Supplementary Material

Table S1 : Serotype identification of cases recorded in the notifiable disease registry (MADO file) in Quebec, 2000-2014

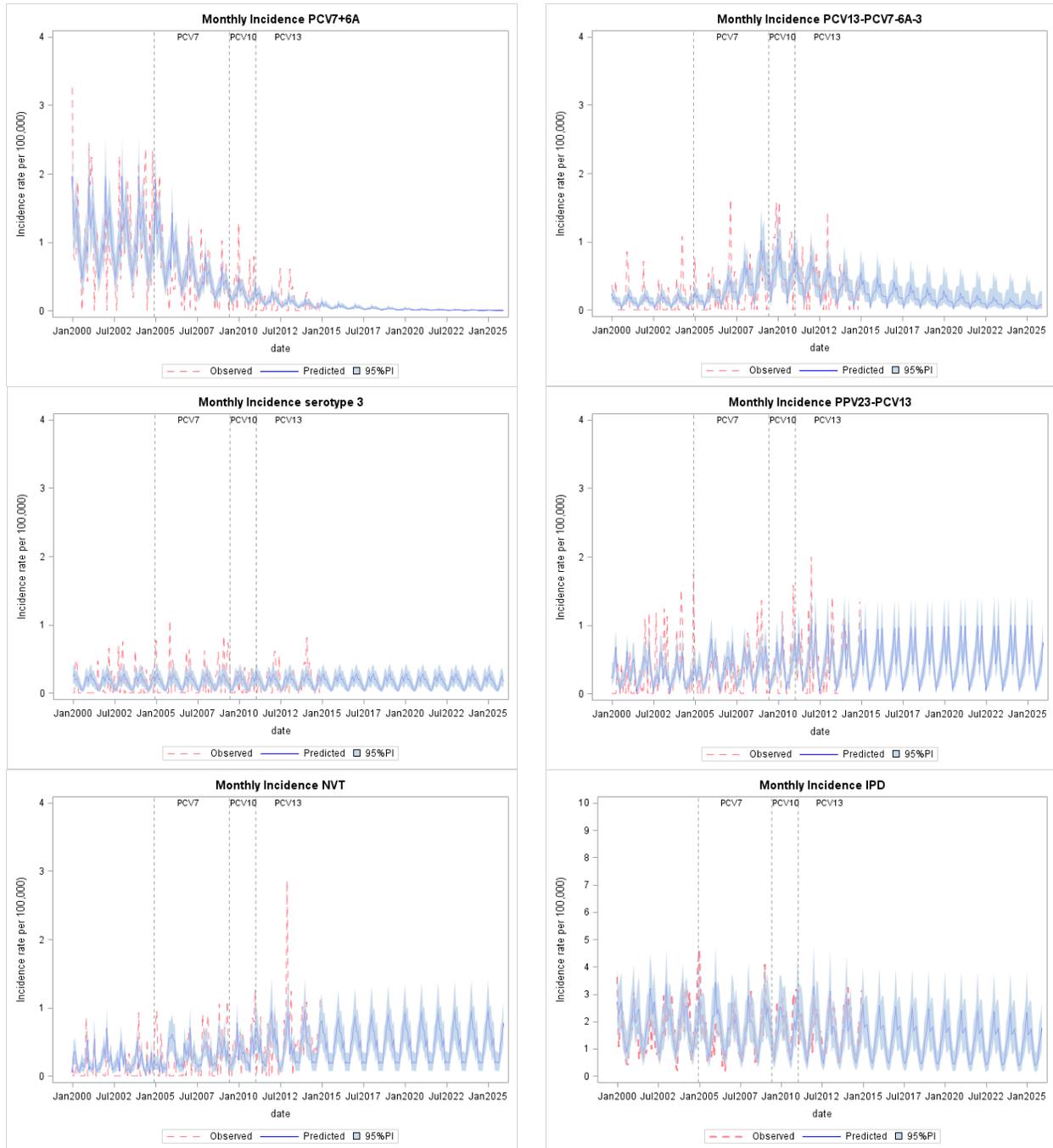| Year	IPD cases notified	IPD cases with serotype identified	% identification
2000	86	53	62%
2001	86	50	58%
2002	90	49	54%
2003	113	69	61%
2004	152	70	46%
2005	111	52	47%
2006	83	43	52%
2007	101	36	36%
2008	120	56	47%
2009	162	84	52%
2010	162	69	43%
2011	125	60	48%
2012	149	59	40%
2013	162	89	55%
2014	177	143	81%

Figure S1 : Observed (2000-2014) and predicted (2000-2024) monthly IPD rate by serotype category in adults 65-74 years of age in the province of Quebec, Canada, 2000-2014 (Base model).
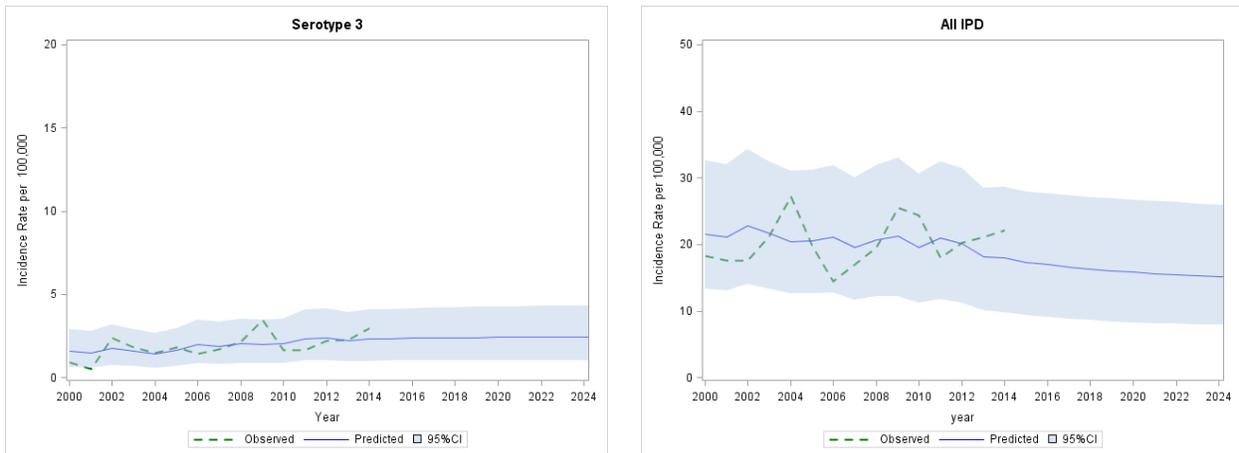
Figure S2 : Observed (2000-2014) and predicted (2000-2024) monthly IPD rate by serotype category in adults 65-74 years of age in the province of Quebec, Canada, 2000-2014 (Sensitivity analysis 1: serotype 3 considered as a NVT which is positively influenced by PCV7 and PCV13 use).
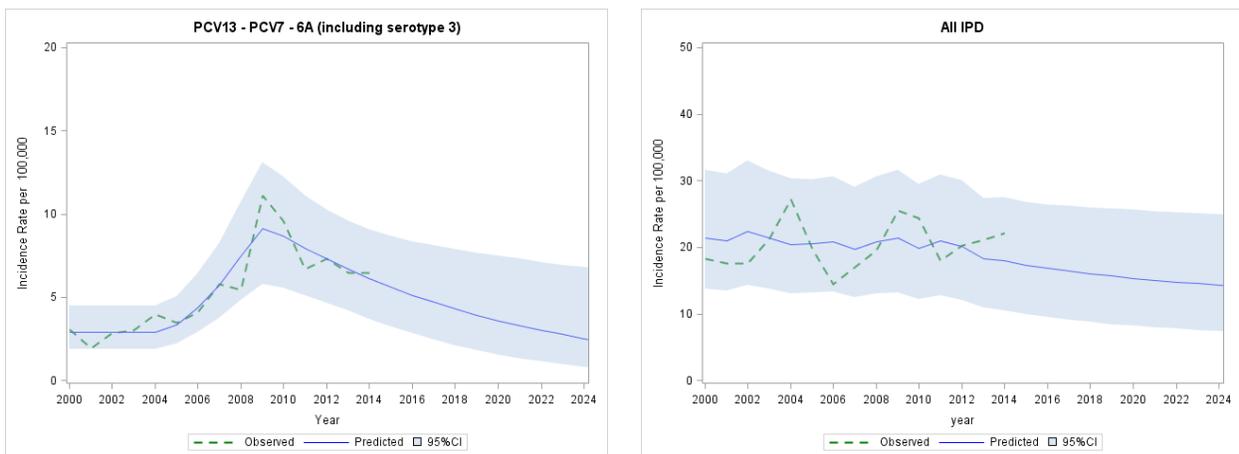

Figure S3 : Observed (2000-2014) and predicted (2000-2024) monthly IPD rate by serotype category in adults 65-74 years of age in the province of Quebec, Canada, 2000-2014 (Sensitivity analysis 2: serotype 3 considered as a PCV13-7 type which is negatively influenced by PCV13 use).
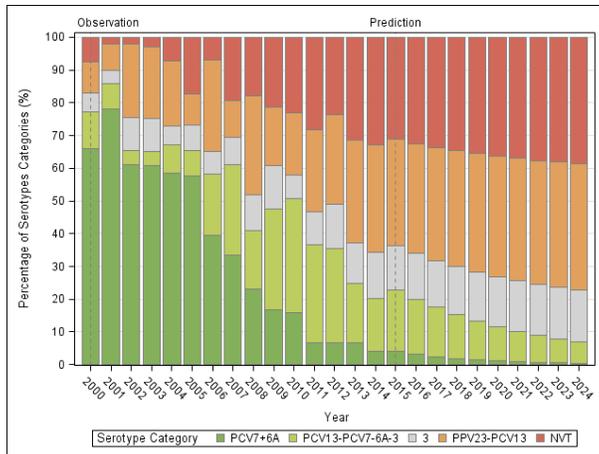
Figure S4 : Observed (2000-2014) and predicted (2015-2024) proportions of IPD cases by serotype category among adults 65 to 74 years of age, in Quebec (Sensitivity analysis 1: serotype 3 considered as a NVT which is positively influenced by PCV7 and PCV13 use).
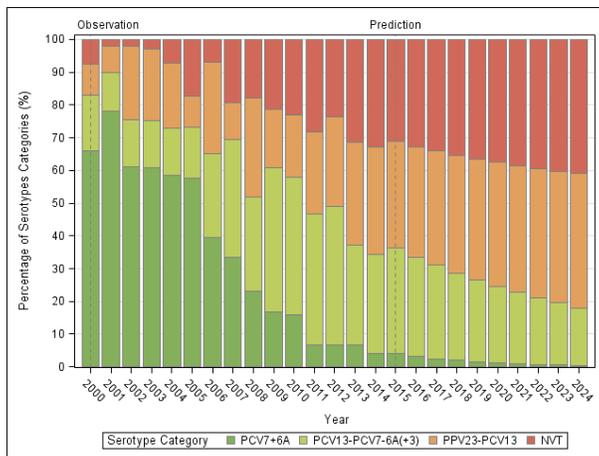

Figure S5: Observed (2000-2014) and predicted (2015-2024) proportions of IPD cases by serotype category among adults 65 to 74 years of age, in Quebec (Sensitivity analysis 2: serotype 3 considered as a PCV13-7 type which is negatively influenced by PCV13 use).