## **Population Calculations**

## **Rationale for Financial Updates Associated for Population Changes**

Increases in spend across each HSCP relating to population growth and demographic changes was calculated using the following steps:

- 1. Population projection figures were obtained from National Records of Scotland (NRS). These projections were based on 2018 data.
- 2. Costs for financial year 2022/2023, split by 4-year age bands (0-4, 5-9, 10-14, 15, 19......85-90, 90+), were obtained from Prescribing Information System (PIS) for each HSCP.
- Using the cost per age band, and 2022 population numbers per age band (obtained from 2022 census data <u>https://www.scotlandscensus.gov.uk/documents/scotland-s-census-2022-rounded-population-estimates-data/</u>) cost per age
   band was calculated for each age band in each HSCP.
- 4. The calculated cost per patient, per age band was then used alongside predicted population numbers to calculate the potential financial impact of changes in both absolute population numbers and demographics.

HSCP	AGE BAND	GIC YR 2022.3	£ per Patient	2023	2024	2025	2026	2027	2028	2029	2030
Moray	Age 0-4	282,207	67.19	276,429	276,160	274,816	273,808	272,330	271,053	269,575	267,895
Moray	Age 5-9	342,779	69.95	320,113	311,299	304,863	296,189	292,901	291,502	291,222	289,753
Moray	Age 10-14	413,845	76.64	405,875	395,299	384,953	375,297	368,399	355,064	345,408	338,357
Moray	Age 15-19	337,207	67.44	359,665	365,330	369,444	371,872	363,374	353,730	344,693	336,263
Moray	Age 20-24	300,900	68.39	320,117	311,637	307,875	307,944	312,799	321,621	326,340	329,691
Moray	Age 25-29	405,693	82.79	453,466	448,664	439,805	426,226	415,463	409,585	399,401	394,930
Moray	Age 30-34	517,680	94.12	521,539	528,033	532,269	540,740	532,363	524,268	518,433	508,267
Moray	Age 35-39	642,548	118.99	684,790	687,527	677,770	669,916	674,557	678,127	685,266	690,145
Moray	Age 40-44	737,413	139.13	801,971	803,223	812,545	827,850	829,241	835,502	838,842	828,267
Moray	Age 45-49	948,874	166.47	928,898	921,240	927,400	924,070	954,534	977,840	979,837	990,658
Moray	Age 50-54	1,428,717	201.23	1,375,392	1,324,481	1,275,784	1,211,794	1,146,596	1,097,496	1,088,642	1,097,295
Moray	Age 55-59	1,643,870	222.14	1,616,768	1,613,436	1,591,888	1,581,670	1,554,790	1,511,250	1,455,714	1,401,733
Moray	Age 60-64	1,779,014	261.62	1,822,182	1,864,041	1,891,249	1,916,103	1,923,952	1,913,225	1,909,563	1,885,755
Moray	Age 65-69	1,854,579	309.10	1,921,963	1,951,018	2,005,728	2,030,146	2,078,674	2,123,184	2,172,949	2,206,950
Moray	Age 70-74	2,059,021	374.37	2,066,134	2,077,739	2,069,129	2,111,806	2,169,085	2,220,373	2,257,810	2,322,950
Moray	Age 75-79	2,034,841	462.46	2,201,790	2,236,937	2,300,295	2,349,779	2,266,997	2,257,748	2,274,397	2,268,847
Moray	Age 80-84	1,455,573	501.92	1,545,417	1,606,149	1,655,338	1,705,028	1,859,118	1,940,429	1,977,069	2,033,285
Moray	Age 85-89	951,098	559.47	1,066,349	1,089,287	1,091,525	1,118,939	1,143,555	1,187,753	1,239,225	1,281,744
Moray	Age 90+	471,878	524.31	561,534	581,982	609,771	630,219	652,764	676,882	700,476	724,070
				19,250,390	19,393,482	19,522,445	19,669,395	19,811,493	19,946,634	20,074,860	20,196,854

## Table 1 – Moray Estimated Costs based on Population Predictions using Cost per Patient per Age Band