

## OP22.4

### **Self-triage by a smartphone application for consulting the out-of-hours primary care clinic - practical, safe and efficient?**

*Alike van der Velden(1), N Verzantvoort(1), T Teunis(2), T Verheij(1)*

*(1) Julius Center for Health Sciences and Primary Care, UMC Utrecht, The Netherlands*

*(2) Van Campen Consulting, The Netherlands*

*Corresponding author: Dr Alike Van Der Velden, University Medical Center Utrecht, Julius Center for Health Sciences and Primary Care, Utrecht, The Netherlands. E-mail: a.w.vandervelden@umcutrecht.nl*

**Background and Aim:** Patient consultation at out-of-hours primary care clinics has been increasing. Unnecessary consulting exerts negative pressure on the health care system. Triage plays an important role in patient selection, and by providing reassurance and information. We aim to investigate whether a smartphone Application could be a practical, safe and efficient tool to guide patient consultation at out-of-hours clinics.

**Methods:** The “Should I see a doctor?” App -a self-triage tool developed in 2012 by the Apeldoorn out-of-hours GP clinic and Van Campen Consulting in collaboration with the Dutch College of GPs- is CE approved. We used a build-in questionnaire to ask users about the App’s clarity, their satisfaction and whether they intend to follow the App’s advice (n=4456). A sub-group of users was phoned by a triage nurse to evaluate whether the App’s advice corresponded to the outcome of the triage call (n=126). Suggestions of phoned participants were recorded.

**Results:** The App was used by patients from all ages, also by parents for their children, and mostly for abdominal pain, skin disorders and cough. 58% of users received the advice to contact the clinic, 34% a self-care advice and 8% to wait-and-see; 65% of users intended to follow the App’s advice. 87% qualified the App as ‘neutral’ to ‘very clear’ and 89% were ‘neutral’ to ‘very satisfied’. For 81% of participants the App’s advice corresponded to the triage call outcome, with sensitivity, specificity, positive- and negative predictive values of 84%, 74%, 88% and 67%, respectively.

**Conclusions:** The App “Should I see a doctor?” could be a valuable tool to aid patients in their decision to contact an out-of-hours clinic. Efficiency and safety of the App could be improved by enabling patients to enter multiple symptoms and to provide more (background) information to patients receiving a wait-and-see advice.