### Background
- The eSTI (electronic self-testing Instrument for STIs) Consortium is a cross-disciplinary collaboration, partnering with industry, to develop rapid pathogen detection technologies integrated with mobile technology.
- A point-of-care self-testing device would communicate with a mobile phone application that will enable a patient to self-test, diagnose, self-manage and initiate partner notification.
- A review of existing sexual health related mobile phone applications will inform the design of the mobile interface for the eSTI mobile app.

### Methods
Major online app stores were searched for sexual health-related apps using the terms for ‘Sexual Health’, ‘STIs’, ‘Chlamydia’, ‘STDs’ and ‘STI testing’. Although the focus of this study was on *C. trachomatis*, we have also included apps that were specifically focusing on other STIs.

We exclude apps that:
- Did not have STIs-related content
- Were not available in English
- Were targeted specifically for healthcare professionals
- Did not work in UK app stores
- Were exclusively designed for the iPad.

A coding frame was developed to list and structure information about each eligible app. This was adapted from a similar health study [1] and draws on principles from a scoping review [2] and other frameworks used for studying health applications [3],[4]

### Results
The search resulted in 1504 matches, of which 40 met all the selection criteria (n = 40).

#### App Platform
- Apps were distributed amongst a number of different stores.
- The majority of the eligible apps were found in Android (47%), followed by iPhone (33%).
- Apps were distributed across different categories (e.g. ‘health and lifestyle’, ‘fitness’, ‘health and education’, ‘medical’).
- 11 of the eligible apps (28%) were available on more than one platform.

#### App Downloads and Ratings
- Sexual health apps were infrequently downloaded (average 100-500 downloads).
- Sexual health apps were not highly rated (average rating of 3.5/5 stars).
- 19 of the eligible apps (47%) received no ratings.
- There was no relationship between download frequency and number of ratings; the most downloaded app (10k-50k downloads) received only 20 reviews.

#### App Content Features
- The most prevalent features of eligible apps were: sexual health knowledge and awareness information, STI testing information and risk calculator features.
- 11 of the eligible apps (28%) featured an interactive component (such as risk assessment activity or contraceptive pill tracker/reminder).
- 8 of the eligible apps (20%) included information for a range of sexual orientations.
- There is no app that supports the user throughout the entire pathway of STI awareness, testing, diagnosis, treatment, partner notification and health promotion.
- Only one eligible app offers a feature for exchanging STI status information in the UK.

### Conclusions
- There is a pressing need for sexual health apps which are validated and certified based on reliable content and meet high operability, privacy and security standards to appropriately exploit the potential health care benefits of mobile sexual health.
- Ongoing work as part of eSTI will focus on the assessment of the clinical content of sexual health apps.

### References & Acknowledgements