# Scientific Hangman

## Gamifying the Understanding of Cervical Cancer Screening Reminder Letters

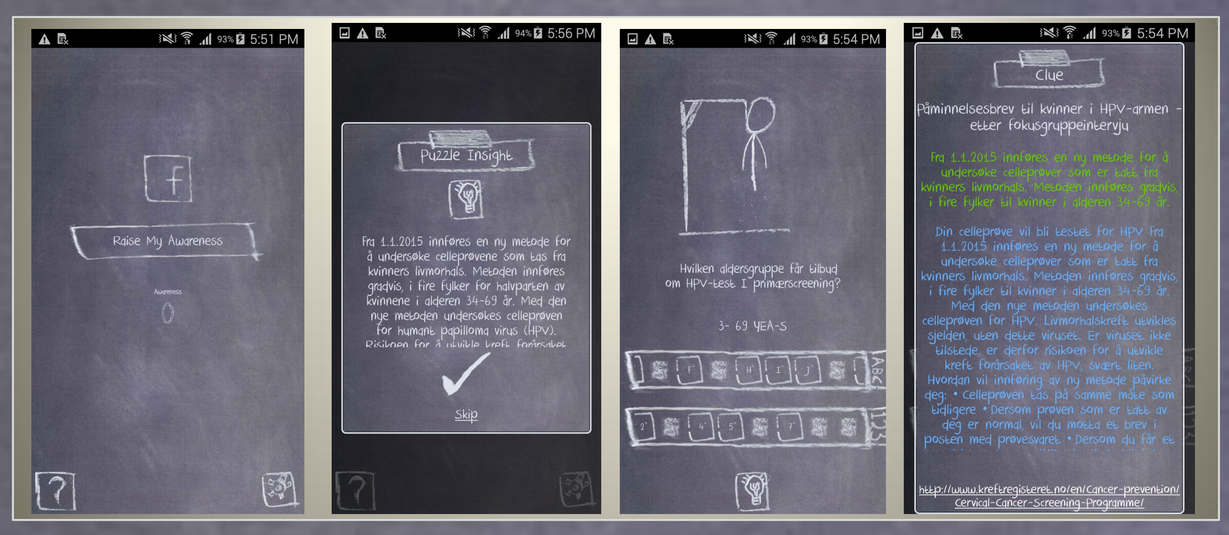
Sagar Sen, Waqas Moazzam, Trude Andreassen, Mari Nygård- Email: sagar@simula.no
Simula Research Laboratory | University of Oslo | Cancer Registry of Norway

## Introduction

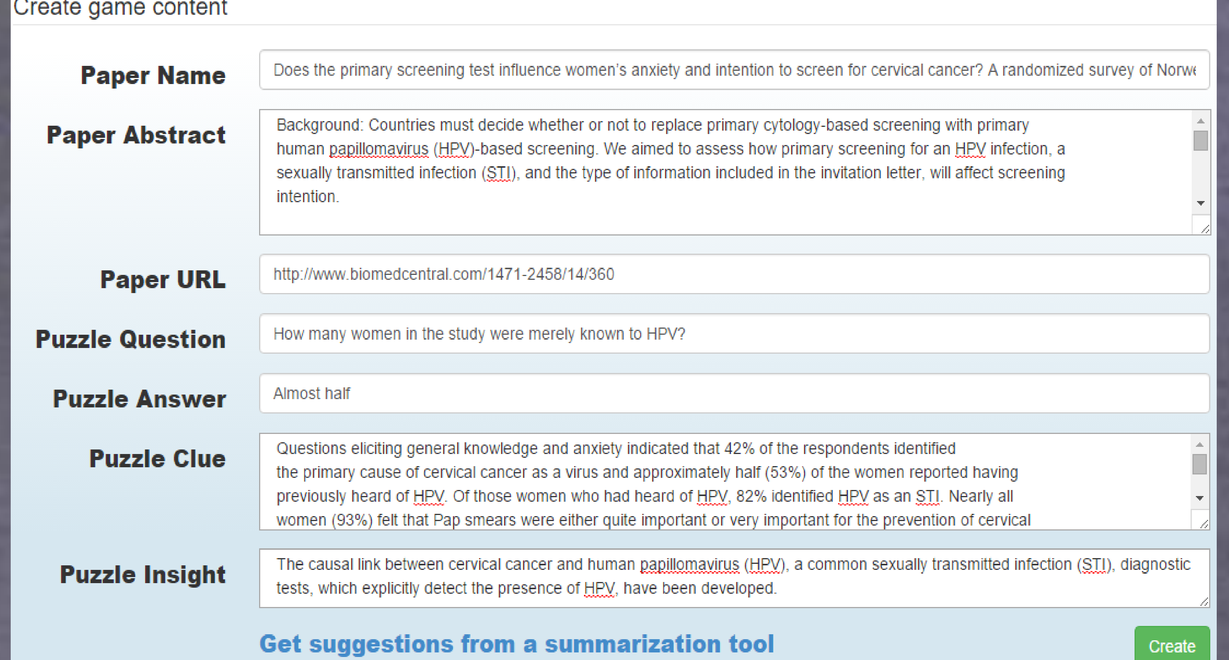
- Reminder letters improved screening coverage from 67% to 75% in Norway (2011). Expected optimal coverage was 80%
- How can we make reading scientific evidence in health more engaging?

## Methods

- We present "Scientific Hangman", a mobile app, to gamify health communication. It challenges players to solve puzzles requiring understanding evidence provided as clues.




- We created a web service for professionals to create evidence-based puzzles and clues




## Focus Group Interview

- We created puzzles and clues from content in screening reminder letters
- 10 women of age 34 to 69 on 13th Oct 2014 played 'Scientific Hangman' and helped us perform an interview-based qualitative evaluation.

## Results

- Puzzles narrow player focus to one information element at a time.
- Challenging with puzzles compelled players to understand information in reminder letters
- Participants agreed that gamification can increase knowledge about HPV and Cervical Cancer

## Suggested Limitations

- Reluctance to download game on phones. Better if on Facebook (share and compete)
- Participants thought that game is more suitable for younger girls

## Conclusion

- Health communication can be improved by challenging people in a game context
- Well-known games such as Hangman, Scrabble and Typing master are easy to learn and useful platforms to communicate evidence in health