

Infectious Epidemiology as a Dynamic Changing Landscape

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Supplementary Materials

Prototype

Current prototype has been built with InVision and is available at:

<https://dynamicepidemiology.invisionapp.com/public/share/E4WTP2TWY>

The prototype visually describes the presentation of potential or known zoonotic threats in a user-selected geographic region.

First Round Semi-Structured Interview/Design Critique Questions

The following interview question format was used for the structured interviews, focused on 3 need criterion for the app to address: Clinical, Physical, and Social.

Clinical Needs:

- 1)
 - a) What are your first impressions about the idea and interface?
 - b) Have you ever encountered this as a problem and if you have what have you used in the past?
- 2)
 - a) Would you ever consider using this as a resource?
 - b) If you would, in what clinical scenarios would you envision yourself using them in?
 - c) At what point in the patient visit would you use it in (before encounter, during encounter, after the encounter, researching the patient case in a time not related to seeing patient such as at home after work, not related to patient encounters whatsoever – studying and updating knowledge)?

Current Resources and Application-Use Strategies:

- 3)
 - a) What other apps (EMR, UptoDate) do you use regularly?
 - b) How would you use this alongside the current electronic applications you use in patient encounters? (After the EMR, before the EMR, after UptoDate, etc)
- 4) “What are factors that make you more or less likely to use a computer-based application in your practice?”
OR “What are your priorities in applications you use in your practice?” *Examples: Efficiency of looking information, breadth of information available, accessibility, reliability*

Physical Needs:

- 5) On what platform would you use this application primarily (Smartphone, Tablet, Laptop, Desktop, Work computer)?
- 6) Will the devices you be using be connected to the internet consistently? Or will connectivity be an issue?
- 7)
 - a) What are the physical surroundings that you will be using it in (sitting in an office, standing in a hall, walking towards a patient, sitting on a hospital ward)?
 - b) How much space will there be (small clinic desk, home desk, mobile device, part of a desk on a ward station)?
 - c) Will you be standing or sitting?
 - d) What display size will you have and what shape will it be?

Social Needs:

- 8) Will this affect how you interact with other colleagues (ie when asking for a consultation? In responding to a consultation?)

Second Round Semi-Structured Interview/Design Critique Questions

- 1) Asked to comment on general idea and clinical challenge
 - 2) Asked to comment on user interface and the presented prototype
 - 3) Asked if they would use this application
 - 4) Asked what resources they currently use
- (Solicited further comments in an open ended fashion)

Clinician Participation

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