routine CAA medicals.

From mid July 2016 to late August 2016.

Participation was voluntary and all responses were anonymous.

The questionnaires were filled by the individual pilots while awaiting their aero-medical certification exam.

All paper questionnaires were checked for completeness by two people. This was manually entered and verified two people.

Pilot Health Questionnaire: Methods

Based on 12 questions format similar to the ones used in Portugal with minor changes.

Based on perceived attitudes and probability of affecting medical certs.

Based on : age, gender,

Based on class of med cert?, airline flight instructor status?

Whether on medications?

Whether having long term family medical conditions?

Flying to tropical countries?

Wearing spectacles?

Pilot Health Questionnaire: Results

79 pilots participated in the study. (response rate of 96%).

91% (72) of the participants were males and 9 % (7) were females.

98.7% (78) were class 1 (commercial pilots) and only 1.3% (1) were class 2(private pilots).

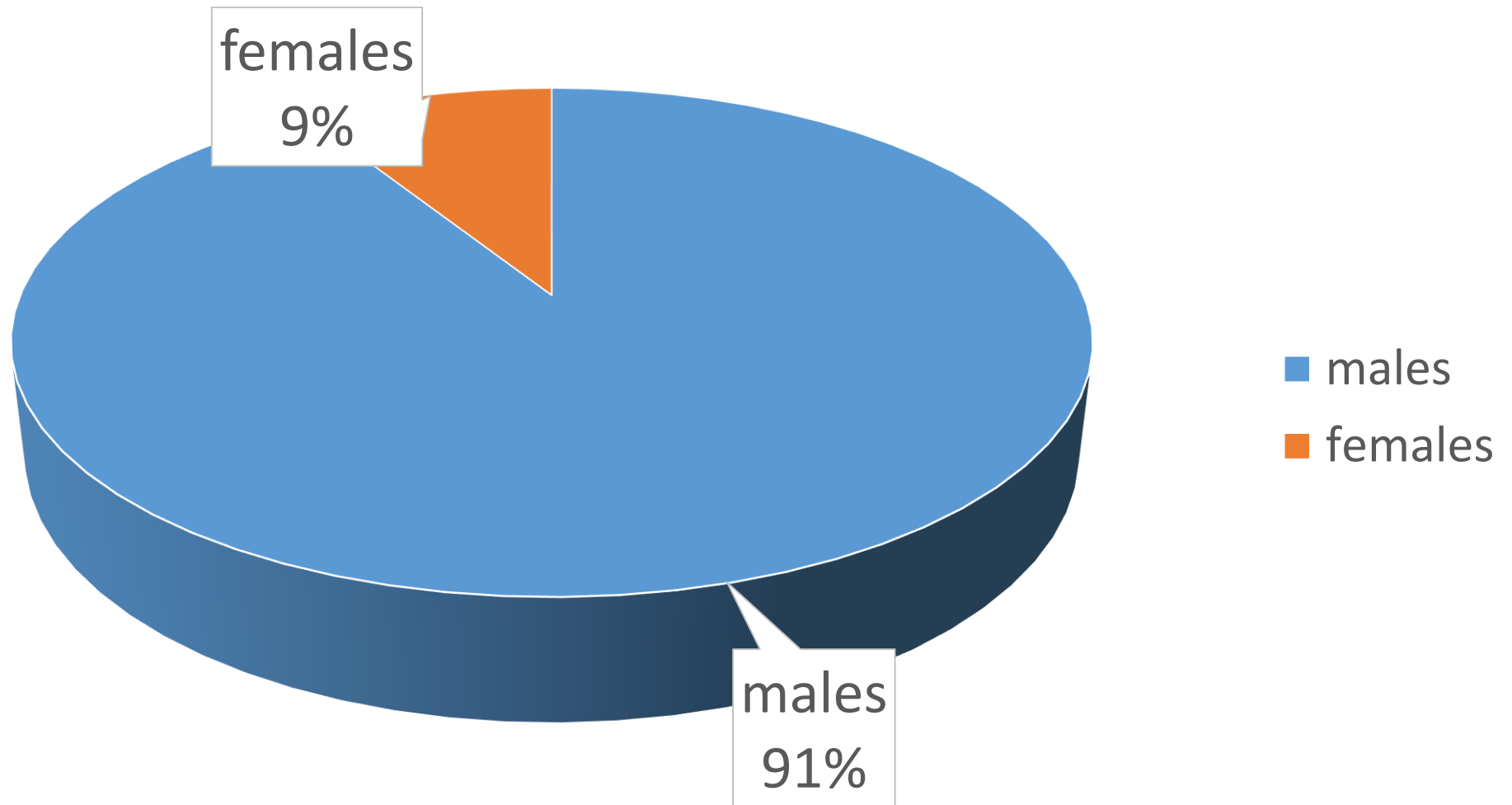
3.80 % were over the age of 65; 20.25% were between the ages of 60-65. 68.34% are in the 30-60 age. The rest were less than 30 years of age.

Pilot Health Questionnaire: Preventive topics during Aero-medical exam??

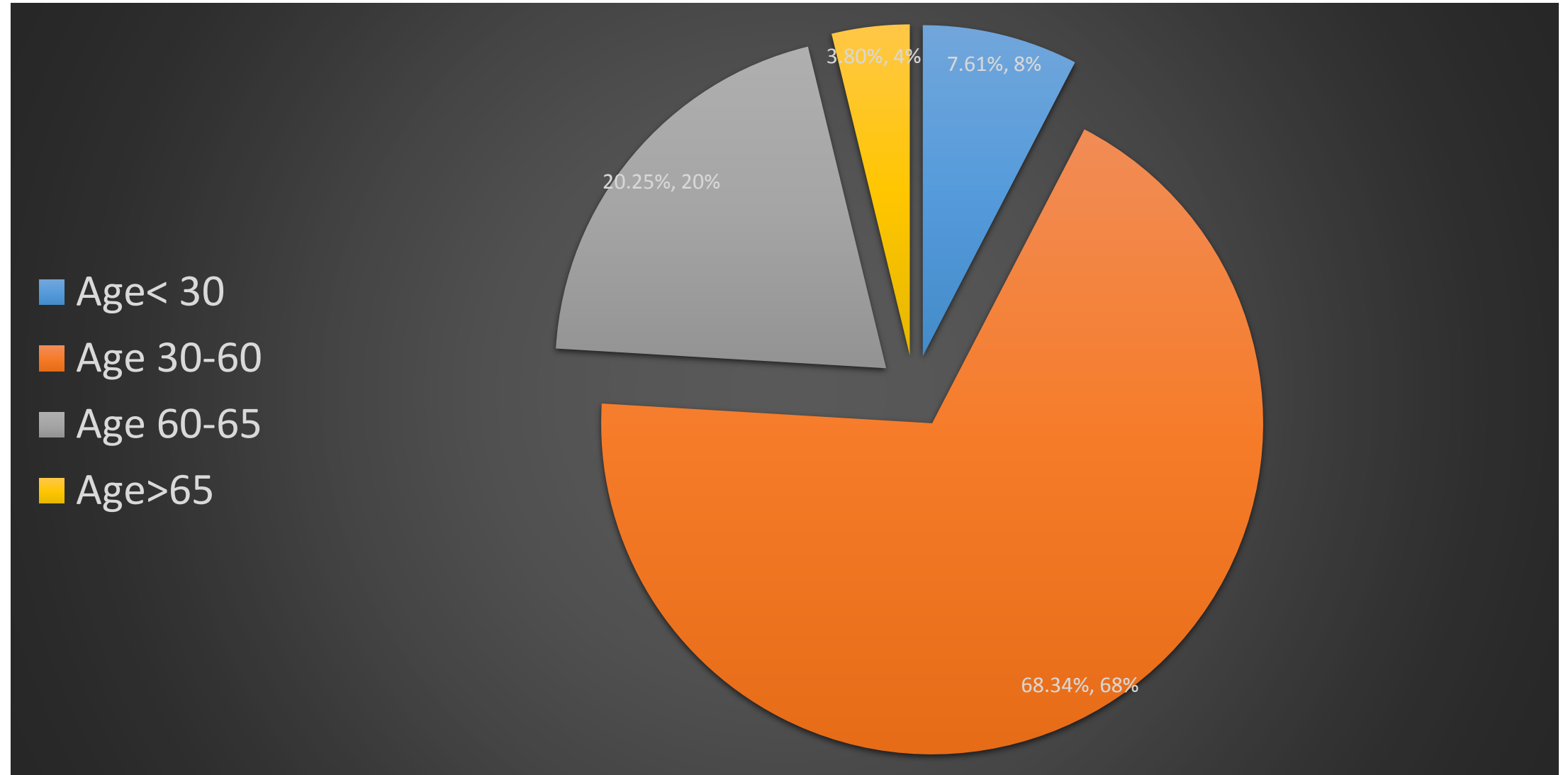
	Not at all opportune ?	Not very opportune?	Opportune ?	Very Opportune?	Don't Know
During routine Aeromedical certification exam?	2.53%	5.06%	26.58%	65.82%	0
An appointment with your attending GP/family Dr?	6.33%	13.92%	30.38%	48.10%	1.27%
An appointment with an Occupational Physician?	10.13%	15.19%	41.77%	27.85%	5.06%
An appointment with an aviation Dr at another time?	7.59%	24.05%	48.10%	20.25%	0

Most pilots
felt it was
opportunistic
to discuss
health topics
during AME.

Pilot Health Questionnaire: Gender

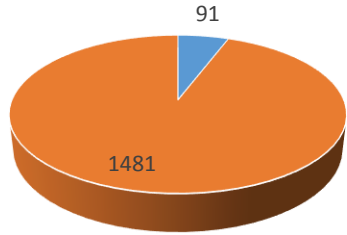


Pilot Health Questionnaire: Age



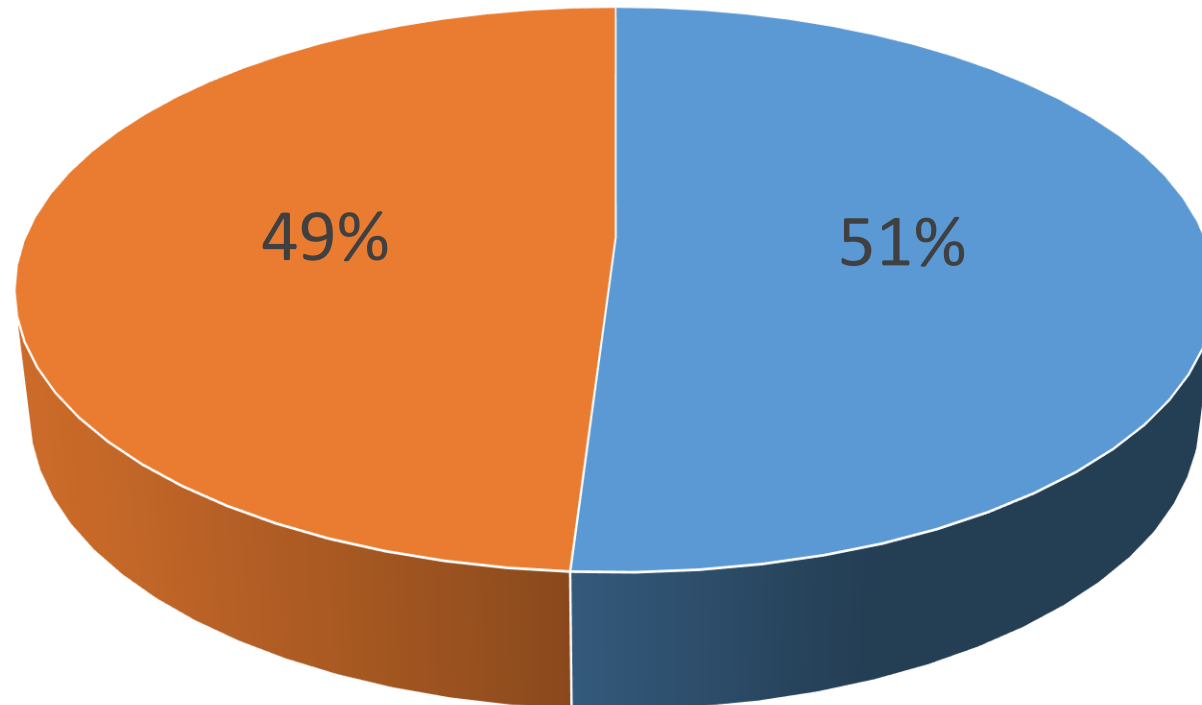
Pilot Health Questionnaire: Flight instructors

Airline Flight Instructors



■ airline flight instructors ■ non-airline flight instructors

Flight Instructors

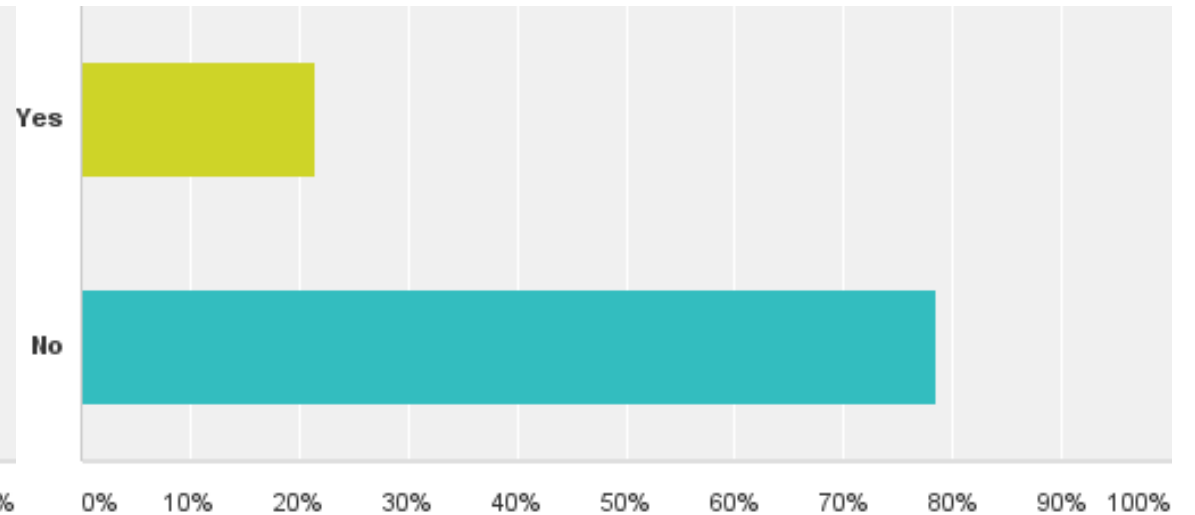
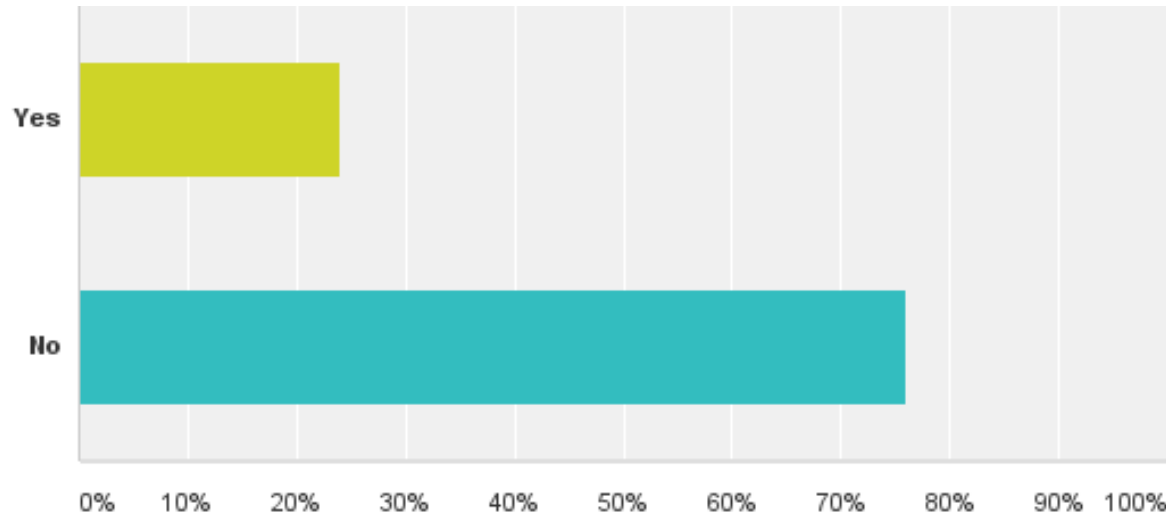


■ Flight Instructors ■ Not Flight Instructors

Pilot Health Questionnaire

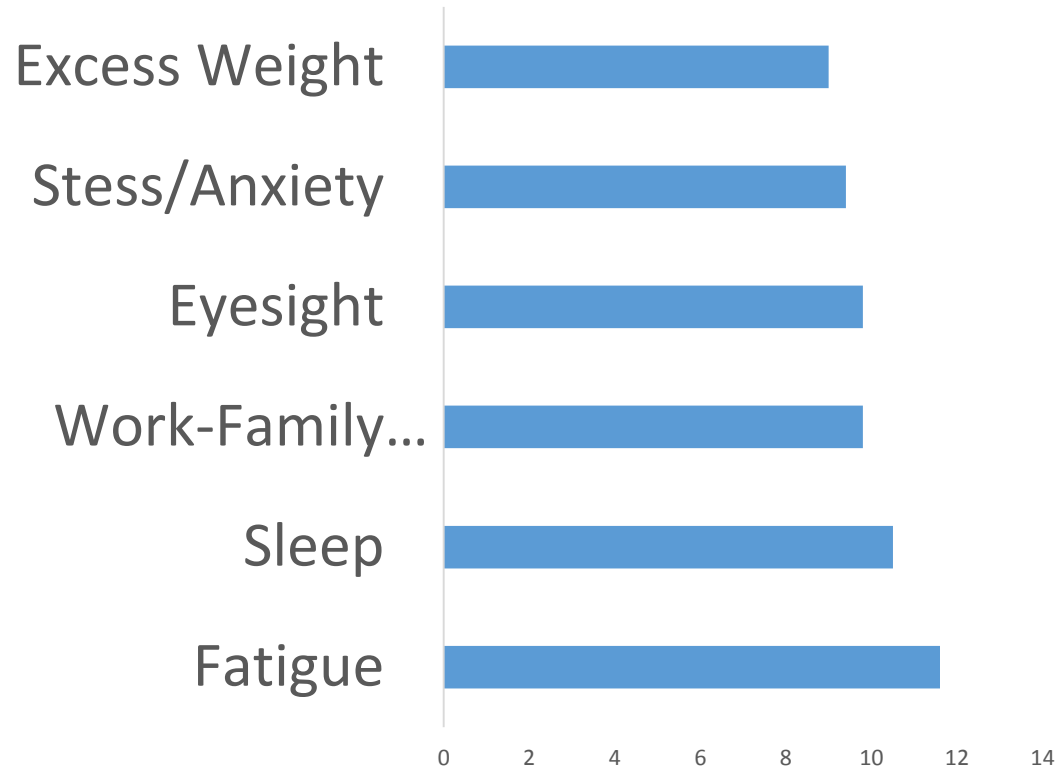
Long term Medications:

Family Medical Hx.

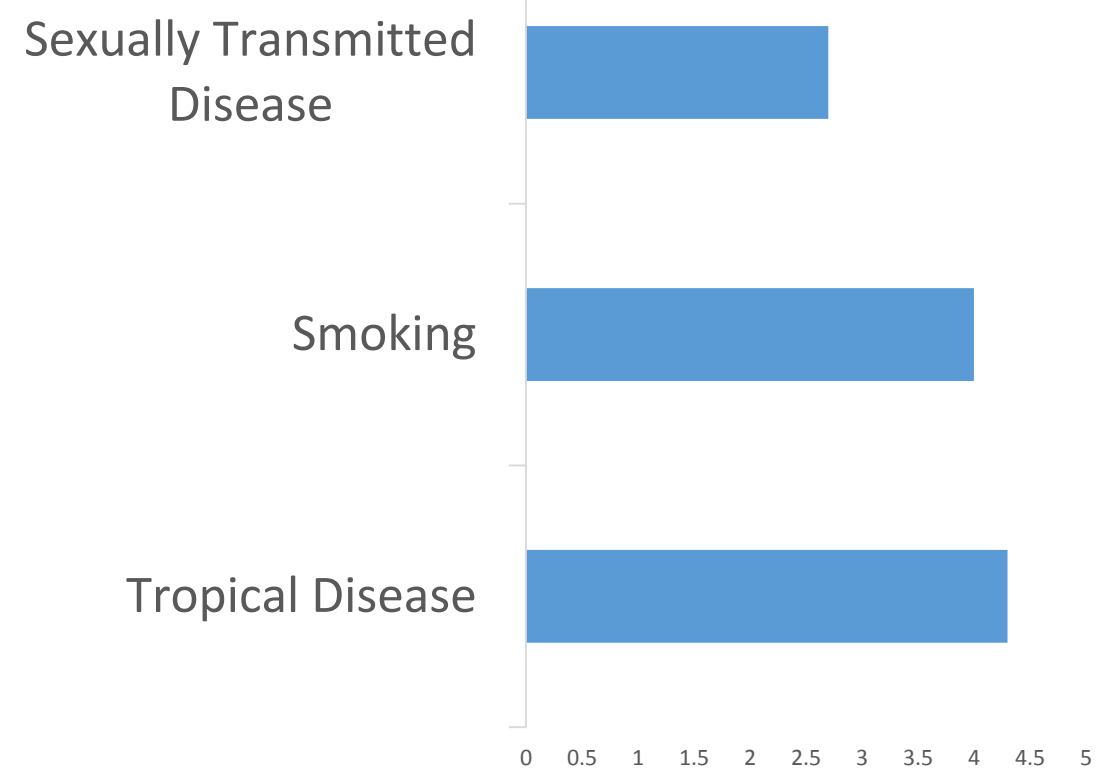


Pilot Health Questionnaire: Rankings

Top 6 rankings by pilots

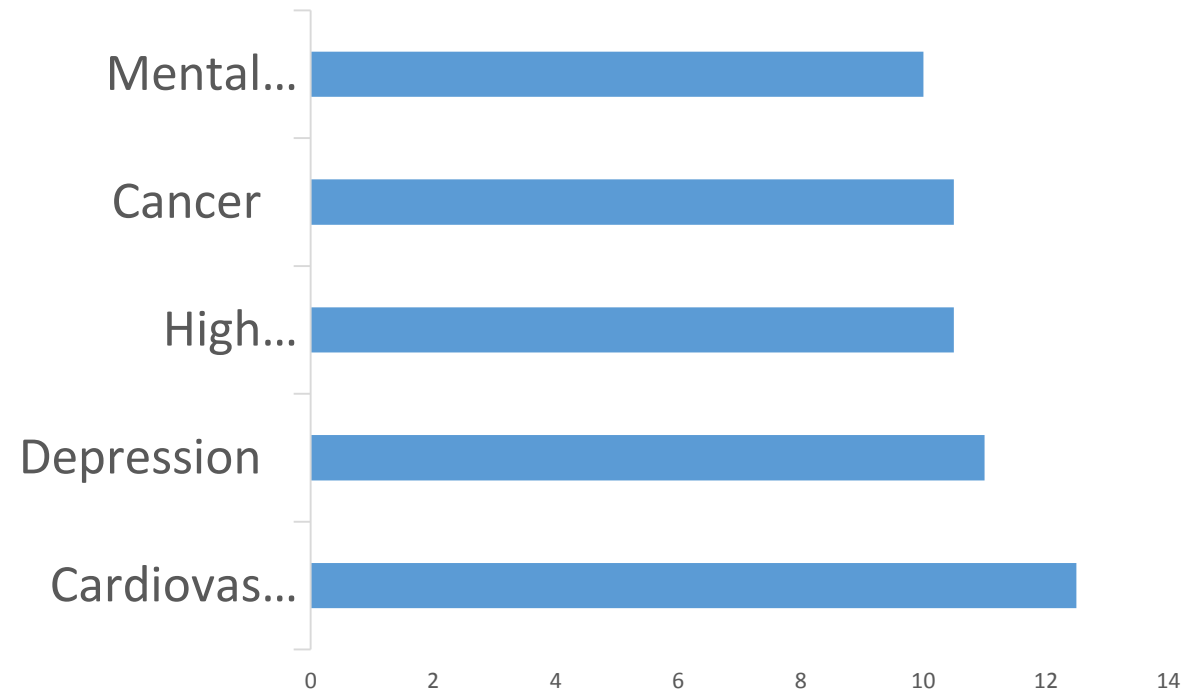


Bottom 3 rankings by pilots

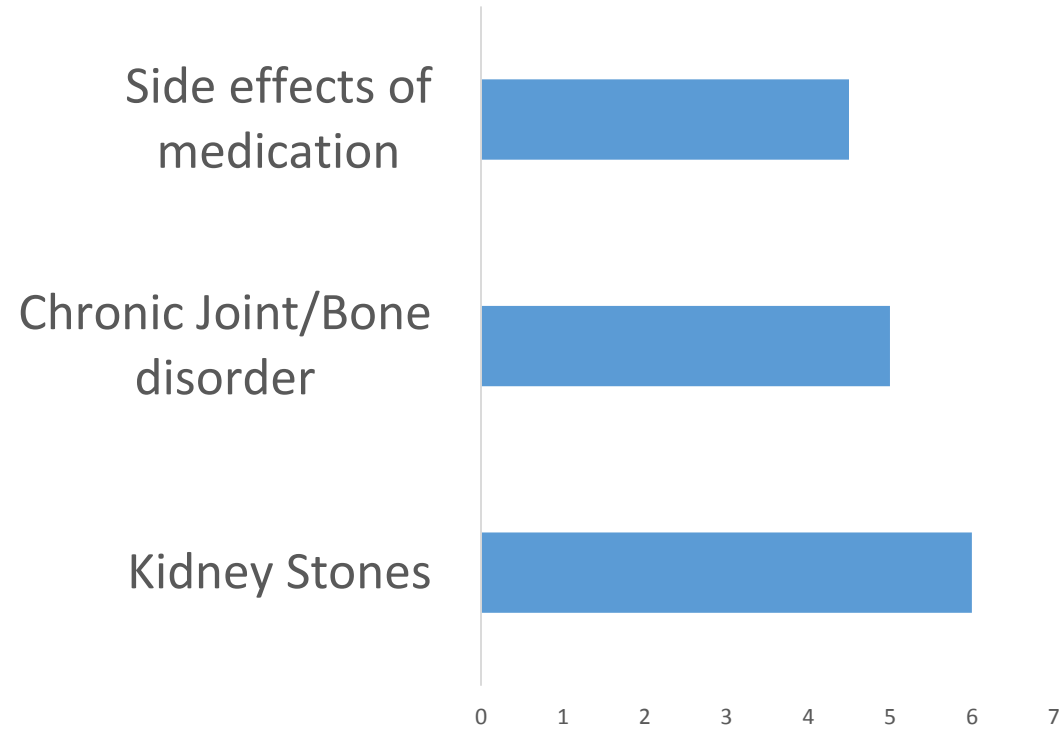


Pilot Health Questionnaire: Probability of negatively affecting medical cert

Top 6



Bottom 3



Pilot Health Questionnaire: Comparisons

Female Pilots

- Rankings differed slightly where top 6 were: Fatigue, work-family balance, sleep, excess weight, stress/anxiety.
- Probability of negatively affecting medical cert were similar.

Aging Pilots >60

- **Rankings were similar to top 6 and bottom 3.**
- **Probability of negatively affecting medical cert were similar.**

Pilot Health Questionnaire: Discussion

Pilots are motivated people and feel health promotion topics should be discussed by their AME during their aero-medical exam.

We need to be proactive – health education rather than reactive- provide health treatment OR predictive.

It involves all of us-AME. We are Doctors first- Do no harm! AME/ FS second!

Pilots benefit from the “Healthy Worker” effect however how long for?

The results from the NZ study reveal slight difference with our counterparts in Portugal.

Could it be culture and context specific?

QUESTION 1:

What is the total number of pilots in
AIR NEW ZEALAND?

1000

1500

2500

3500

Question 2:

In this study, what was the highest probability of negatively affecting the pilot's medical cert?

Depression,

Cardiovascular,

Kidney stones,

Cancer

QUESTION 3:

In this study, what was the number 1 Ranking for pilots in terms of health promotion?

- Smoking,
- Fatigue,
- Sexually Transmitted Disease
- Stress/Anxiety

Pilot Health Questionnaire

THANK YOU

