The profile is $\boldsymbol{v} = (v_1, \ldots, v_n)$, with n odd.

The probability of a correct decision is:

$$
\begin{aligned}
\Pr\big[F_{\mathit{maj}}(\boldsymbol{v}) = 1\big] &= \Pr\big[\text{a majority of voters in } \boldsymbol{v} \text{ are correct}\big] \\
&= \Pr\big[\text{at least three voters in } \boldsymbol{v} \text{ are correct}\big] \\
&= \Pr\big[\boldsymbol{v} \text{ is one of } (1,1,1,0,0), \ldots, (1,1,1,1,0), \ldots, \text{ or } (1,1,1,1,1)\big] \\
&= 10 \cdot p^3(1-p)^2 + 5 \cdot p^4(1-p) + p^5 \\
&= \binom{5}{3} \cdot p^3(1-p)^2 + 5 \cdot p^4(1-p) + p^5
\end{aligned}
$$

Again, as p grows, so does group accuracy.

And a group of five voters is more accurate than a group of three!