Areas to check before launching healthcare applications based on Infermedica API

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Security & legal requirements

☐ **App ID and App key are hidden from the end-user.**

☐ **Legal disclaimers and Terms of Service are confirmed with legal experts and available for end-users.**

☐ **Communication with the end-user is not misleading.**
Example: Infermedica API enables “pre-diagnosis”, any keywords or phrases suggesting “medical diagnosis” should be avoided.

☐ **Infermedica credit is added and linked.**
Example: “Powered by Infermedica”.

Interview flow

☐ **The sex and age attributes are two required elements of every request to /diagnosis.**
In the background, sex and age are used to automatically instantiate corresponding risk factors that may alter the base prevalence of medical conditions in Infermedica's model. Make sure to use the age attribute in ‘/parse’, ‘/suggest’ endpoints and GET requests: ‘/symptoms’, ‘/conditions’, ‘/risk_factors’, and use the sex parameter in

‘/suggest’ endpoint. Details:
developer.infermedica.com/docs/v3/diagnosis#sex-and-age

□ **The scope of age is narrowed to the actual user’s group.**
Even though Infermedica API allows any scope or range of ages to be set up, it is recommended to configure the age range for adults between 12 and 120.

□ **Common risk factors are added to the interview flow.**
This includes chronic conditions, lifestyle habits, events, and recent travels. Details:
developer.infermedica.com/docs/v3/diagnosis#common-risk-factors

□ **Common risk factors are related to patient demographics.**
This is an additional mode in the ‘/suggest’ endpoint with related risk factors to the given patient’s age and sex. Details:
developer.infermedica.com/docs/v3/suggest-related-concepts#relevant-risk-factors

□ **Initial symptoms are marked as `"source": "initial"`.**
It is highly recommended to use this attribute for evidences reported before interview start. We recommend to have at least two initial symptoms. Details:
developer.infermedica.com/docs/v3/diagnosis#gathering-initial-evidence

□ **The ‘related symptoms’ feature is used.**
This feature can be added with the ‘/suggest’ endpoint (related symptoms).
Adding it will likely shorten the interview and improve the accuracy of the results. The application should make use of ‘/suggest’ after collecting the initial symptoms and before going into the ‘/diagnosis’ flow. It is recommended to show this question only when there are more than two possible symptoms. Details:
developer.infermedica.com/docs/v3/suggest-related-concepts

□ **Related symptoms are marked with "source": "suggest"**
Indicating the evidence source allows for the exact stage of the interview in which given evidence was sent to be marked accordingly. Thanks to that, the engine provides a more relevant interview and, in consequence, a more accurate final diagnosis and triage. Details:
developer.infermedica.com/docs/v3/diagnosis#indicating-evidence-source

□ **The output diagnosis displays common names.**
If the end-user is non-professional, it is recommended to display each condition’s ‘common_name’ instead of a ‘name’.

□ **Interview-ID.**
It is recommended to include a custom HTTP header Interview-ID, which will help us analyze particular cases if you have some questions or concerns regarding an interview. Additionally, it helps to improve Infermedica’s statistical models. Details:
developer.infermedica.com/docs/v3/diagnosis#helping-us-improve-the-engine

Additional features

- □ **Data from the '/rationale' endpoint is used.**
  The rationale feature gives more transparency and insight into the internal logic of the question selection process. Such information can be displayed to the end-user during the diagnostic interview to build a better understanding and confidence. Details: developer.infermedica.com/docs/v3/rationale

- □ **Data from the '/explain' endpoint is used.**
  This endpoint allows you to display how reported observations are linked with the final diagnoses. For example, you can use this endpoint in the results page to display "reasons for" and "reasons against" particular conditions. This feature provides insights into why certain diagnoses were considered by the reasoning engine and it increases the credibility of the results presented to the end-user. Details: developer.infermedica.com/docs/v3/explain

- □ **Data from the '/red_flags' endpoint is used.**
  For Call Center Triage or similar applications, it is recommended to use the '/red_flag' endpoint and display a list of observations that may be related to conditions that are potentially life-threatening. Please note that '/red_flags' endpoint has been deprecated and should be replaced with '/suggest' and "suggest_method":"red_flags" which provides the same functionality. Details: developer.infermedica.com/docs/red-flags

- □ **Data from the '/enable_explanations' endpoint is used.**
  The purpose of this option is to provide additional descriptions of selected questions to make them easier to understand for users. Details: developer.infermedica.com/docs/v3/diagnosis#enable_explanations

- □ **Data from the '/enable_third_person_questions' endpoint is used**.
  This option allows you to create an interview scenario in which users can answer questions on behalf of someone else, e.g. "Does she have a headache?". Details: developer.infermedica.com/docs/v3/diagnosis#enable_third_person_questions

- □ **Data from the '/recommend_specialist' endpoint is used.**
  This endpoint extends the '/triage' recommendation by providing the most appropriate specialist and communication channel as a part of next step advice. Details: developer.infermedica.com/docs/v3/specialist-recommender

User Experience

- □ **User needs are answered.**
  Think about the users. What are their goals? How can the application help them? Infermedica experience shows that apps that solve a real problem are performing best.

- □ **Navigation is seamless.**
  Make sure that the navigation in the application is intuitive and consistent. If the application consists of more than one screen, it's good practice to design a progress bar.

- □ **Application styles are consistent.**
  It is recommended to create a style guide, or at least define basic styles for the application. The typography, colors, and components (buttons, inputs, etc.) should be used consistently. Every element that serves the same purpose should look the same. If the application is embedded in a larger system, adjust the styles of both parts.

- □ **Icons and visual language are used.**
  It is recommended to add custom icons and illustrations to the application. People like to use products that are usable and look great.

- □ **Additional content is added.**
  The application is enriched with additional content, such as a welcome message, triage level descriptions, next steps to take, etc.

- □ **Accessibility is good.**
  The application should be accessible to a wide range of people with disabilities. Don't know where to start? Follow the WCAG 2.1 recommendations.

- □ **Mobile users have access.**
  Make sure that the application is responsive and works on mobile devices, even those with a poor internet connection.

- □ **Copywriting is optimized.**
  Most of the time, the application will communicate with users through text. How can you ensure this is done right? A good rule of thumb is to be concise and efficient, yet friendly and polite.

- □ **Analytics tools are implemented.**
  Use analytics tools (e.g. Google Analytics) to measure the performance of the application. If you're building a symptom checker for patients, we recommend

tracking at least one indicator – the conversion rate. If you notice a drop in conversion on a particular screen, you can improve that screen.

More detailed information is available in the Developers Portal at developer.infermedica.com.

For individual inquiries, please contact the Infermedica Customer Success team at support@infermedica.com.