## Running head: SEX DIFFERENCES IN HEALTH SERVICES AND MEDICATION USE AMONG OLDER ADULTS WITH ASTHMA

**Online Supplement.** Adjusted relative rates of asthma-specific health services use and prescriptions for women vs. men

## a) Negative binomial regression models

	Crude RR (95% CI)		Adjusted RR (95% CI)	
Outcome	<b>Study Population</b>	P -Value†	<b>Study Population</b>	P -Value†
	(N=209,054)		(N=209,054)	
Asthma-Specific HSU				
Spirometry visits	0.79 (0.77, 0.81)	< 0.0001	0.87 (0.85, 0.89)	< 0.0001
Asthma-specific ED visits	0.99 (0.88, 1.11)	0.8400	1.43 (1.33, 1.53)	< 0.0001
Asthma-specific hospitalizations*				
Asthma-specific physician office visits	0.97 (0.95, 0.99)	0.0071	1.03 (1.01, 1.05)	0.0007
Asthma-specific specialist visits	0.93 (0.89, 0.96)	0.0005	0.93 (0.90, 0.96)	< 0.0001
Asthma-Specific Medication Use				
Asthma controller prescriptions	0.88 (0.87, 0.89)	< 0.0001	0.98 (0.97, 0.99)	0.0227
Asthma reliever prescriptions	0.91 (0.89, 0.92)	< 0.0001	1.03 (1.02, 1.05)	0.0002

The multivariate negative binomial regression models were adjusted for age at baseline, age at asthma prevalence, collapsed aggregated diagnosis groups (CADGs), Ontario Marginalization Index, local health integration networks (LHINs), rurality, and chronic obstructive pulmonary disease (COPD); offset by log(years observed). RR: relative rate. CI: confidence interval. HSU: health services use. ED: emergency department. †: P<0.05 considered statistically significant. \*: The negative binomial regression model did not converge.

## b) Logistic regression model

	Crude OR (95% CI)		Adjusted OR (95% CI)	
Outcome	<b>Study Population</b>	P -Value†	<b>Study Population</b>	$\emph{P}$ -Value †
	(N=209,054)		(N=209,054)	
Asthma-Specific HSU				
Asthma-specific hospitalizations	2.03 (1.89, 2.19)	< 0.0001	2.31 (2.14, 2.49)	< 0.0001

The logistic regression model was adjusted for age at baseline, age at asthma prevalence, collapsed aggregated diagnosis groups (CADGs), Ontario Marginalization Index, local health integration networks (LHINs), rurality, and chronic obstructive pulmonary disease (COPD); offset by log(years observed). OR: odds ratio. CI: confidence interval. HSU: health services use. †P<0.05 considered statistically significant.