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Operational Outcomes Analysis: Medically Qualified vs Medically Waivered Accessions

Concetta Brightbill MSc[1]; Edward Sheriff, PhD[2]; Atheer Jaffar, MPH[3];

[1]USAF AFMC USAFSAM/FESO (Contractor, Siertek, Ltd.)

[2]USAF AFMC USAFSAM/FESO (Contractor, Laredo Technical Services, Inc.)

[3]USAF AFMC USAFSAM/FESS (Contractor, Eagle Integrated Services)

United States Air Force School of Aerospace Medicine, Wright-Patterson AFB, OH

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Background: Medical Standards & Terminology

- DoDI 6130.03, Volume 1 (Core Requirements)
  - No contagious diseases: Prevents endangering other personnel
  - No high-risk conditions: Avoids expected lost duty time or early separation
  - Medically capable: Ready to complete training and initial service contract
  - Globally deployable: Adaptable to any environment without geographic limits
  - Duty-ready: Performs duties without aggravating existing conditions

Applicants NOT meeting medical standards may request a medical waiver

- Medical Waiver (Granted during accession pipeline)
  - A decision that allows an applicant with a disqualifying medical condition to enter the military
- Profile – (Granted post-accession/active duty)
  - A medical tool used to communicate a service member's (SM) functional and physical limitations to their unit commander
  - May also be used to exempt a SM from Physical Training (PT) or from another military requirement (due to a medical condition, such as shaving)

In the context of this project, 'profile' is used to indicate deployment and duty restrictions

Study Purpose & Objectives

- Core Purpose:
  - To conduct a 5-year longitudinal retrospective analysis evaluating how medical waivers in the accession pipeline impact long-term operational readiness
- Primary Objective
  - Identify career and health disparities among the cohorts over 6 intervals of time
- Key Study Questions:
  - **Early-Stage Attrition**: Do longitudinal disparities exist in training success between the cohorts during critical milestones, specifically looking at 1-month Basic Military Training BMT and 6-month (Technical Training) intervals?
  - **Retention**: Do medically waivered Airmen have different 5-year attrition rates compared to baseline accessions?
  - **Mobility Restrictions**: Is there a difference in deployability or non-deployable days among the cohorts?
  - **Duty Restrictions**: Do the waivered cohorts require a higher rate of duty-limiting profiles, post-accession?

Methodology & Cohort Definition

- Cohort selection FY20-25 all USAF ADAF Enlisted Accessions Data Sources
  - Air Force Recruiting Service (AFRS) Accession Medical Waiver Division (AMWD)
    - Medically **waivered** cohort
    - Medically **qualified** cohort
  - Air Force Personnel Center (AFPC)
    - Attrition and retention outcomes
  - Legacy Armed Forces Health Longitudinal Technology Application (AHLTA) & Military Health System (MHS) GENESIS datasets
    - Medical encounters based on the Healthcare Cost and Utilization Project's (HCUP) Clinical Classifications Software (CCS) International Classification of Diseases (ICD) 9 and 10 codes
    - Armed Forces Health Surveillance Division (AFHSD), categorized by diagnostic groupings of interest
    - Medically waivered Airmen were further stratified utilizing **ICD & AFHSD group standardization**
- Datasets were merged to analyze retention and other variables of interest, among the medically waivered, medically qualified, and combined cohorts

Outcomes Assessed

Variables Assessed

- Retention Rate Analysis
  - Follow-up Six Interval Periods: 1 month, 6 months, 1 yr, 2 yrs, 3 yrs, 4 yrs
- Availability Analysis
  - Mobility Restriction (MR): Airmen **not deployable** per Airman-year
  - Duty Restrictions (DR): Airmen **incapable of performing 100% of duties**
  - Mean Days per Airman-year
- Medical Visits
  - Average visits per Airman-year
- Performance Analysis Rates
  - Medical Evaluation Board (MEB)
  - Early Return from Deployment (ERD)
  - Permanent Profiles (PERMCOND)
    - % of service spent on a profile for 365+ days
  - Training Related Attrition (Enlisted BMT)

Basic Military Training Metrics

Medically Qualified

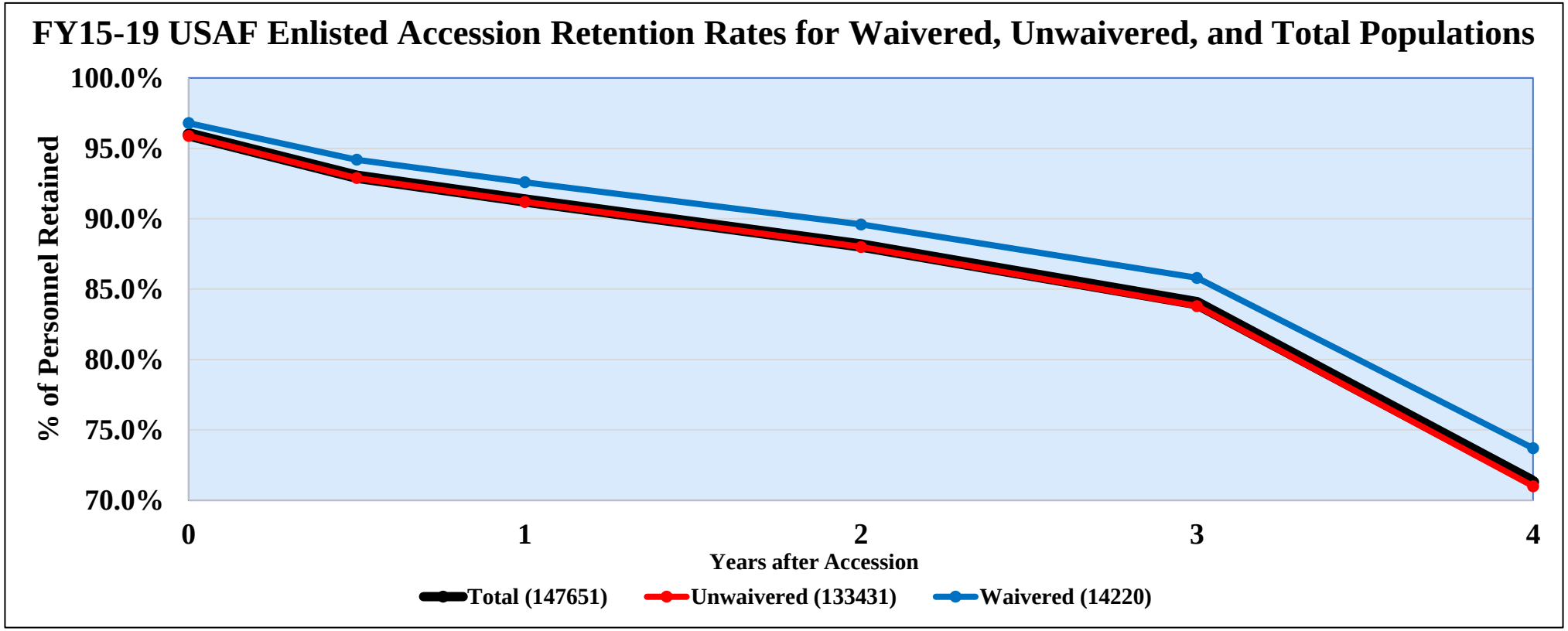
- Accessed: 133,409
- BMT Washed Out (Total): 7,759 (5.8%)
  - Admin/erroneous: 2,919 (2.2%)
  - Medical Discharge: 4,840 (3.6%)
- BMT Recycled: 4,040 (3.0%)

Medically Waivered

- Accessed: 14,216
- BMT Washed Out (Total): 746 (5.3%)
  - Admin/erroneous: 249 (1.8%)
  - Medical Discharge: 497 (3.5%)
- BMT Recycled: 803 (5.7%)

- BMT Washed Out: Trainee is permanently removed from service, often due to medical or administrative causes.
- BMT Recycled: Trainee is set back in training, often due to medical condition or not meeting required milestones.

Active Duty Enlisted Analysis - Retention

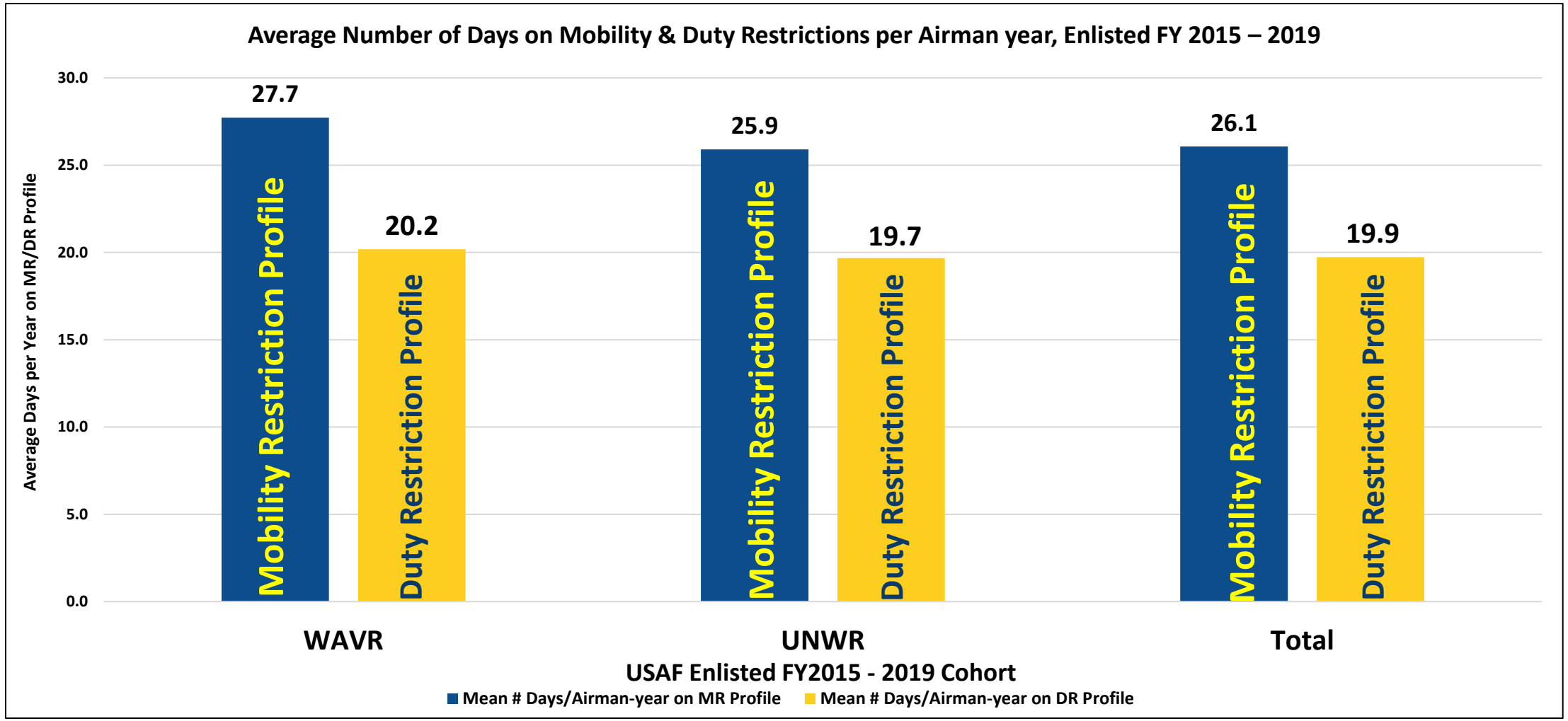


Waivered Members:

- 14K accessed
- Higher retention than unwaivered
- Spent more days DR & MR
- 6% more annual medical visits

Population	Rate of Retention by Time Period						Mean # Days/ Airman Year		Encounters/ Airman Year	ERD	MEB	PERMCOND
	1 Month	6 Months	12 Months	2 Years	3 Years	4 Years	MR	DR				
Total (147651)	96.0%	93.0%	91.3%	88.1%	84.0%	71.3%	26.1	19.7	13.2	0.82%	7.90%	16.80%
Unwaivered (133431)	95.9%	92.9%	91.2%	88.0%	83.8%	71.0%	25.9	19.7	12.8	0.78%	7.83%	16.70%
Waivered (14220)	96.8%	94.2%	92.6%	89.6%	85.8%	73.7%	27.7	20.2	13.6	0.91%	8.85%	17.60%

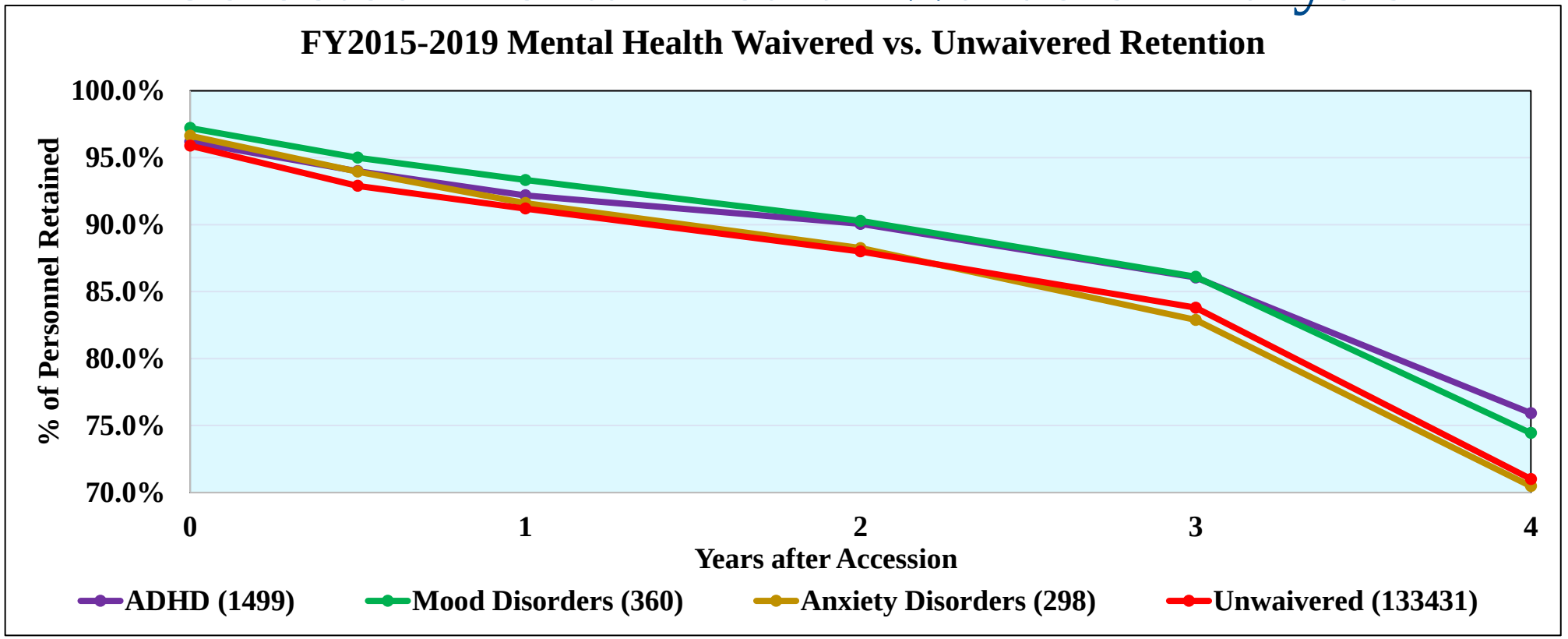
MR & DR (ALL WAVR vs UNWR)



Diagnostic Subgroup Analysis

- The Waiver Group was further subdivided into overarching diagnostic groups by grouping similar ICD codes
- Diagnostic Subgroup Analysis
  - Ophthalmic & Otic
    - Myopia, Hyperopia, Excessive Astigmatism, Binocular Vision disorders; Hearing loss
  - Immune-Mediated Conditions (Allergy & Anaphylaxis)
    - Anaphylaxis/Food allergy, Asthma, and Atopic/Contact Dermatitis
  - Mental Health & Mood Disorders
    - ADHD, Anxiety disorders, Mood disorders

Selected Mental Health Waivers Analysis



- ADHD, Mood Disorder show higher rates of retention and higher visits than the general population

Population	Rate of Retention, by Time Period						Mean # Days/ Airman Year		Encounters/ Airman Year	MEB	PERMCOND
	1 Month	6 Months	12 Months	2 Years	3 Years	4 Years	MR	DR			
ADHD (1499)	96.2%	94.0%	92.2%	90.1%	86.1%	75.9%	26.5	18.9	13.2	7.8%	18.1%
Mood Disorders (360)	97.2%	95.0%	93.3%	90.3%	86.1%	74.4%	32.5	21.9	16.4	16.4%	21.9%
Anxiety Disorders (298)	96.6%	94.0%	91.6%	88.3%	82.9%	70.5%	31.4	22.4	16.0	9.7%	16.8%
Unwaivered (133431)	95.9%	92.9%	91.2%	88.0%	83.8%	71.0%	25.9	19.7	12.8	7.8%	16.7%

Enlisted Cohort Conclusions

Subgroups of accession with waivers have varying risk by diagnostic category

MR Rates

Hearing Loss had a better rate of MR than unwaivered

All others worse

DR Rates

Hearing Loss & Contact Derm had better rates of DR than unwaivered

All others worse

Medical Utilization

Hearing Loss, Astigmatism & Contact Derm had better rates of Medical Utilization than unwaivered

All others worse

LIMITATIONS

- Not all medical diagnoses were included in this analysis
- Small number of diagnoses
- Biases and Confounders not assessed
- Medical standards may have changed
- Waiver policies/thresholds may have changed
- Administrative/discharge (other than medical) excluded
- Ongoing Analyses on USAF Officer outcomes
- No adjustments for COVID-19

Going Forward

1. Detailed exploration of mental health in the service, emphasizing MEB, suicide, and tying specific conditions to specific outcomes. Tie with AFSC?
2. Exploration of obesity (at admission) and its relationship to MEB conditions. Look at diabetes type II? Are outcomes different by AFSC? Esp retention?
3. Investigation of the etiology of asthma/eczema in the service.
4. Breakdown of MEB frequency by category, attempt to tie the major conditions to accession waivers. (emphasis on current data)
5. Narrative exploration for population identification of individuals who are "high-deployers" and "no-deployers" based upon return from deployment PHA data. Are these folks who never have waivers, always have waivers? Typical?
6. Trends over time for MEBs, profiles.
7. Investigate impact of 2020 asthma policy change.
8. Assess for anemia, back pain, and other diagnostic groups of interest.
9. SMs on MR & DR profiles can’t meet the requirements; burden falls on co-workers (qualitative/quantitative)
    a. Ex: Increased frequency & duration of deployments
    b. Assess for the burden placed on Airmen (qualitative/quantitative)
10. Expand the initial follow-up period to assess monthly attrition.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Questions?