

August 20, 2025

Re: City of Novi – Medical and Prescription Drug IBNR Reserve Estimate – As of June 30, 2025

Dear City of Novi:

The following provides an uncertified estimate of Medical and Prescription Drug reserve for incurred but not reported claims (IBNR) for City of Novi's self-funded employee health plan.

Reserve Estimate

The reserve estimate as of June 30, 2025 is \$304,000 (\$379,000 including IBNR margin). The results are broken down by benefit in the table below. Details of the reserve development are provided in the attached exhibits.

	IBNR Estimate (without margin)	IBNR Estimate (with 25% IBNR margin)
HAP Medical	\$286,000	\$357,000
HAP Prescription Drug	\$18,000	\$22,000
Total	\$304,000	\$379,000

Methodology and Assumptions

The attached exhibits provide the following information for each incurred month: number of employees (exposure units), paid-to-date claims by incurred date, completion factors, incurred claims, outstanding claim reserve, and per exposure unit values.

Deriving the IBNR estimate uses a blending of methods. For more stable patterns of payments the development method is used. This method uses historical claim payment patterns to develop completion factors used to calculate monthly ultimate incurred estimates.

For the more recent months, where experience is more variable or insufficient to produce credible completion factors, a projection method is used. Thus, an estimate of ultimate incurred claims per employee per month (PEPM) is determined based on historical ultimate incurred claims.

Adjustments for claims trend, backlog and seasonality are also made where appropriate. Excess claims over stop loss insurance specific deductible limit have been removed from the medical lag triangles. The current specific deductible is \$150,000.

Run-out administrative fees are not included in this analysis.

Data

The HAP Medical analysis is based on historical data incurred and paid for the period from July 1, 2023 through June 30, 2025. Medical claims and enrollment data was provided by HAP.

The HAP Prescription Drug analysis is based on historical data incurred and paid for the period from July 1, 2023 through June 30, 2025. Prescription Drug claims and enrollment data was provided by HAP.

Reliance and Limitations

The purpose of this letter is to present the results of the reserve estimate and to document the methods and assumptions employed. This document is uncertified and its purpose is for internal budgetary use only and not intended for third parties. Any other use of this memorandum is inappropriate.

The IBNR calculation uses claims processed as of the valuation date and would not include analysis on items used (e.g., outstanding checks issued) in an Incurred but not Paid (IBNP) reserve calculation.

The estimate relies upon the accuracy of the claim and enrollment data provided by HAP. We have not independently performed a claim audit or cash flow testing. However, we have no reason to doubt the accuracy of the data at this time.

Please contact us if you have any questions.



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City of Novi IBNR Analysis

Based on HAP Medical Claims Paid Through June 30, 2025

Incurral Month	Exposure Unit	Paid to Date Claims by Incurral Date	Completion Factor	Incurred Claims	Outstanding Claim Reserve	Outstanding Claim Reserve	Monthly Paid Claims	Paid to Date Claims Per Unit	Incurred Claims Per Unit	Rolling Twelve Months Incurred Claims Per Unit	Rolling Six Months Incurred Claims Per Unit	Rolling Three Months Incurred Claims Per Unit
	(Employees)		6 of 8 Months Averaging		(Before Margin)	(Margin Applied)		PEPM	PEPM	PEPM	PEPM	PEPM
Jul-23	185	\$103,020	1.0000	\$103,020	\$0	\$0	\$35,262	\$557	\$557			
Aug-23	185	\$146,016	1.0000	\$146,016	\$0	\$0	\$115,145	\$789	\$789			
Sep-23	184	\$147,164	1.0000	\$147,164	\$0	\$0	\$135,513	\$800	\$800			\$715
Oct-23	180	\$203,285	1.0000	\$203,285	\$0	\$0	\$180,754	\$1,129	\$1,129			\$904
Nov-23	178	\$176,014	1.0000	\$176,014	\$0	\$0	\$128,531	\$989	\$989			\$971
Dec-23	180	\$211,542	1.0000	\$211,542	\$0	\$0	\$209,613	\$1,175	\$1,175		\$904	\$1,098
Jan-24	186	\$212,640	1.0000	\$212,640	\$0	\$0	\$235,888	\$1,143	\$1,143		\$1,003	\$1,103
Feb-24	186	\$128,389	1.0000	\$128,389	\$0	\$0	\$165,286	\$690	\$690		\$986	\$1,001
Mar-24	185	\$219,724	1.0000	\$219,724	\$0	\$0	\$155,145	\$1,188	\$1,188		\$1,052	\$1,007
Apr-24	186	\$241,848	1.0000	\$241,848	\$0	\$0	\$321,479	\$1,300	\$1,300		\$1,081	\$1,059
May-24	188	\$232,685	1.0000	\$232,685	\$0	\$0	\$141,854	\$1,238	\$1,238		\$1,122	\$1,242
Jun-24	189	\$185,772	1.0000	\$185,772	\$0	\$0	\$224,742	\$983	\$983	\$998	\$1,090	\$1,173
Jul-24	190	\$151,592	0.9982	\$151,870	\$278	\$348	\$173,833	\$798	\$799	\$1,018	\$1,032	\$1,006
Aug-24	190	\$122,479	0.9971	\$122,832	\$353	\$441	\$118,338	\$645	\$646	\$1,005	\$1,024	\$809
Sep-24	194	\$242,259	0.9963	\$243,161	\$902	\$1,128	\$156,198	\$1,249	\$1,253	\$1,044	\$1,036	\$902
Oct-24	195	\$243,252	0.9958	\$244,282	\$1,030	\$1,287	\$304,800	\$1,247	\$1,253	\$1,055	\$1,030	\$1,054
Nov-24	196	\$461,582	0.9929	\$464,865	\$3,283	\$4,103	\$329,095	\$2,355	\$2,372	\$1,174	\$1,224	\$1,628
Dec-24	199	\$309,283	0.9908	\$312,147	\$2,864	\$3,580	\$290,096	\$1,554	\$1,569	\$1,209	\$1,322	\$1,731
Jan-25	237	\$269,460	0.9874	\$272,895	\$3,435	\$4,293	\$209,111	\$1,137	\$1,151	\$1,208	\$1,371	\$1,661
Feb-25	237	\$284,635	0.9845	\$289,124	\$4,489	\$5,611	\$455,921	\$1,201	\$1,220	\$1,249	\$1,452	\$1,299
Mar-25	233	\$376,702	0.9797	\$384,513	\$7,811	\$9,764	\$218,822	\$1,617	\$1,650	\$1,293	\$1,517	\$1,339
Apr-25	231	\$278,378	0.9457	\$294,364	\$15,986	\$19,982	\$463,966	\$1,205	\$1,274	\$1,290	\$1,514	\$1,381
May-25	229	\$207,230	0.8904	\$232,749	\$25,519	\$31,899	\$258,158	\$905	\$1,016	\$1,269	\$1,307	\$1,315
Jun-25	227	\$82,727	0.2737	\$302,299	\$219,572	\$274,465	\$210,128	\$364	\$1,332	\$1,296	\$1,274	\$1,207

Jul-23 to Jun-25	4,770	\$5,237,678	94.83%	\$5,523,199	\$285,521	\$356,902	\$5,237,678	\$1,098	\$1,158			
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12 Months Incurred Claims PEPM - 6/1/2024 to 5/31/2025	\$1,269
Midpoint of Experience Period	12/1/2024
Midpoint of Rating Period	6/15/2025
Months to Trend	6.5
Assumed Annual Trend	9.27%
Underwriting Adjustment	1.00
PEPM Trended Claims for June 2025	\$1,332

Base Claim Reserve @ 6/30/2025	\$285,521
6-Month Average Monthly Paid Claims	\$302,684
Reserve Expressed as Months of Claims	0.94
Margin Used	25.00%

This analysis is uncertified and for illustrative purposes only, and is not a guarantee of future expenses, claims costs, managed care savings, etc. There are many variables that can affect future health care costs including utilization patterns, catastrophic claims, changes in plan design, healthcare trend increases, etc. This analysis does not amend, extend, or alter the coverage provided by the actual insurance policies and contracts. Please see your policy or contact us for specific information or further details in this regard.



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City of Novi IBNR Analysis

Based on HAP Prescription Drug Claims Paid Through June 30, 2025

Incurral Month	Exposure Unit	Paid to Date Claims by Incurral Date	Completion Factor	Incurred Claims	Outstanding Claim Reserve	Outstanding Claim Reserve	Monthly Paid Claims	Paid to Date Claims Per Unit	Incurred Claims Per Unit	Rolling Twelve Months Incurred Claims Per Unit	Rolling Six Months Incurred Claims Per Unit	Rolling Three Months Incurred Claims Per Unit
	(Employees)		6 of 8 Months Averaging		(Before Margin)	(Margin Applied)		PEPM	PEPM	PEPM	PEPM	PEPM
Jul-23	185	\$57,174	1.0000	\$57,174	\$0	\$0	\$25,830	\$309	\$309			
Aug-23	185	\$62,849	1.0000	\$62,849	\$0	\$0	\$85,337	\$340	\$340			
Sep-23	184	\$57,277	1.0000	\$57,277	\$0	\$0	\$43,268	\$311	\$311			\$320
Oct-23	180	\$81,555	1.0000	\$81,555	\$0	\$0	\$77,980	\$453	\$453			\$367
Nov-23	178	\$49,180	1.0000	\$49,180	\$0	\$0	\$68,855	\$276	\$276			\$347
Dec-23	180	\$54,222	1.0000	\$54,222	\$0	\$0	\$50,232	\$301	\$301		\$332	\$344
Jan-24	186	\$61,596	1.0000	\$61,596	\$0	\$0	\$70,637	\$331	\$331		\$335	\$303
Feb-24	186	\$32,199	1.0000	\$32,199	\$0	\$0	\$28,774	\$173	\$173		\$307	\$268
Mar-24	185	\$37,538	1.0000	\$37,538	\$0	\$0	\$40,047	\$203	\$203		\$289	\$236
Apr-24	186	\$73,472	1.0000	\$73,472	\$0	\$0	\$60,547	\$395	\$395		\$280	\$257
May-24	188	\$48,701	1.0000	\$48,701	\$0	\$0	\$54,237	\$259	\$259		\$277	\$286
Jun-24	189	\$60,482	1.0000	\$60,482	\$0	\$0	\$33,146	\$320	\$320	\$306	\$280	\$324
Jul-24	190	\$50,702	1.0000	\$50,702	\$0	\$0	\$74,974	\$267	\$267	\$302	\$270	\$282
Aug-24	190	\$41,895	1.0000	\$41,895	\$0	\$0	\$50,845	\$221	\$221	\$292	\$277	\$269
Sep-24	194	\$54,470	1.0000	\$54,470	\$0	\$0	\$51,158	\$281	\$281	\$289	\$290	\$256
Oct-24	195	\$57,167	1.0000	\$57,167	\$0	\$0	\$55,417	\$293	\$293	\$277	\$273	\$265
Nov-24	196	\$50,255	1.0000	\$50,255	\$0	\$0	\$49,278	\$256	\$256	\$275	\$273	\$277
Dec-24	199	\$51,289	1.0000	\$51,289	\$0	\$0	\$56,278	\$258	\$258	\$271	\$263	\$269
Jan-25	237	\$69,454	1.0000	\$69,454	\$0	\$0	\$66,387	\$293	\$293	\$269	\$268	\$271
Feb-25	237	\$41,237	1.0000	\$41,237	\$0	\$0	\$46,818	\$174	\$174	\$267	\$257	\$241
Mar-25	233	\$85,988	1.0000	\$85,988	\$0	\$0	\$79,394	\$369	\$369	\$281	\$274	\$278
Apr-25	231	\$75,915	1.0000	\$75,915	\$0	\$0	\$71,767	\$329	\$329	\$277	\$281	\$290
May-25	229	\$100,751	1.0000	\$100,751	\$0	\$0	\$87,100	\$440	\$440	\$293	\$311	\$379
Jun-25	227	\$42,498	0.7067	\$60,139	\$17,641	\$22,051	\$69,560	\$187	\$265	\$289	\$311	\$345

Jul-23 to Jun-25	4,770	\$1,397,866	98.75%	\$1,415,507	\$17,641	\$22,051	\$1,397,866	\$293	\$297			
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12 Months Incurred Claims PEPM - 6/1/2024 to 5/31/2025	\$293
Midpoint of Experience Period	12/1/2024
Midpoint of Rating Period	6/15/2025
Months to Trend	6.5
Assumed Annual Trend	11.74%
Underwriting Adjustment	0.85
PEPM Trended Claims for June 2025	\$265

Base Claim Reserve @ 6/30/2025	\$17,641
6-Month Average Monthly Paid Claims	\$70,171
Reserve Expressed as Months of Claims	0.25
Margin Used	25.00%

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