Title: Pathways for digital healthcare: Is an automated online clinical care pathway for people with genital chlamydia (Chlamydia-OCCP) safe and feasible? Proof of concept study

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Background
UK health strategy supports self- and internet-based care. Within the eSTI2 consortium (www esti2 org uk) we developed UK’s first automated Online Clinical Care Pathway for people with genital chlamydia (Chlamydia-OCCP) within an eSexual Health Clinic (eSHC). Chlamydia-OCCP includes: STI results service; clinical consultation; electronic prescription via community pharmacy; partner notification (PN); with integral telephone helpline support. It complies with regulatory, professional, prescribing and surveillance requirements. We report on a study to assess Chlamydia-OCCP feasibility and safety as an alternative to routine care.

Methods:
Non-randomised, exploratory study to evaluate Chlamydia-OCCP: 21.07.14 -13.03.15
Participants: 1) chlamydia-positive untreated Genitourinary Medicine (GUM) clinic attenders; 2) people testing chlamydia-positive and negative through six National Chlamydia Screening Programme (NCSP) areas’ online postal self-sampling service
Exclusions: under 16yrs; co-existing STIs, extra-genital chlamydia

Intervention: eligible people were sent an SMS message with a link to access results from eSHC via a password protected web-app, optimised for smartphone use. Having consented online chlamydia-positive users followed the automated Chlamydia-OCCP. Patients who declined received routine care.
**Evaluation:** treatment rate; time to treatment; PN outcomes; engagement with clinical helpline and health promotion; safety; acceptability, costs.

**Results:**

**GUM:** of 197 eligible patients, 161 accessed results online, 116 consented, 112/116 (97%) treated (74 exclusively via *Chlamydia-OCCP*, median 1 day). **NCSP:** of 146 eligible patients, 134 accessed results online, 105 consented, 93/105 (89%) treated (60 exclusively via *Chlamydia-OCCP*, median 1 day).

28/482 sexual partners were managed solely online. 1776/1936, (89%) NCSP chlamydia-negative people accessed results online, of whom 389 accessed online health promotion. All patients who didn’t access results online were managed routinely. Patients moved effectively between online, telephone and clinic-based care.

**Discussion**

*Chlamydia-OCCP* is a feasible and safe alternative to routine care for management of people with genital chlamydia. Preliminary evidence indicates comparable treatment outcomes. If linked to home testing, *Chlamydia-OCCP* offers potential for wholly remote care.