**Options for Forecasting Chronic Vacancies**

**Option 1:** Apply the number of chronic vacancies as on the first date of the year as demand in each year for the next 10 years.

* Rationale: This approach can be viewed as a worst-case scenario, where the SHA is unable to improve its ability to fill vacancies over the forecast period. It could be appropriate as a cautionary model but may not reflect realistic expectations given the recruitment and incentives strategies planned.
* Pros:
  + Simplicity: Straightforward to calculate and implement.
  + Conservatism: Preserves the current chronic vacancies, considering it as the status quo for the entire forecast period.
* Cons:
  + Potential Overestimation: Can result in an overestimation of future demand, especially if initiatives such as incentives programs and recruitment strategies are effective.

**Option 2:** Use the average number of chronic vacancies over the past 5 years as the demand for each year for the next 10 years.

* Rationale: This approach could be useful if historical trends are expected to continue into the future. However, it might not be as useful if significant changes are expected due to new strategies or external factors.
* Pros:
  + Considers Historical Trends: This method takes into account past data and trends, which might be a more accurate representation of the SHA's chronic vacancies.
  + Smoother Projections: Averages tend to reduce the impact of outliers and can give a smoother and possibly more realistic projection.
* Cons:
  + May Overestimate or Underestimate Future Demand: If the number of vacancies has been decreasing due to successful strategies, this method might overestimate future demand. Conversely, if vacancies have been increasing, it could underestimate future demand.
  + Doesn't Account for Future Initiatives: This approach doesn't factor in the impact of planned recruitment strategies and incentives on future vacancies.

**Option 3:** Distribute a certain proportion of chronic vacancies across the next 10 years.

* Rationale: This method might be appropriate if the organization expects it will take several years to fill current vacancies. However, the choice of distribution proportions needs to be justified, perhaps based on historical data or the expected impact of recruitment and incentive strategies.
* Pros:
  + Spreads Out Demand: This can give a more realistic picture of demand over time, particularly if there are constraints on the SHA's ability to fill vacancies within.
  + Flexible Approach: The proportions can be adjusted based on the expected effectiveness of recruitment and incentive strategies.
* Cons:
  + Requires Justification for Distribution Ratio: The choice of distribution proportions might be arbitrary and could be questioned unless it's based on historical data or informed predictions.
  + Potential Misrepresentation: If the recruitment strategies and incentives are successful, this method might overestimate future demand.

**Option 4:** Move the shortage between supply and demand to the next year as one of the components of the demand.

* Rationale: This approach comes from an acknowledgment that unfilled vacancies represent a sort of "debt" that carries forward. In reality, unfilled positions from one year do not disappear but continue to represent a staffing need until they are filled. If these positions aren't filled within the year they become available, it makes sense to carry them over to the next year as part of the continuing demand.
* Pros:
  + Dynamic Approach: This method dynamically adjusts demand based on the gap between supply and demand in the previous year, which could provide a more realistic forecast.
  + Accounts for Recruitment Efforts: Reflects the reality that not all vacancies can be filled immediately and that there could still be chronic vacancies in the following years.
* Cons:
  + Potential Overestimation: If the recruitment strategies and incentives are highly successful, this method could overestimate demand in later years.
  + Dependent on Prior Year: The model's dependence on the prior year's gap.