

Development of an Automated Online Clinical Consultation with Electronic Antibiotic Prescribing for the Remote Management of Genital *Chlamydia trachomatis* Infection within the eSTI² Consortium

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Background

Developments within sexual health, including the advent of self-sampling and self-testing into routine clinical practice, along with advances in information and communication technology, have unlocked the potential for online diagnostic and clinical management pathways. However, no UK specific regulatory guidelines exist for such online clinical care pathways.

Objective

To develop an automated online clinical consultation, meeting existing regulatory and legal requirements, which takes people from diagnosis of chlamydia, through clinical assessment, leading to electronic prescription and partner management.

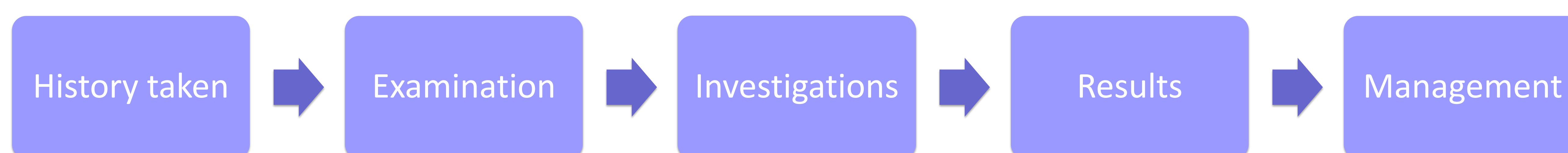
Methods

1. Review of legislation, regulations, ethical and perceptual barriers
2. Development of a framework to subdivide the pathway into functional units against which legal & regulatory findings are mapped
3. Development of a prototype care pathway
4. Refinement through an iterative process of expert and user review and comprehension testing.

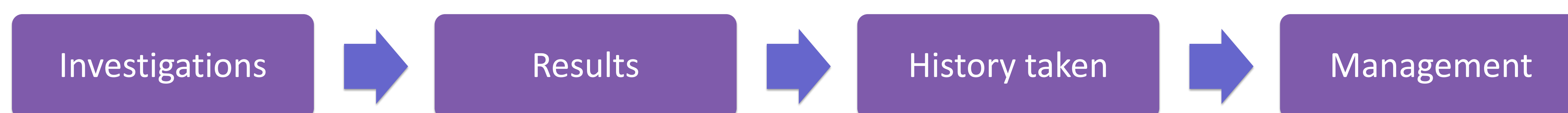
Results

The majority of existing regulations fail to meet the needs of online medical care. We referred to guidelines for traditional care and adapted them as appropriate. The need for a different sequence of the key elements was fundamental to the development of the online pathway:

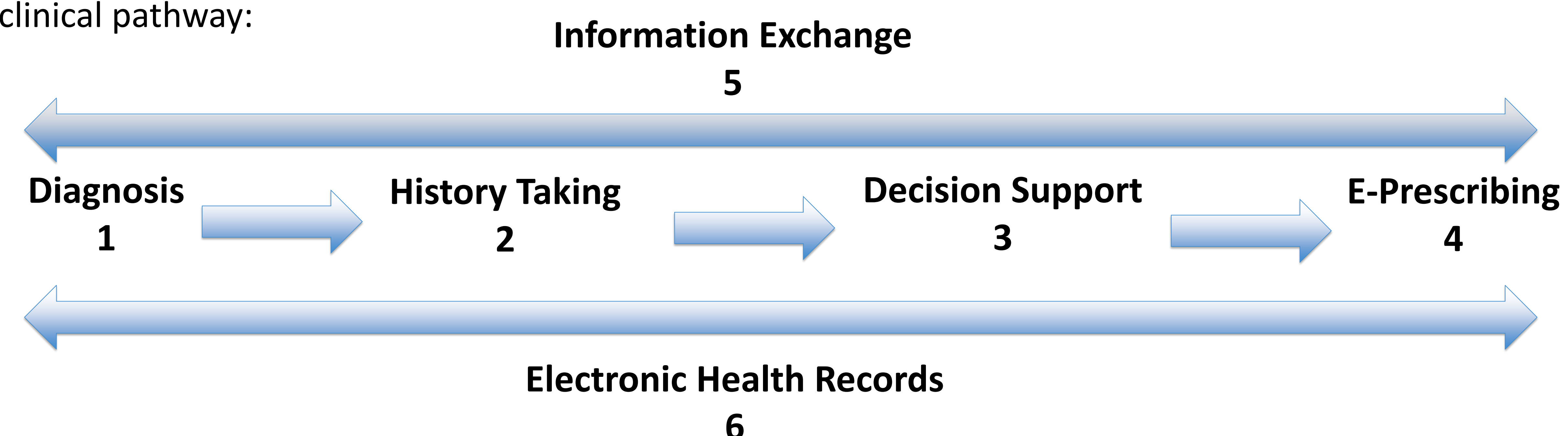
Traditional pathway



Online pathway



Six functional units were identified within a linear framework supporting all elements of the clinical pathway:



Within this framework, the automated online clinical consultation includes the following elements and meets current regulatory and legal guidance. A linked telephone helpline supports people with complex medical and psychological needs.



Conclusions

It is possible to develop an online clinical consultation, using robust methods of review, pathway design and testing. In the UK existing legal & regulatory guidance lags behind advances in diagnostic technologies, presenting challenges to adoption of innovation particularly in relation to online management and remote prescribing for STIs. Our pathway will be tested as part of an exploratory pilot study in 2014. The methodology described has potential for application to different suited to remote care.

About eSTI²

eSTI² (Electronic Self-Testing Instruments for Sexually Transmitted Infections) is a multi-institutional research consortium. It aims to develop a polymicrobial, rapid and accurate STI diagnostic self-test, embedded within online care pathways for management and partner notification to reduce the public health impact of STIs.

