



ESAM, IAA and Case Studies

Disclosures

ESAM President
Chief Medical Assessor, Ireland
Aeromedical Examiner
General Practitioner

Conflicts of Interest?



ESAM
ICAM
News from EASA

Dr Declan Maher
President ESAM



Who is ESAM?

- 46 Member Associations
- 34 Countries
- 8 Associated Members

Aerospace medicine professionals

AMEs

AeMCs

Military

Research Institutes

Governmental

Others



What is ESAM

- ESAM is the only Pan-European Society of Aerospace Medicine.
- ESAM is an independent, open Society.
- ESAM is a not for profit Society for Tax and Legal purposes.
- Registered in Germany.

- ESAM is NOT a Union
- ESAM is NOT a Regulator.

6th ECAM
6th European Congress of Aerospace Medicine



Trust & Care
in aviation safety
PRAGUE 20-23 September 2018



Mayakovsky: National House of Vinohrady
Congress hall: www.nardum.cz

Saturday Francouzská Restaurace
Gala Dinner: www.francouzskarestaurace.cz

A cooperation between
ESAM, AsMA, the Czech Aeronautical Institute & the Czech Association of Aerospace Medicine
Accreditation foreseen in the EU and US system



Upcoming Newsletters: will be sent by mail
Check us out soon on: <http://ecam2018.esam.aero>

Follow us soon on Facebook:
6th ECAM 2018

ESAM Organisation

- Elected Executive Committee
 - 2 years
- Each Member Association
 - 1 Vote
 - 1 Member of the Advisory Board
- Advisory Board
 - Advises and reports to the Executive Committee
 - Advisory Board Committee manages the activity of the Advisory Board.
 - ABC appointed by the EC
- ESAM Academy
 - Education and Training,
 - Basic and Advanced AME training.



Advisory Board Organisation

- Expert Groups Wiesbaden 2008
 - Expert Groups by Discipline on EU Regulation Implementation
- The Circle of Experts 2018
 - Expert Groups by Discipline
 - Members chosen by Member Associations
 - Voluntary Activity
 - Answering questions asked by the EC/ABC
 - EU Regulation Implementation

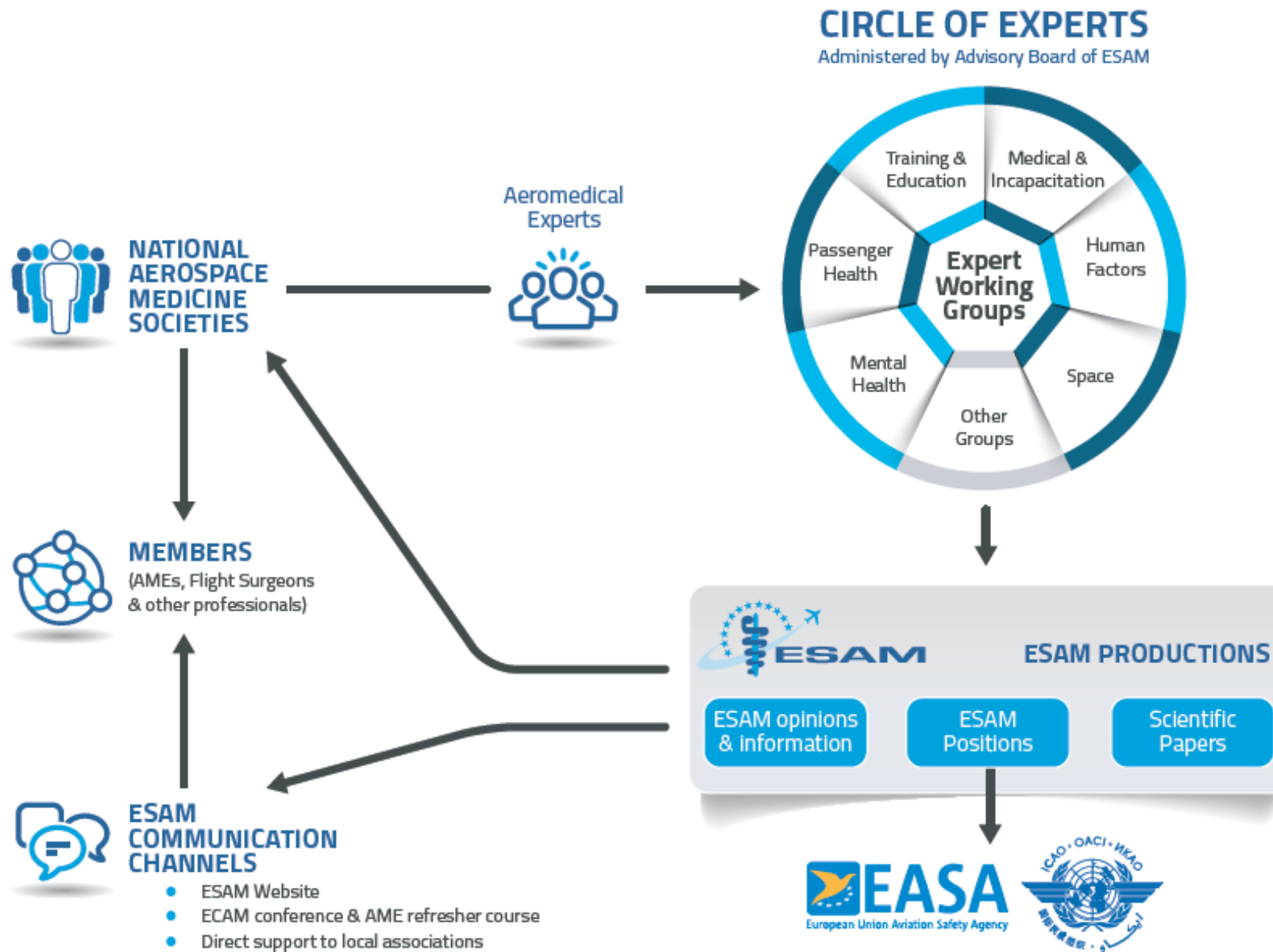


**AEROMEDICAL SCREENING:
WHAT'S EUROPE'S HEADING?**

ESAM
Lunchtime Meeting

OPEN TO ALL
English tea and different European bites offered

Wednesday 8th May 2019
Venue: **Miranda 6/8**
12 noon to 2 pm.



ESAM Needs You

Circle of Experts



Recruiting aeromedical experts

We need you to help us improve the impact of ESAM!



What?

- The Big Questions:
 - Upper Age limit



What?

- The Big Questions:
 - Upper Age limit
 - Diabetes

ESAM Scientific Meeting
at AsMA 2012 - Hilton Atlanta (Room 201)



"Sugar and spice & all things...
...Diabetic"

"commercial pilots on insulin?"

Wednesday 16 May 2012

12.00 – 14.00 hrs

Open to all

beverages provided by ESAM

The European Society of Aerospace Medicine

www.esam.aero

What?

- The Big Questions:
 - Upper Age limit
 - Diabetes
 - Cardiovascular Disease



What?

- The Big Questions:
 - Upper Age limit
 - Diabetes
 - Cardiovascular Disease
 - Mental Health
 - Colour Vision



What?

- The Big Questions:

- Upper Age limit
- Diabetes
- Cardiovascular Disease
- Mental Health
- Colour Vision
- **Human Factors**



[READ MORE](#)



**COVID 19 CRISIS
AND ITS EFFECT ON
AVIATION MENTAL HEALTH**

**JOINT
STATEMENT**

What?

- The Big Questions:

- Upper Age limit
- Diabetes
- Cardiovascular Disease
- Mental Health
- Colour Vision
- Human Factors
- Drugs and Alcohol



What?

- The Big Questions:
 - Upper Age limit
 - Diabetes
 - Cardiovascular Disease
 - Mental Health
 - Colour Vision
 - Human Factors
 - Drugs and Alcohol
 - Medical Certification



What?

- The Big Questions:

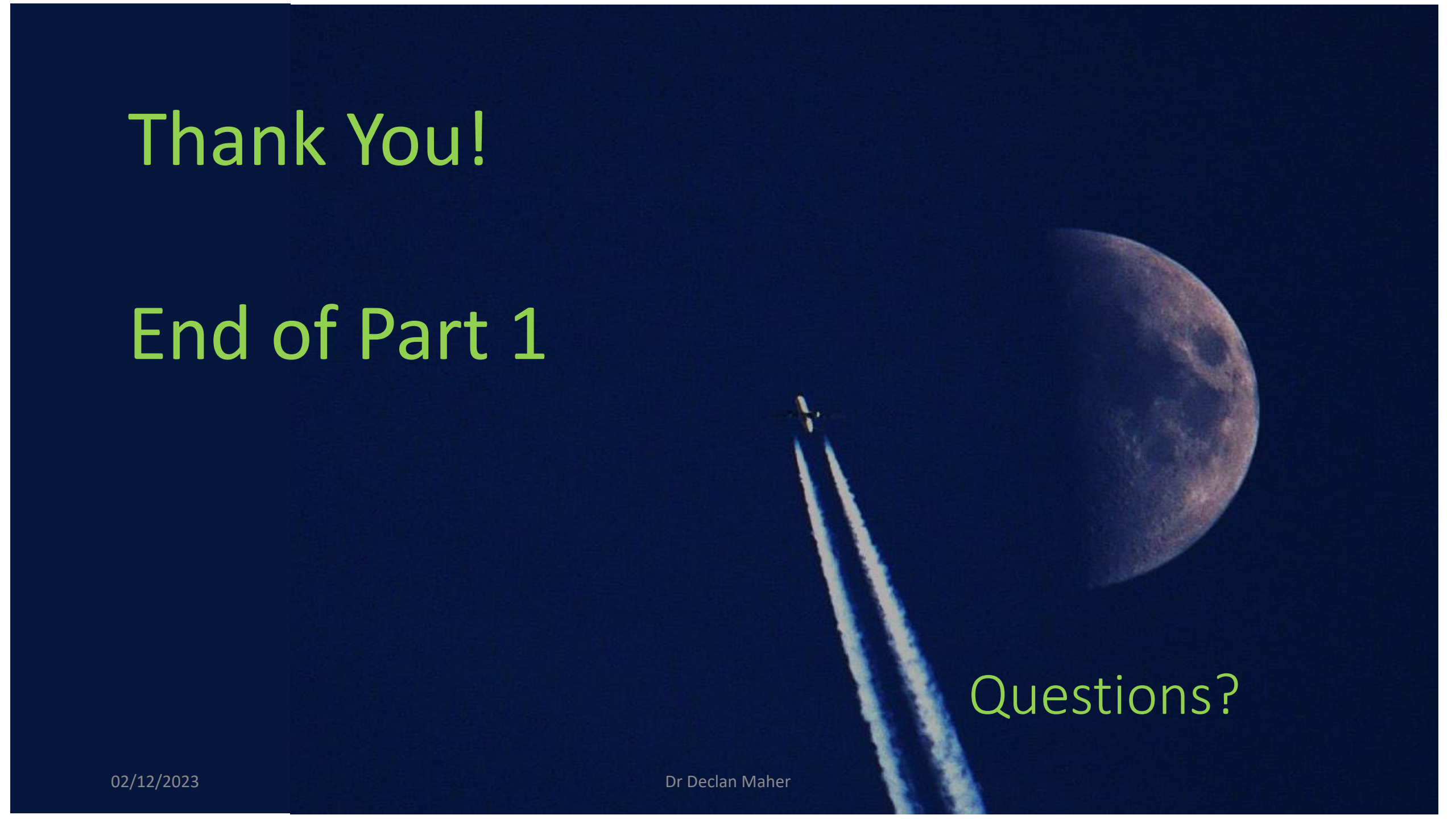
- Upper Age limit
- Diabetes
- Cardiovascular Disease
- Mental Health
- Colour Vision
- Human Factors
- Drugs and Alcohol
- Medical Certification
- **Reduced Crew Operations**



Thank You!

End of Part 1

Questions?



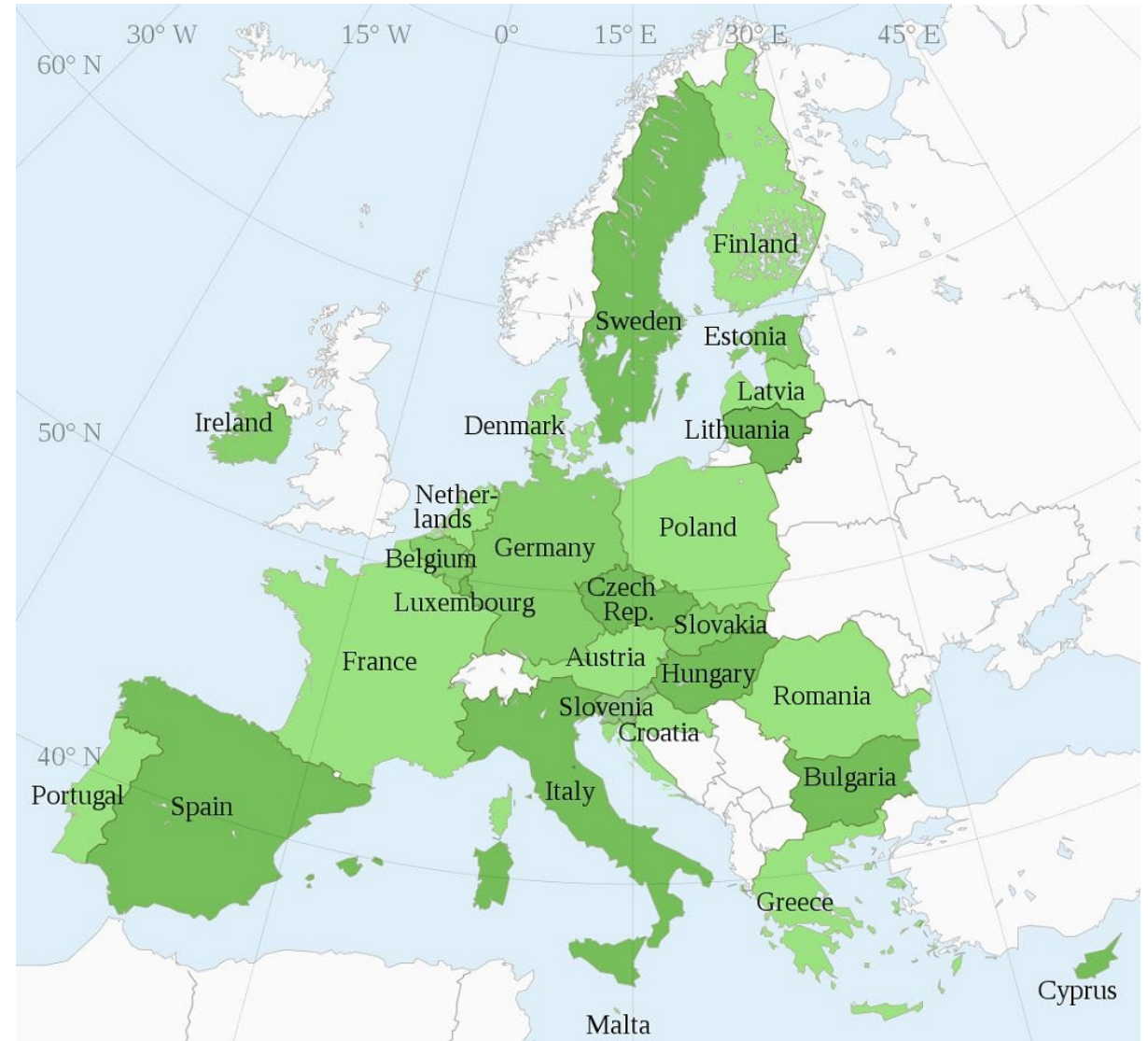


Aeromedical Oversight One small State

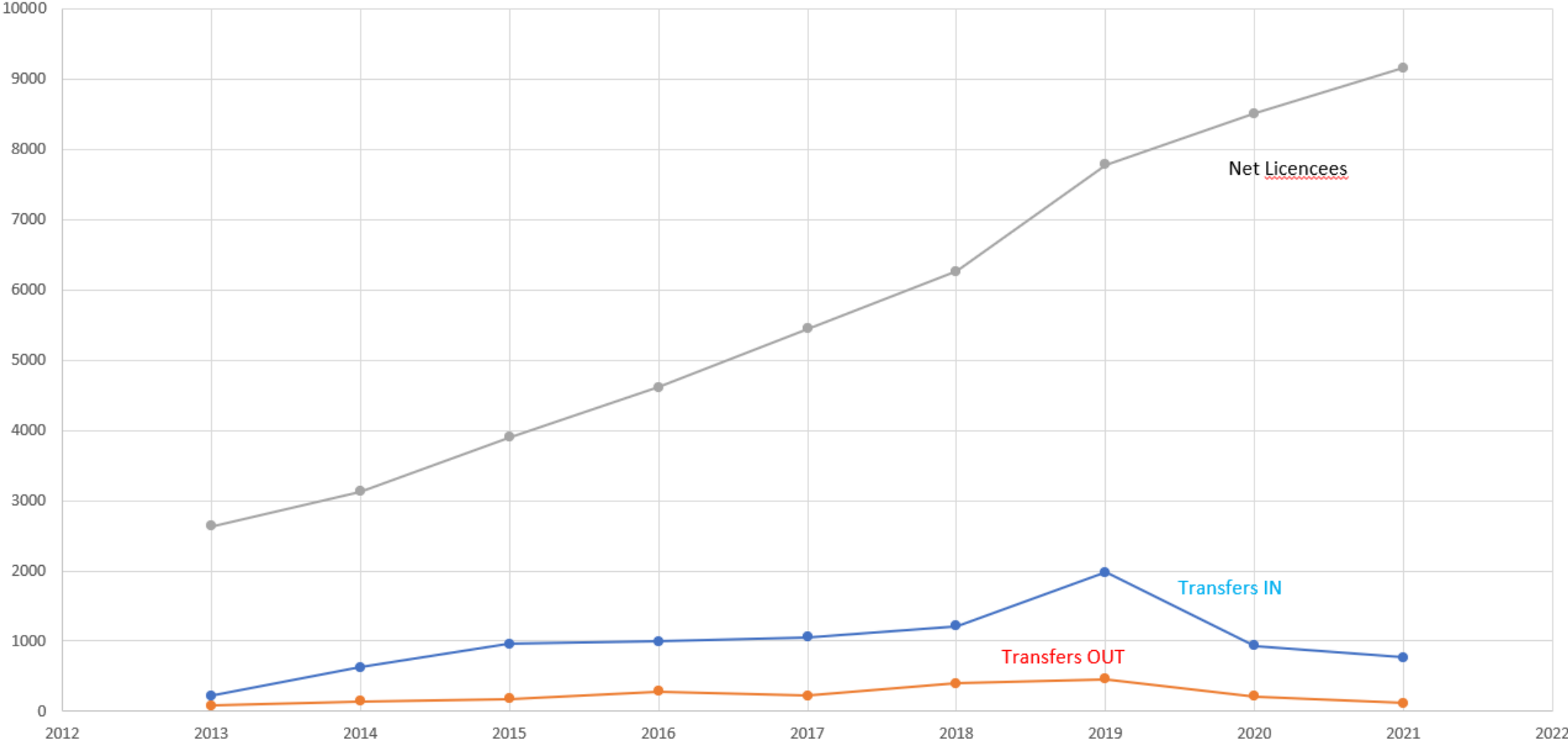
Croatia AME Refresher Training Meeting, Zagreb, HR

Remote Oversight Background

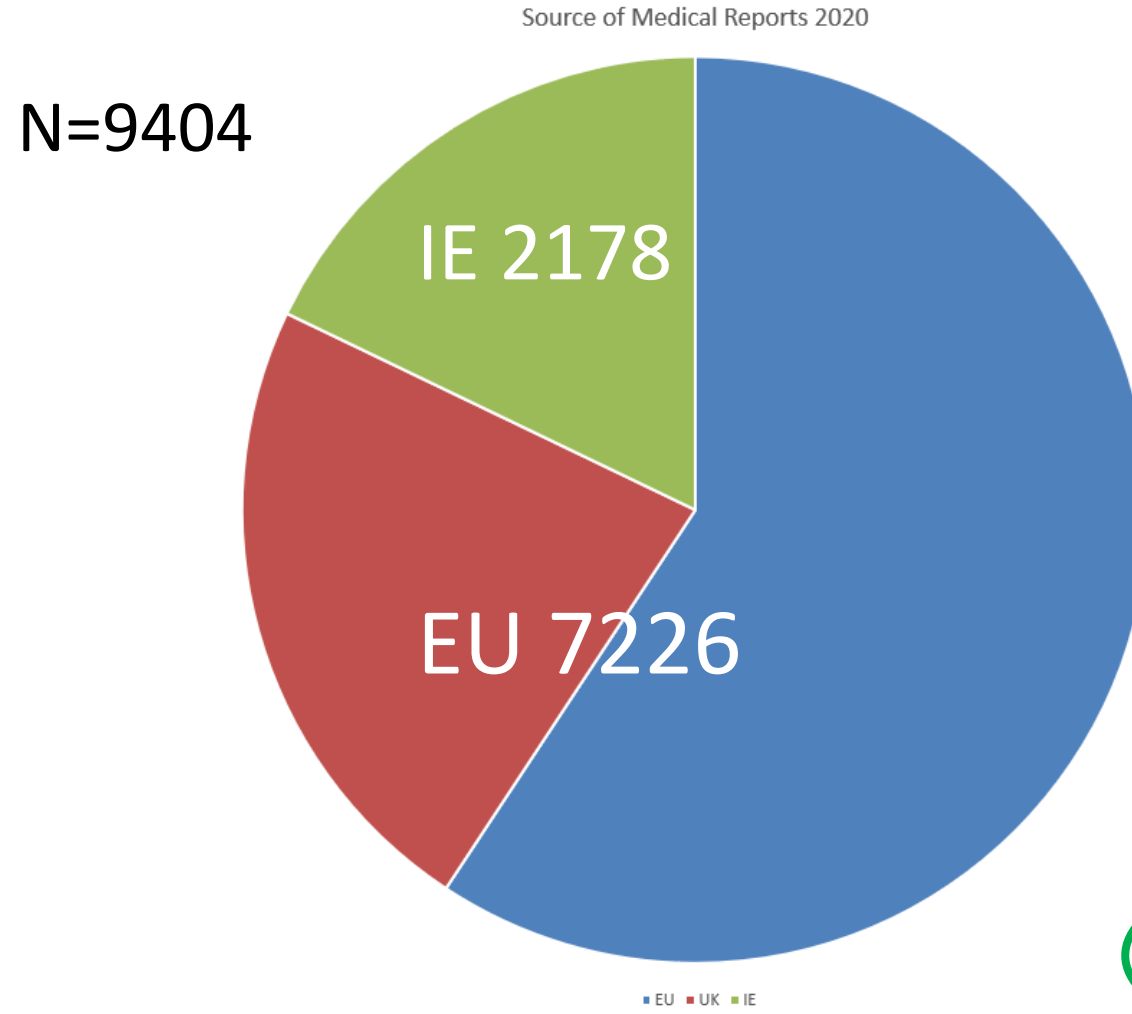
- EU Member States
 - 27
- EFTA
 - 4 (Iceland, Lichtenstein, Norway and Switzerland)



Growth in IE issued EU Licence Holders Reports 2013-2021



Medical Report Sources



EU 7226

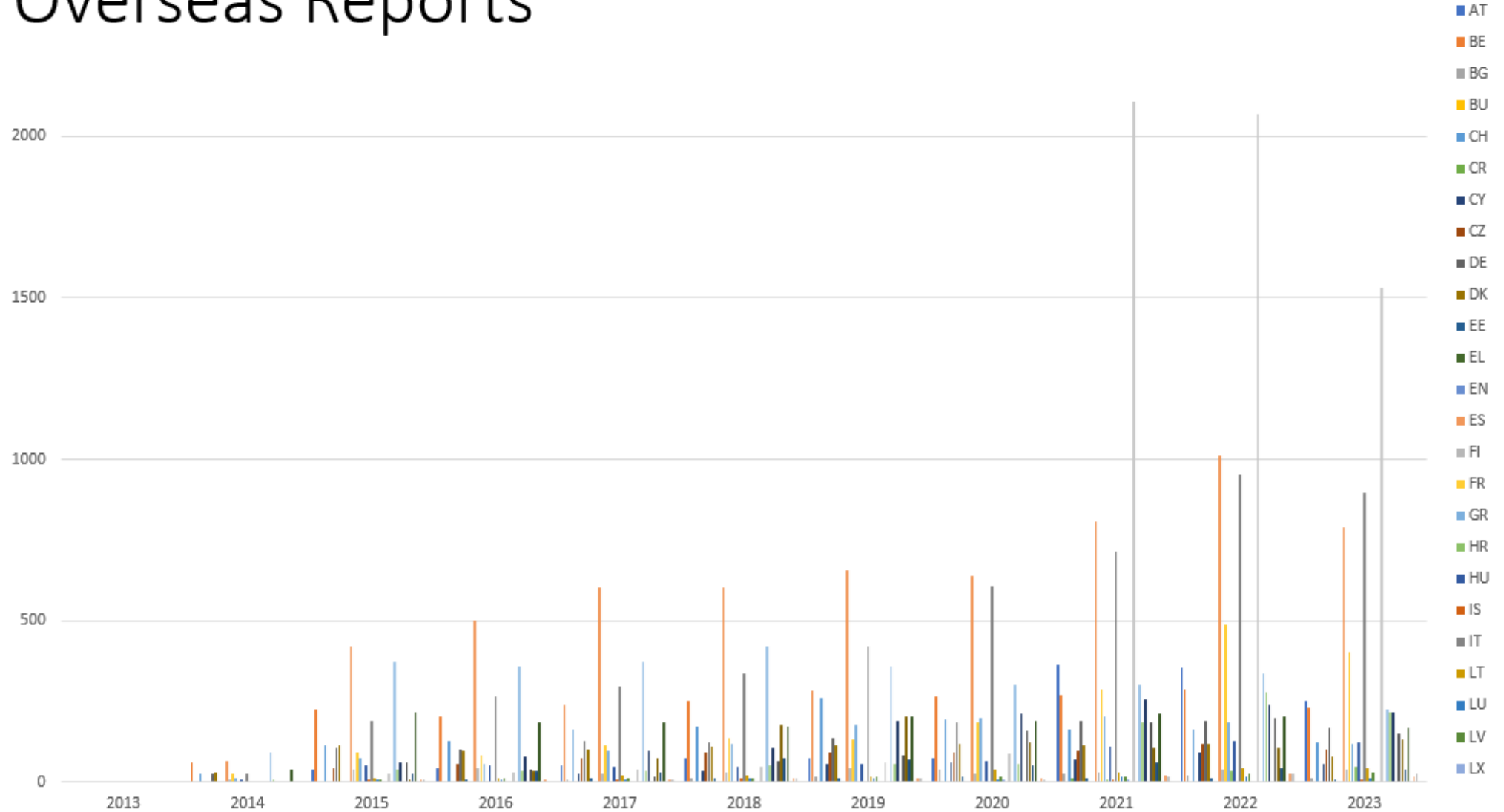
IE 2178

Live Aeromedical Repository

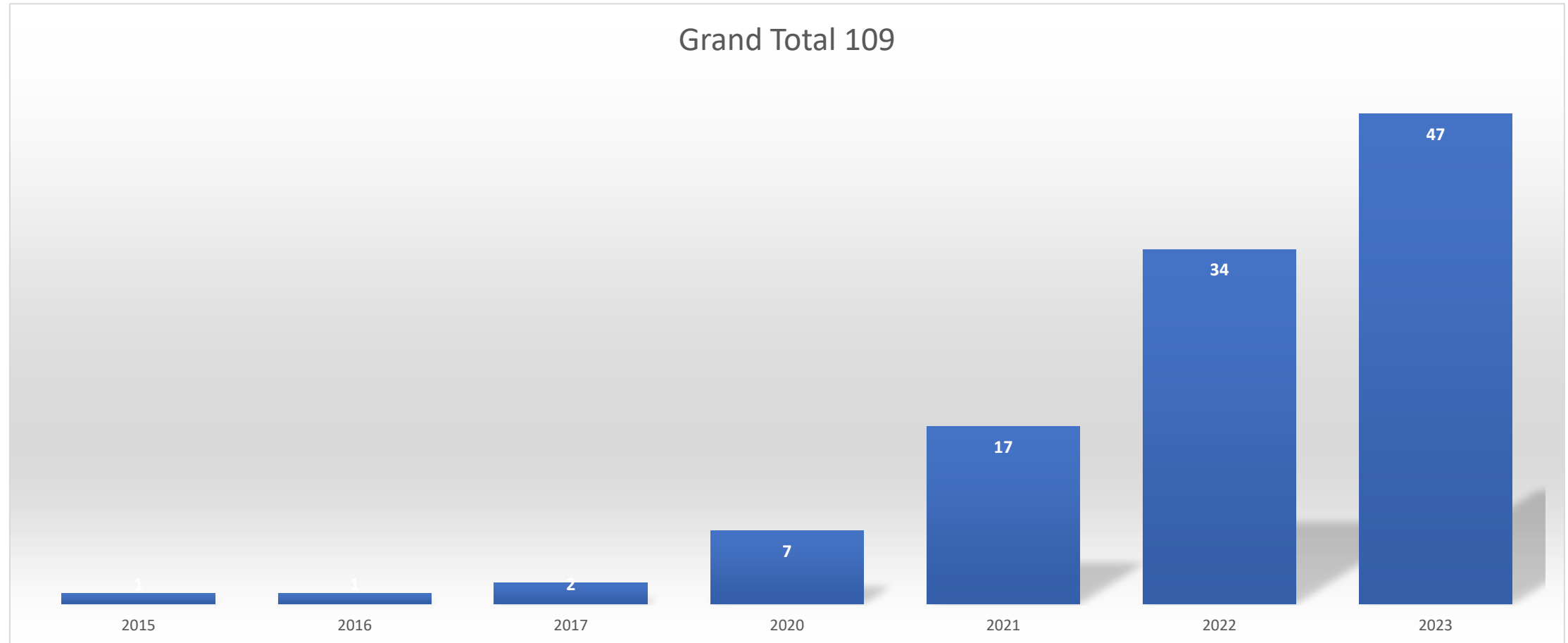
Remote Medical Oversight Results

1	Issue	Grand Total	n=33851	Low	Moderate	High
2	CA Incorrect	631	1.86%	1.86%		
3	ECG	288	0.85%			0.85%
4	Incomplete	299	0.88%	0.88%		
5	Lipids not done	28	0.08%		0.08%	
6	VDL removed	25	0.07%	0.07%		
7	OML removed	6	0.02%			0.02%
8	TU	15	0.04%		0.04%	
9	Visual	285	0.84%		0.84%	
10	Totals:	1571	4.60%	2.81%	0.96%	0.87%

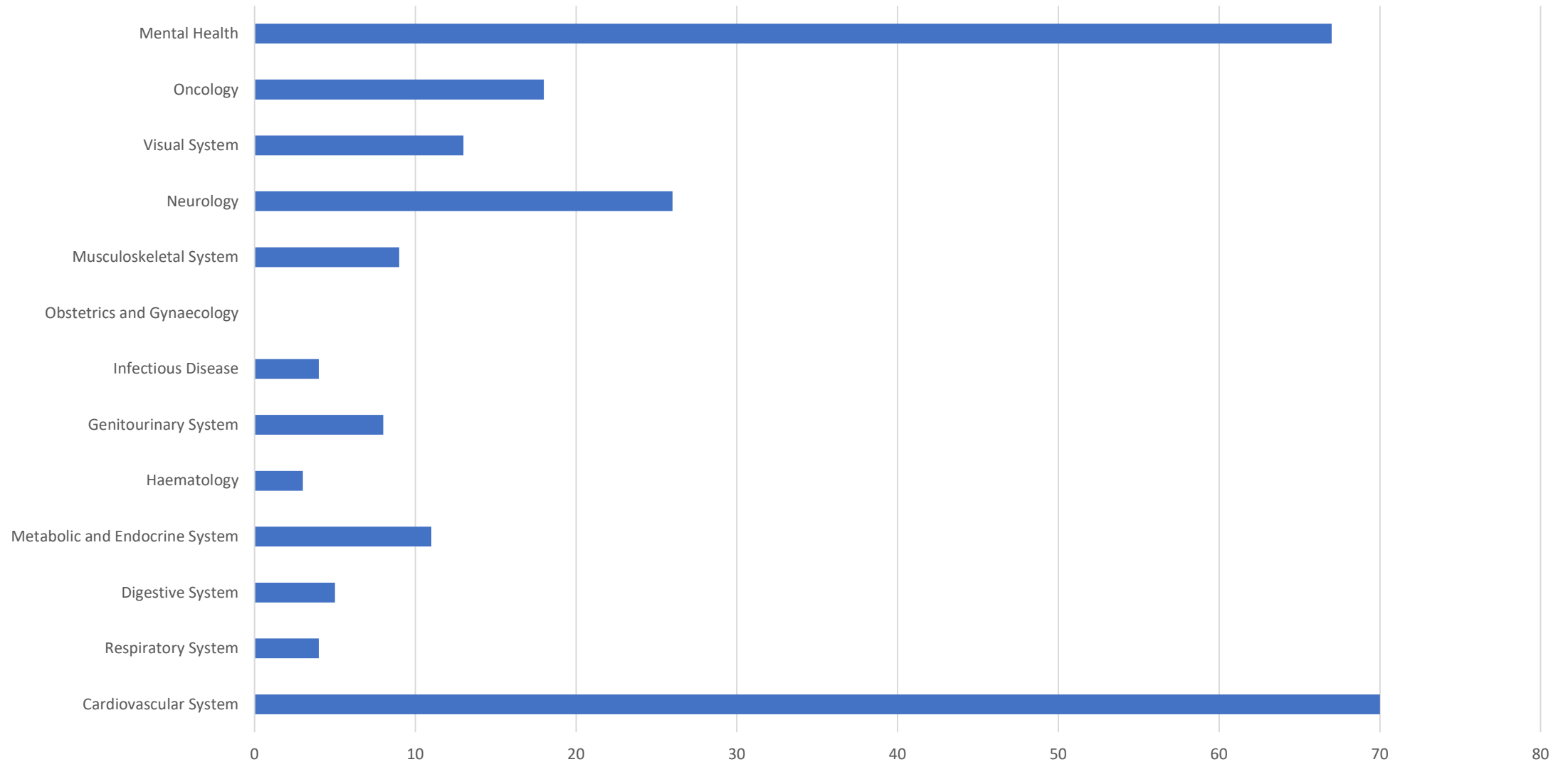
Overseas Reports

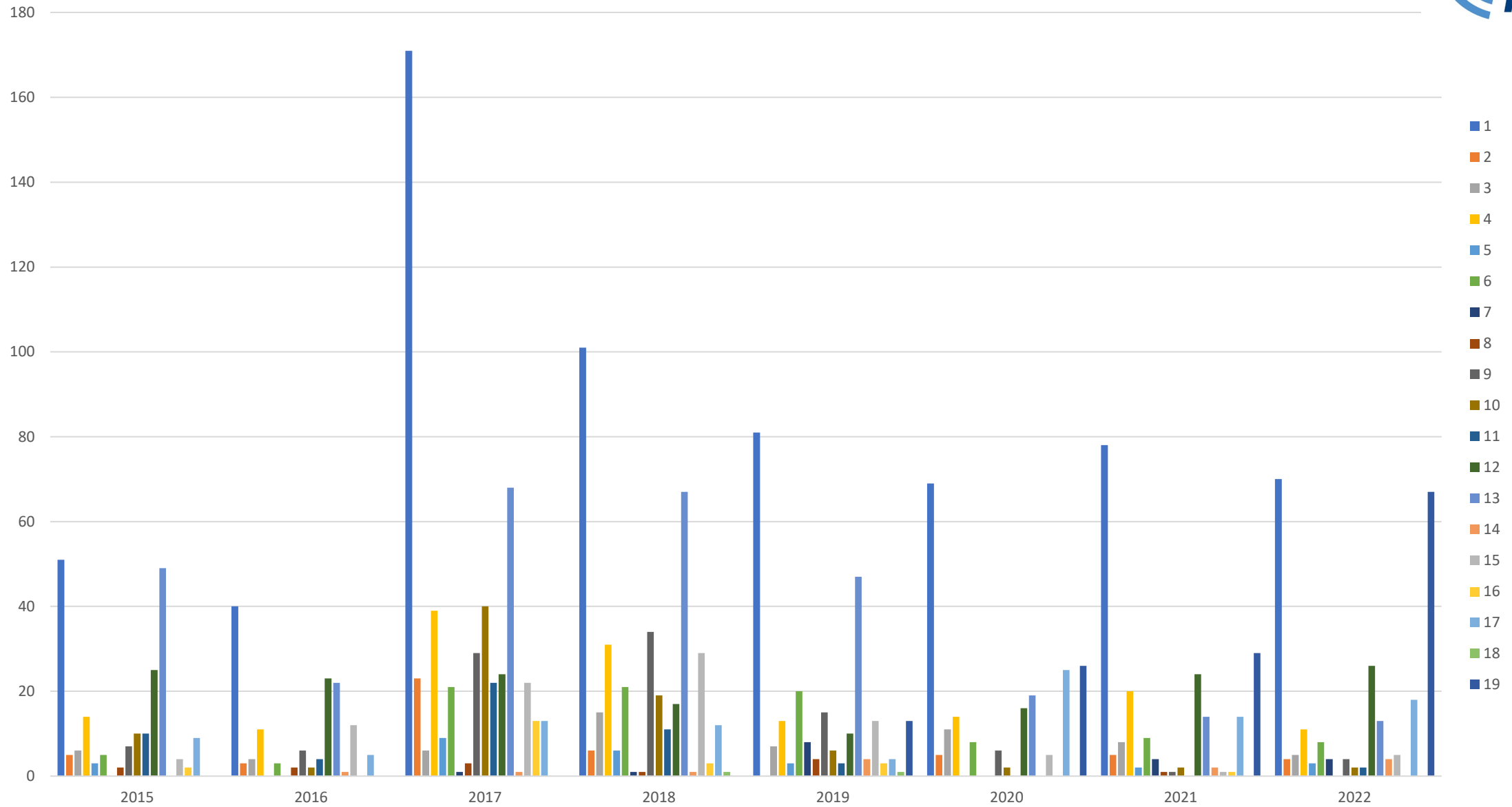


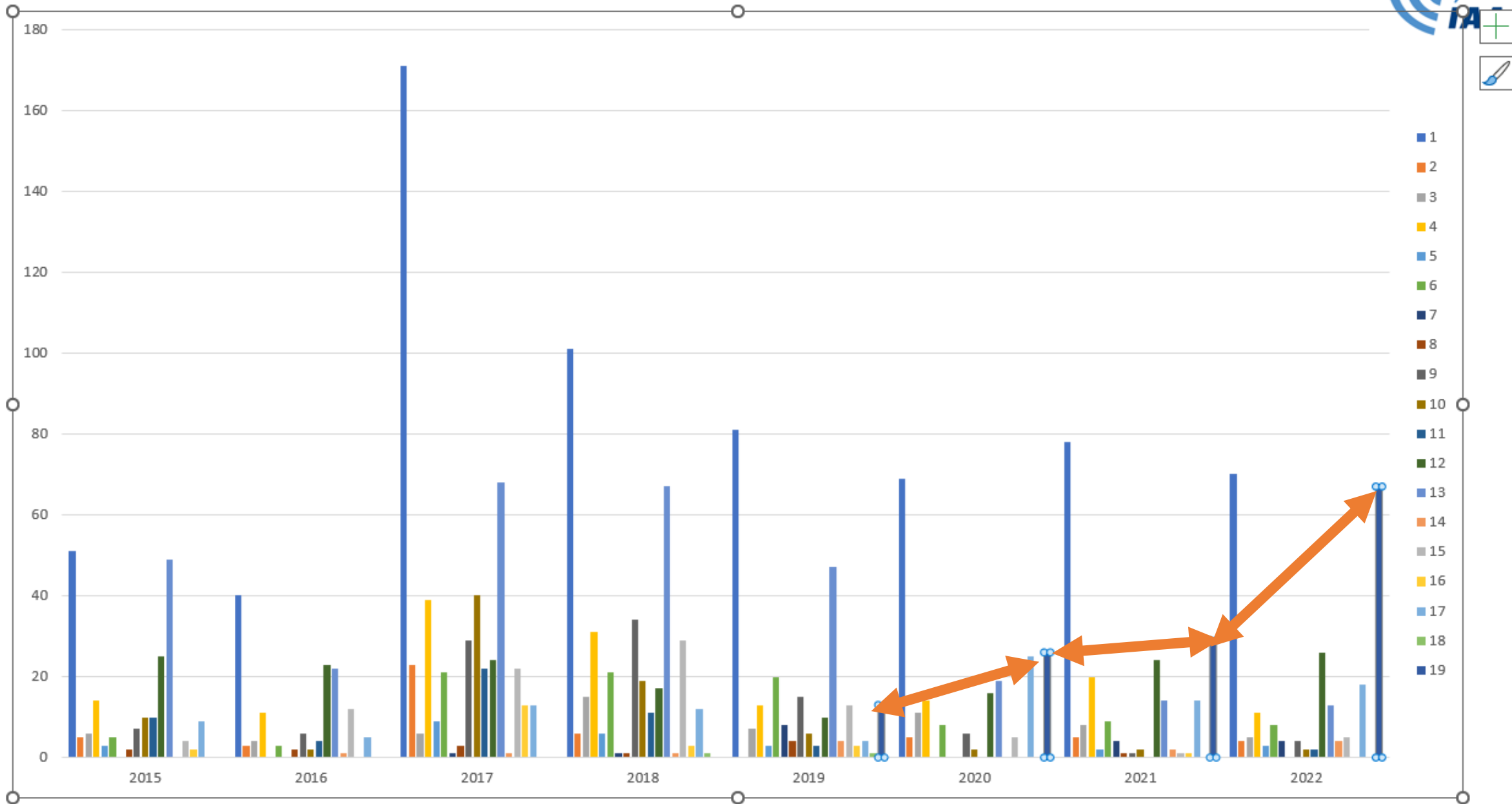
Medical Assessments from HR



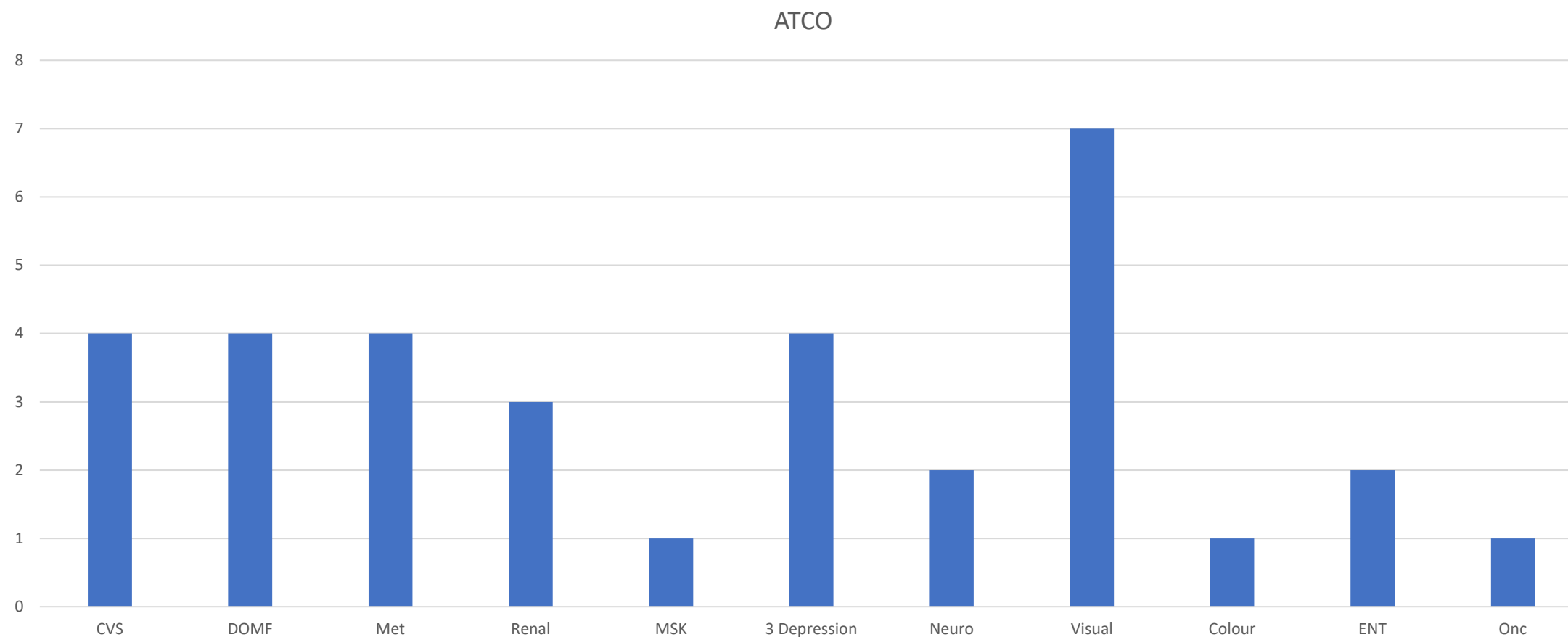
2022 TU x Part.MED Category







ATCO 2016 to 2023



Go raibh mile maith agaibh!

Deireadh Cuid 2

Ceisteanna?



Aeromedica Case Studies

Croatia AME Refresher Training Meeting, Zagreb, HR

Remove OML?

- Thyroidectomy for pT1a N0 M0 20-09-2020
- 20 year mortality of low risk disease 1%
- Subject to Follow Up
- Recurrence site risk, lymphatic nodes

AMC1 MED.B.025 Metabolic and endocrine systems

- (e) Thyroid dysfunction
- Applicants with hyperthyroidism or hypothyroidism should be assessed as unfit. A fit assessment may be considered when a stable euthyroid state is attained.
- AMC1 MED.B.090 Oncology
- (a) Applicants who have been diagnosed with a malignant disease may be assessed as fit provided that:
 - (1) after primary treatment, there is no evidence of residual malignant disease likely to jeopardise flight safety;
 - (2) time appropriate to the type of tumour and primary treatment has elapsed;
 - (3) the risk of inflight incapacitation from a recurrence or metastasis is sufficiently low;
 - (4) there is no evidence of short or long-term sequelae from treatment. Special attention should be paid to applicants who have received anthracycline chemotherapy
 - (5) satisfactory oncology follow-up reports are provided to the medical assessor of the licensing authority.
- (b) An OML should be applied as appropriate.
- © Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.
- (d) Applicants with pre-malignant conditions of the skin may be assessed as fit if treated or excised as necessary and there is regular follow-up.

Fit Class 1?

- Dyspraxia
- Visual Motor integration skills below average
- No Sensory processing challenges observed.
- PPL training FI I going according to plan with no evidence of concerns

Psychology Report

Psychology Report:

[REDACTED] identified as having dyspraxia as a younger child.

The outcome of today's assessment :

- confirms that he continues to have Dyspraxia/ DCD (Developmental Coordination Disorder).
- Shows that [REDACTED] has managed well with a range of supports at home and in school
- These supports have minimised the impact of his Dyspraxia on his daily function

[REDACTED] profile shows:

- He continues to be in the Below Average range in visual motor integration skills
- Just within the Average range on movement skills overall on assessment; with manual coordination at the 3rd percentile
- There are minimal functional difficulties experienced in everyday life, at home and in school
- No sensory processing challenges were noted
- [REDACTED] handwriting speed is significantly below expected for his age

Fit Class 1

- Impose SIC Annual Occupational Therapy Report
- Impose SSL Operate in Multi-crew environment.

Fit Class 1?

- **Dyslexia**
- **Favourable Psychology Report**
 - He has considerable strengths in both verbal and non-verbal areas. He is performing less well than he should be in all aspects of reading but, particularly in silent reading speed and comprehension. His proofreading skills are weak, his rate of writing is slow and he has trouble with spelling. Diagnostic testing shows that he has difficulty with the processing of information in working memory, his verbal short term memory, naming ability and symbolic processing speed all being very weak. As this would explain the inconsistencies in his literacy skills it is appropriate to confirm that He is dyslexic.
- **Has PPL**

MED.B.005 General medical requirements

- Applicants for a medical certificate shall be assessed in accordance with the detailed medical requirements set out in Sections 2 and 3.
- They shall, in addition, be assessed as unfit where they have any of the following medical conditions which entails a degree of functional incapacity which is likely to interfere with the safe exercise of the privileges of the licence applied for or could render the applicant likely to become suddenly unable to exercise those privileges:
 - (a) abnormality, either congenital or acquired;
 - (b) active, latent, acute or chronic disease or disability;
 - (c) wound, injury or sequelae from operation;
 - (d) effect or side effect of any prescribed or non-prescribed therapeutic, diagnostic or preventive medication taken.

Outcome

- Fit Class 1
- TML 12

Class 1 Fit?

- Vestibular Migraine
- Dec 2022 episode of vertigo

- Neurology report favourable.
- Migraine dismissed.
- ENT possible vestibular migraine as provisional diagnosis

MED.B.065 Neurology

AMC1 MED.B.065 Neurology

- (a) Applicants with clinical diagnosis or a documented medical history of any of the following medical conditions shall be assessed as unfit:
- (b) Applicants with clinical diagnosis or a documented medical history of any of the following medical conditions shall undergo further evaluation before they may be assessed as fit:
 - (1) epilepsy without recurrence after age 5;
 - (2) epilepsy without recurrence and off all treatment for more than 10 years;
 - (6) migraine;
- AMC1 MED.B.065 Neurology
- (d) Migraine
- Applicants with an established diagnosis of migraine or other severe periodic headaches likely to cause a hazard to flight safety should be assessed as unfit. A fit assessment may be considered after full evaluation. The evaluation should take into account at least the following: auras, visual field loss, frequency, severity, therapy. Appropriate limitation(s) may apply.

Fit Class 1

- Impose OML
- SIC Neurology review at one year

Fit Class 1?

- DVT twice in past
- 2010 DVT as CC
- 2015 DVT as CC in other leg.
- Investigations NAD by haematology.
- Remains on DOAC to prevent recurrence in flight

AMC1 MED.B.010 Cardiovascular system

- (g) Thromboembolic disorders
- Applicants with arterial or venous thrombosis or pulmonary embolism should be assessed as unfit. A fit assessment with an OML may be considered after a period of stable anticoagulation as prophylaxis, after review by the medical assessor of the licensing authority. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an OML may be considered after review by the medical assessor of the licensing authority after a stabilisation period of 3 months.

Fit Class 1

- Impose OML

Fit Class 1?

- Multiple Sclerosis
- 5 years in remission On Tysabri.
- Favourable Neurology Report

- As long as your MS remains in remission you can be deemed fit Class 1 and 2. Any decrease in medical fitness will result in being Temporary Unfit. MED.A.020
- Due to the nature of MS, I am required to impose the SIC Class 1 but can remove the OML at this time.
- Regarding the Class 2, I believe I can remove the OPL, again with the SIC due to your continuing remission.
- The SIC will remain long-term due to the nature of MS and the need for the AME to be aware of the condition.

Fit Class 1 and 2

- Retain SIC and remove OML
- Remove OPL and Impose SIC

Fit Class 1?

- Vertigo, 2 episodes. Stress related.
- One on Flight deck

- Commutes, new born, new relationship, stress
- MRI Brain NAD.
- ?Meniere's/vestibular migraine, cleared by Neurology
- No recurrence.
- Now stress free

MED.B.080 Otorhinolaryngology (ENT)

- (b) Applicants with any of the following medical conditions shall undergo further examination to establish that the medical condition does not interfere with the safe exercise of the privileges of the applicable licence(s):
 - (2) an active pathological process of the internal or middle ear;
 - (5) disturbance of vestibular function;
 - © Aero-medical assessment
- (1) Applicants for a class 1 medical certificate with any of the medical conditions specified in points (1), (4) and (5) of point (b) shall be referred to the medical assessor of the licensing authority.
- (d) Vestibular disturbance
- Applicants with disturbance of vestibular function should be assessed as unfit. A fit assessment may be considered after full recovery. The presence of spontaneous or positional nystagmus requires complete vestibular evaluation by specialist. Applicants with significant abnormal caloric or rotational vestibular responses should be assessed as unfit. Abnor

Unfit All Classes

- Review reports at 9 and 12 months before considering return to flight.
- OML
- SIC ENT review and reports

Seminoma pT2NX Stage 1

- Right Orchiectomy.
- No extension beyond margins.
- 5 year risk 15%
- 2 years greatest risk.
- Incapacitation risk low
- review Bi-ennial 2 years then annual 5 years

AMC1 MED.B.090 Oncology

- (a) Applicants who have been diagnosed with a malignant disease may be assessed as fit provided that:
 - (1) after primary treatment, there is no evidence of residual malignant disease likely to jeopardise flight safety;
 - (2) time appropriate to the type of tumour and primary treatment has elapsed;
 - (3) the risk of inflight incapacitation from a recurrence or metastasis is sufficiently low;
 - (4) there is no evidence of short or long-term sequelae from treatment. Special attention should be paid to applicants who have received anthracycline chemotherapy;
 - (5) satisfactory oncology follow-up reports are provided to the medical assessor of the licensing authority.
- (b) An OML should be applied as appropriate.
- © Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.
- (d) Applicants with pre-malignant conditions of the skin may be assessed as fit if treated or excised as necessary and there is regular follow-up

Fit Class 1

- OML initially
- Remove OML at 2 years.
- Impose SIC whilst on Surveillance Programme

C2H5 Missuse

- Recent admission to residential unit for treatment.
- Engaged with Pilot Advisory Group (Peer Support Pilots)
- Complying with Management.
- Overseen by Psychiatrist
- Spoke with PAG member. Favourable report, suggests 3-4/12.

- AMC1 MED.B.055 Mental health
- (8) Disorders due to alcohol or other psychoactive substance(s) use or misuse
- (i) Applicants with mental or behavioural disorders due to alcohol or other psychoactive substance(s) use or misuse, with or without dependency, should be assessed as unfit.
- (ii) A fit assessment may be considered after a period of two years of documented sobriety or freedom from psychoactive substance use or misuse. At revalidation or renewal, a fit assessment may be considered earlier with an OML. Depending on the individual case, treatment and evaluation may include in-patient treatment of some weeks and inclusion into a support programme followed by ongoing checks, including drug and alcohol testing and reports resulting from the support programme, which may be required indefinitely.

TU

- Discussed plan over phone,
- TU 12 months, review with PeTH CDT, routinely.
- Based on Reports and Lab Reports, might return Class 1 OML.
- Review in interim
- 15:26:51 Will review TU down on sight of Reports, ?4/12 then OML

HIV positive

- 2010 LASIK
- 2014 on long term anti-virals, asymptomatic.
- 8 years in remission.

- ?Fit

MED.B.040 Infectious Disease

- (b) Applicants who are HIV positive may be assessed as fit subject to satisfactory aero-medical evaluation. Such applicants for a class 1 medical certificate shall be referred to the medical assessor of the licensing authority.
- AMC1 MED.B.040 Infectious disease
- (d) HIV positivity
- (1) Applicants who are HIV positive may be assessed as fit with an OML if a full investigation provides no evidence of HIV associated diseases that might give rise to incapacitating symptoms. Frequent review of the immunological status and neurological evaluation by an appropriate specialist should be carried out. A cardiological evaluation may also be required, depending on the medication.
- (2) Applicants with signs or symptoms of an AIDS-defining condition should be assessed as unfit.

Fit Class 1 OML

- Impose OML initially and
- Review at 2 years with view to change to SIC during follow up.

Initial Class 1 Keratoconus

- High astigmatism. LE -4.00 refraction -6.50. Aniso <2.00.
- RE -2.75. Post-cross linking.
- Ophthalmology assessment favourable.

AMC1 MED.B.070 Visual system

- (g) Keratoconus
- Applicants with keratoconus may be assessed as fit if the visual requirements are met with the use of corrective lenses and periodic evaluation is undertaken by an ophthalmologist
- (d) Refractive error and anisometropia
- (4) An evaluation by an eye specialist should be undertaken 2-yearly if:
 - (i) the refractive error is greater than -6.0 dioptres or $+5.0$ dioptres;
 - (ii) astigmatism or anisometropia exceeds 3.0 dioptres.

Adeno-CA Rectum

- 2022 Q1, chemo and radiotherapy then rectal resection and defunctioning Ileostomy.
- Ileostomy closed 2022 Q2.
- ypT0yp0N0
- No residual disease.
- Follow up programme 6 monthly review by Oncology.

AMC1 MED.B.090 Oncology

- ED Decision 2019/002/R
- (a) Applicants who have been diagnosed with a malignant disease may be assessed as fit provided that:
 - (1) after primary treatment, there is no evidence of residual malignant disease likely to jeopardise flight safety;
 - (2) time appropriate to the type of tumour and primary treatment has elapsed;
 - (3) the risk of inflight incapacitation from a recurrence or metastasis is sufficiently low;
 - (4) there is no evidence of short or long-term sequelae from treatment. Special attention should be paid to applicants who have received anthracycline chemotherapy;
 - (5) satisfactory oncology follow-up reports are provided to the medical assessor of the licensing authority.
- (b) An OML should be applied as appropriate.
- © Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.
- (d) Applicants with pre-malignant conditions of the skin may be assessed as fit if treated or excised as necessary and there is regular follow-up.

- Fit class 1
- Impose OML and TML 6.
- Review OML at one year, consider exchange for SIC at that time with removal of OML.
- Request Oncology report

Childhood Psychological treatment

- 2015 admitted suicidal ideation.
- No further issues.
- Adjustment disorder
- No evidence of Pathology
- Favourable Reports from Psychiatrist
- No follow up required.

AMC1 MED.B.055 Mental health

- (a) Mental health assessment as part of the initial class 1 aero-medical examination
- (1) A comprehensive mental health assessment should be conducted and recorded taking into account social, environmental and cultural contexts.
- (2) The applicant's history and symptoms of disorders that might pose a threat to flight safety should be identified and recorded.
- (3) The mental health assessment should include assessment and documentation of:
 - (i) general attitudes to mental health, including understanding possible indications of reduced mental health in themselves and others;
 - (ii) coping strategies under periods of psychological stress or pressure in the past, including seeking advice from others;
 - (iii) childhood behavioural problems;
 - (iv) interpersonal and relationship issues;
 - (v) current work and life stressors; and
 - (vi) overt personality disorders.
- (4) Where there are signs or is established evidence that an applicant may have a psychiatric or psychological disorder, the applicant should be referred for specialist opinion and advice.
- (7) Personality or behavioural disorders
- Where there are signs or is established evidence that an applicant may have a personality or behavioural disorder, the applicant should be referred for psychiatric or psychological opinion and advice.

Fit Class 1

- Impose SIC,
- May be removed, by Medical Assessor, on production of a favourable Psychology report at next medical assessment.
- Review

VTE

- 2023 Bilateral PE RV Strain. Covid-19
- 2023 Left LL DVT
- 2019 Right LL DVT off DOAC
- 2019 Left LL DVT DOAC
- Conservative risk assessment. Vienna tool
- Predicted probability of recurrence within 12 months from assessment of D-Dimer level (%): 5.39
- Predicted probability of recurrence within 60 months from assessment of D-Dimer level (%): 21.17
- HASBLED risk 1-2% pa

AMC1 MED.B.010 Cardiovascular system

- (g) Thromboembolic disorders
- Applicants with arterial or venous thrombosis or pulmonary embolism should be assessed as unfit. A fit assessment with an OML may be considered after a period of stable anticoagulation as prophylaxis, after review by the medical assessor of the licensing authority. Anticoagulation should be considered stable if, within the last 6 months, at least 5 INR values are documented, of which at least 4 are within the INR target range and the haemorrhagic risk is acceptable. In cases of anticoagulation medication not requiring INR monitoring, a fit assessment with an OML may be considered after review by the medical assessor of the licensing authority after a stabilisation period of 3 months. Applicants with pulmonary embolism should also be evaluated by a cardiologist. Following cessation of anticoagulant therapy, for any indication, applicants should undergo a re-assessment by the medical assessor of the licensing authority.

TU

- Currently, Unfit.
- Await further Cardiovascular assessment before considering return to Fit status

Past history of admission to Psychiatry unit. ?Psychosis

- Occurrence report. Misrepresentation.
- Formal Psychiatry reports favourable.
- Single episode of OCD.2021.
- No recurrence.
- No treatment.
- No sequelae.
- No Psychosis/Schizophrenia

AMC1 MED.B.055 Mental health

- € Assessment and referral decisions
- (1) Psychotic disorder
- Applicants with a history, or the occurrence, of a functional psychotic disorder should be assessed as unfit. A fit assessment may be considered if a cause can be unequivocally identified as one which is transient, has ceased and the risk of recurrence is minimal.
- (4) Schizophrenia, schizotypal or delusional disorder
- Applicants with an established history or clinical diagnosis of schizophrenia, schizotypal or delusional disorder may only be considered for a fit assessment if the medical assessor of the licensing authority concludes that the original diagnosis was inappropriate or inaccurate as confirmed by psychiatric evaluation, or, in the case of a single episode of delirium of which the cause was clear, provided that the applicant has suffered no permanent mental impairment.
- (5) Mood disorder
- Applicants with an established mood disorder should be assessed as unfit. After full recovery and after full consideration of the individual case, a fit assessment may be considered, depending on the characteristics and severity of the mood disorder.

- Fit Class 1
- Issue Class 1 unrestricted.
- Applicant informed regarding issue of misrepresentation.

Psychological Stress

- Anxiety over years.
- Driving Ban 2023Q3
- Peth low use, CHO low.
- Older son, Asperger's traits
- Favourable Psychiatrist's report.
- Psychologist's report Favourable.
- Crisis reaction.

- AMC1 MED.B.055 Mental health
- (5) Mood disorder
- Applicants with an established mood disorder should be assessed as unfit. After full recovery and after full consideration of the individual case, a fit assessment may be considered, depending on the characteristics and severity of the mood disorder.
- (8) Disorders due to alcohol or other psychoactive substance(s) use or misuse
- (ii) A fit assessment may be considered after a period of two years of documented sobriety or freedom from psychoactive substance use or misuse. At revalidation or renewal, a fit assessment may be considered earlier with an OML. Depending on the individual case, treatment and evaluation may include in-patient treatment of some weeks and inclusion into a support programme followed by ongoing checks, including drug and alcohol testing and reports resulting from the support programme, which may be required indefinitely.

TU Class 1

- Review at 12 months.
- If PEth and CHO reports are favourable at 6 and 12 months,
- May be deemed Fit Class 1 OML

Anxiety event and tachycardia.

- No recurrence since
- Cardiology Favourable reports
- Mental Health Favourable.
- No further events

Fit Class 1

- Remove OML
- Impose SIC pro temps

? Remove OML

- Psychosis 2020.
- Documented Psychotic event 2020.
- Treated and favourable report from Psychiatrist 2022.
- Period of remission 2 years.

AMC1 MED.B.055 Mental health

- € Assessment and referral decisions
- (1) Psychotic disorder
- Applicants with a history, or the occurrence, of a functional psychotic disorder should be assessed as unfit. A fit assessment may be considered if a cause can be unequivocally identified as one which is transient, has ceased and the risk of recurrence is minimal.

Fit Class 1

- Maintain OML until next assessment in 2023.
- Review OML subject to favourable reports providing evidence of stability and no recurrence of illness.

Hyperthyroid

- On Carbergoline
- Hypogonadism
- Hyperprolactinaemia,
- Pituitary micro-adenoma

AMC1 MED.B.025 Metabolic and endocrine systems

- € Thyroid dysfunction
- Applicants with hyperthyroidism or hypothyroidism should be assessed as unfit. A fit assessment may be considered when a stable euthyroid state is attained.

Fit Class 1

- Valvopathies, Pericarditis, hypotension and depression, are common side effects from Carbergoline.
- Therefore as treatment should incur an OML
- Euthyroid on treatment. Stable >3/12
- Impose OML and SIC whilst on Carbergoline treatment

CLASS 2

- Aeromedical Decision Making
- EU 1178/2011

Initial Class 2. Depression

- Favourable report from GP treating physician.
- No SI no DSH.
- 4 year history of Fluoxetine 20mg stable for low mood.
- Euthymic on SSRI, long term.
- AME opinion Fit Class 2.

AMC2 MED.B.055 Mental health

- (4) Mood disorder
- Applicants with an established mood disorder should be assessed as unfit. After full recovery and after full consideration of the individual case, a fit assessment may be considered, depending on the characteristics and severity of the mood disorder.
- Impose ORL

Seizure

- Single nocturnal seizure 2008
- NAD on neurology.
- No meds.
- Neurology opinion very low risk of recurrence

AMC2 MED.B.065 Neurology

- (a) Epilepsy
- Applicants may be assessed as fit if:
 - (1) there is a history of a single afebrile epileptiform seizure, considered to have a very low
 - risk of recurrence;
 - (2) there has been no recurrence after at least 10 years off treatment; and
 - (3) there is no evidence of continuing predisposition to epilepsy.

Fit Class 2

- Unfit Class 1. May consider OML, but initial with OML not possible.
- Class 2 may be certified, but unprovoked nocturnal seizure.
- Consider OSL due to possible strobe induction.
- Seek Neurology review.
- Review after one year.

CVA

- CVA 16/05/16 Right CVA.
- Ischaemic Right Middle Cerebral Artery

- Background CABG 2010
- Traumatic Pneumothoraxes A/C crash ?2012

- Complete recovery
- Underlying cause. ?Coagulopathy/Paroxysmal SVT

- On beta blockers for rate control

MED.B.065 Neurology

- (a) Applicants shall have no established medical history or clinical diagnosis of any neurological condition which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).
- AMC2 MED.B.065 Neurology
- (c) Neurological disease
- Any stationary or progressive disease of the nervous system which has caused or is likely to cause a significant disability is disqualifying. In case of minor functional loss associated with stationary disease, a fit assessment may be considered after full evaluation.

- ICAO:
- 10.3.4 Assuming absence of significant neurological deficit, risk for recurrent stroke becomes the prime consideration in aeromedical disposition (and risk of cardiac disease in large artery stroke such as carotid disease).
- Beyond the first year, recurrence risk is about four per cent per year, with some variability depending on stroke subtype.
- 10.3.5 In considering medical certification following stroke, the medical assessor must consider stroke mechanism, corrective measures if undertaken (e.g. carotid endarterectomy), degree of attention to risk factors (e.g. treatment of hypertension and hyperlipidaemia), and neurological stability during a suitable observation period.

Fit Class 2

- OSL/OPL after assessment at 1 year.
- Consider assessment of Visual Fields.
- Seek opinion of MA

SAH 2020 Berry Aneurysm

- Berry Aneurysm coiled March 2020. Grandmother died at 40 same.
- No sequelae.
- Favourable Neurosurgical report.
- Angio due 09-20.

AMC2 MED.B.065 Neurology

- (f) Vascular deficiencies
- Applicants with a disorder of the nervous system due to vascular deficiencies including haemorrhagic and ischaemic events should be assessed as unfit. A fit assessment may be considered if neurological evaluation is satisfactory and the provisions of AMC2 MED.B.050 are met. A cardiological evaluation and medical flight test should be undertaken for applicants with residual deficiencies.

TU

- RXO annual Ophthalmology review
- Review 1 year for Estermann Fields
- Then ?Fit Class 2

Childhood Epilepsy

- Favourable report.
- Last seizure age 5.
- On Valproate to 8 years
- Seizure free and off meds >10 year

AMC2 MED.B.065 Neurology

- AMC2 MED.B.065 Neurology
- (a) Epilepsy
- Applicants may be assessed as fit if:
- (1) there is a history of a single afebrile epileptiform seizure, considered to have a very low risk of recurrence;
- (2) there has been no recurrence after at least 10 years off treatment; and
- (3) there is no evidence of continuing predisposition to epilepsy.

Fit Class 2

Parkinson's Disease

- A Fit assessment may be considered.
- In accordance with the regulation we will require the following:
 - Specialist Neurological Assessment.
 - Evaluation of any medical therapy
 - Regular review of functional capacity.

MED.B.065 Neurology

- (a) Applicants shall have no established medical history or clinical diagnosis of any neurological condition which is likely to interfere with the safe exercise of the privileges of the applicable licence(s).
- (c) Applicants with an established history or clinical diagnosis of:
 - (4) progressive or non-progressive disease of the nervous system;
 - (8) spinal or peripheral nerve injury;
- shall undergo further evaluation before a fit assessment can be considered. Applicants for a Class 1 medical certificate shall be referred to the licensing authority. Fitness of Class 2 applicants shall be assessed in consultation with the licensing authority.
- AMC2 MED.B.065 Neurology
- (b) Conditions with a high propensity for cerebral dysfunction
- An applicant with a condition with a high propensity for cerebral dysfunction should be assessed as unfit. A fit assessment may be considered after full evaluation.
- (c) Neurological disease
- Any stationary or progressive disease of the nervous system which has caused or is likely to cause a significant disability is disqualifying. In case of minor functional loss associated with stationary disease, a fit assessment may be considered after full evaluation.
- ICAO:
 - 10.6.7 A diagnosis of Parkinson's disease in itself is not disqualifying for any class of medical certification.
- Aeromedical considerations
 - 10.6.8 A diagnosis of Parkinson's disease should lead to a thorough neurological evaluation, exclusion of related conditions, and evaluation of need for treatment. Medical certification may be appropriate immediately in mild conditions.
- Medication must also be considered. Levodopa agents may be allowed, but dopamine agonists are prohibited due to their potentially sedating effects. If certification is granted following medical evaluation, it should be conditioned upon periodic re-examination and re-evaluation. If disease progression presents a risk to aviation safety, the Medical Assessment should be revoked.

TU

- OSL/OPL may be required
- Neurological Assessment
- Medical Flight Test repeated
- Periodic Neurologic Review

Breast cancer

- Intraductal Grade 2 T1N0M0
- In recovery. No sequelae.
- On Tamoxifen

AMC2 MED.B.090 Oncology

- (a) Applicants who have been diagnosed with a malignant disease may be considered for a fit assessment provided that:
 - (1) after primary treatment, there is no evidence of residual malignant disease likely to jeopardise flight safety;
 - (2) time appropriate to the type of tumour and primary treatment has elapsed;
 - (3) the risk of in-flight incapacitation from a recurrence or metastasis is sufficiently low;
 - (4) there is no evidence of short or long-term sequelae from treatment that may jeopardise flight safety;
 - (5) arrangements for an oncological follow-up have been made for an appropriate period of time.
- (b) Applicants receiving ongoing chemotherapy or radiation treatment should be assessed as unfit.
- © Applicants with pre-malignant conditions of the skin may be assessed as fit if treated or excised as necessary and there is a regular follow-up.

Fit

- Remove SIC OSL

Haemochromatosis

- Cardiology review satisfactory.
- LFTs Normal.
- Ferritin normal.
- Regular Blood Donor

AMC1 MED.B.030 Haematology

- ED Decision 2019/002/R
- (a) Abnormal haemoglobin
- Applicants with abnormal haemoglobin should be investigated.
- (b) Anaemia
- (1) Applicants with anaemia demonstrated by a reduced haemoglobin level require investigation.
- (d) Haemoglobinopathy
- (1) Applicants with a haemoglobinopathy should be assessed as unfit. A fit assessment may be considered where minor thalassaemia or other haemoglobinopathy is diagnosed without a history of crises and where full functional capability is demonstrated. The haemoglobin level should be satisfactory.

Fit

- Unrestricted Class 2

Marfans's

- Aortic root dilatation
- Dyslexia sensory processing disorder 2010

- Aortic root dilatation within limits and growth acceptable.
- On medication Losarten and Atenolol
- Mild to moderate Aortic Root dilatation and
- Mild Mitral valve prolapse

MED.B.010 Cardiovascular system

- MITRAL VALVE DISEASE
- (a) Minor regurgitation should have evidence of no thickened leaflets or flail chordae and left atrial internal diameter of less than or equal to 4.0 cm.
- (b) The following may indicate severe regurgitation:
 - (1) LV internal diameter (diastole) > 6.0 cm; or
 - (2) LV internal diameter (systole) > 4.1 cm; or
 - (3) Left atrial internal diameter > 4.5 cm.
- (c) Doppler indices, such as width of jet, backwards extension and whether there is flow reversal in the pulmonary veins may be helpful in assessing severity of regurgitation.

Fit Class 2

- TML 12/12
- SSL
- Annual Cardiology review

Atrial Flutter and Sick Sinus Syndrome

- Demand Pacemaker inserted July 2015.
- Favourable Cardiology review and pacemaker check

AMC2 MED.B.010 Cardiovascular system

- (I) Rhythm and conduction disturbances
- Any significant rhythm or conduction disturbance should require cardiological evaluation and an appropriate follow-up before a fit assessment may be considered. An OSL or OPL limitation should be considered as appropriate.
- (7) Pacemaker
- Applicants with a subendocardial pacemaker may be assessed as fit no sooner than 3 months after insertion provided:
 - (i) there is no other disqualifying condition;
 - (ii) a bipolar lead system is used, programmed in bipolar mode without automatic mode change of the device;
 - (iii) the applicant is not pacemaker dependent; and
 - (iv) the applicant has a regular follow-up, including a pacemaker check.

Fit Class 2

- Issue OSL/OPL

Asperger's

- Anxiety
- Neurosensory deafness
- Vertigo benign positional
- Spoke by phone today. Flying in Coonagh doing well. Cracked a joke about his sister! In great form. Doing TnG at EINN no problem with comms and not "acting as a mad thing".

MED.B.060 Psychology

- (a) Applicants shall have no established psychological deficiencies, which are likely to interfere with the safe exercise of the privileges of the applicable licence(s). (b) A psychological evaluation may be required as part of, or complementary to, a specialist psychiatric or neurological examination.
- AMC2 MED.B.080 Otorhino-laryngology
- (d) Vestibular disturbance
- An applicant with disturbance of vestibular function should be assessed as unfit pending full recovery.

Fit Class 2 Cert

- TML 1 year

Request to remove OSL

- Multi-vessel PCI Stenting prior to 2016.
- Stable since.
- EST shows no evidence of Ischaemia.
- Annual review

AMC2 MED.B.010 Cardiovascular system

- (k) Coronary artery disease
- (4) After an ischaemic cardiac event, or revascularisation, applicants without symptoms should have reduced cardiovascular risk factors to an appropriate level. Medication, when used to control angina pectoris, is not acceptable. All applicants should be on appropriate secondary prevention treatment.
- (iv) Successful completion of the six-month or subsequent review will allow a fit assessment. Applicants may be assessed as fit with an ORL or OSL having successfully completed only an exercise ECG.
- (16) ORL Valid only with a safety pilot if passengers are carried and in aircraft with dual controls
- This limitation applies to holders of a class 2 or LAPL medical certificate with a medical condition that may lead to an increased level of risk to flight safety when exercising the privileges of the licence. The safety pilot, if carried, should be made aware of the type(s) of possible incapacity that the pilot whose medical certificate has been issued with this limitation may suffer and should be prepared to take over the aircraft controls during flight. Refer to MED.B.001(d)(4).

Fit Class 2

- OSL/ORL required by EU 1178/2011
- ORL may be considered as alternative to OSL allowing solo flight.

? UNFITCLASS 2/ fit LAPL

- History of coronary artery disease ,
- Very significant family history .
- The atheroma is diffuse with moderate stenoses , moderate being 40-50 % stenoses approximately as described by his cardiologist .
- LVH, hypertension
- I advise he attends his cardiologist for review and he should take a copy of the relevant section of the regulation as below with him.
- Currently he is unfit class 2 but may be fit for LAPL.

MED.B.010

- (k) Coronary artery disease
- (1) Chest pain of uncertain cause requires full investigation.
- (2) Applicants with suspected asymptomatic coronary artery disease should undergo cardiological evaluation which should show no evidence of myocardial ischaemia or significant coronary artery stenosis.
- (3) Applicants with evidence of exercise-induced myocardial ischaemia should be assessed as unfit.
- (4) After an ischaemic cardiac event, or revascularisation, applicants without symptoms should have reduced cardiovascular risk factors to an appropriate level.
- Medication when used to control angina pectoris, is not acceptable. All applicants should be on appropriate secondary prevention treatment.
- (i) A coronary angiogram obtained around the time of, or during, the ischaemic myocardial event and a complete, detailed clinical report of the ischaemic event and of any operative procedures should be available to the AME.
- (A) There should be no stenosis more than 50 % in any major untreated vessel, in any vein or artery graft or at the site of an angioplasty/stent, except in a vessel subtending a myocardial infarction.
- (B) The whole coronary vascular tree should be assessed as satisfactory by a cardiologist and particular attention should be paid to multiple stenoses and/or multiple revascularisations.
- © Applicants with an untreated stenosis greater than 30 % in the left main or proximal left anterior descending coronary artery should be assessed as unfit.

Hvala!

Kraj Dijela 3

Pitanja?

CLASS ATCO

- EU 2015/340