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Fourth Report of the Surveillance Working Group Federal Commission for Sexual Health

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In collaboration with

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1 Introduction

1.1 Surveillance Working Group's activities 2015

In 2015, the Surveillance Working Group followed progress in the measuring the effectiveness of HIV prevention through the Break the Chains 2015 campaign, organized a data triangulation workshop and held a meeting in October 2015. The following table provides an overview of the topics of these activities.

Table 1: Overview of the Surveillance Working Group's activities in 2015

Date	Event	Participants
19.3.2015	Study on the effectiveness of Break the Chains 2015 Coordination meeting	Researchers, Federal Office of Public Health (FOPH), Swiss Aids Federation
8.6.2015	Modernisation of HIV Surveillance Workshop organized by B. Somaini. Discussion of the key indicators for the assessment of the NPHS.	Bertino Somaini, Raphaël Bize, Kathrin Frey
8.9.2015	Study on the effectiveness of Break the Chains 2015 Coordination meeting	Researchers, FOPH, Swiss Aids Federation
22.10.2015	Workshop "Data Triangulation HIV/STI" <ul style="list-style-type: none"> • Effectiveness of Break the Chains 2015 <ul style="list-style-type: none"> - Analysis of the implementation - Cost analysis - Analysis of the effects - Analysis of social interactions • New trends among men who have sex with men (MSM) • Key indicators for the evaluation and planning of the national programme on HIV and other STI 	Surveillance Working Group / Institute of social and preventive medicine of the University of Lausanne (IUMSP) In total 32 researchers, analysts, prevention specialists and policy-makers participated in the workshop.
22./23.10.2015	Meeting of the Surveillance Working Group <ul style="list-style-type: none"> • Advancing the measurement of the effectiveness of HIV prevention • Advancing HIV surveillance/ key indicators; proposal of Dr. B. Somaini • Surveillance of HPV vaccination uptake and vaccination impact? • Introduction of PrEP and/or immediate treatment of HIV infection? Will this have implications for surveillance? 	Surveillance Working Group: Jonathan Elford, Gwenda Hughes, Daniel Kübler (Co-Chair), Nicola Low (Co-Chair). Excused: Rolf Rosenbrock, Herbert Brunold (FOPH). Guests: Raphaël Bize (IUMSP), Bertino Somaini (Public Health Promotion), Stefan Enggist (FOPH).
5.11.2015	Statement on the foundation of an HIV Surveillance centre Letter to the FOPH	Surveillance Working Group

1.2 Contents of the fourth report of the Surveillance Working Group

This report is the result of the Working Group's discussions at its meeting in October 2015. The Working Group identified challenges for STI and HIV surveillance, stimulated by developments in international and Swiss epidemiology. The report includes comments on the proposed HIV surveillance centre (section 2) and summarises developments in biological surveillance (section 3), behavioural surveillance (section 4) and the Working Group's discussions on data triangulation, accessibility and dissemination (section 5). The report also gives an update on the study measuring the effectiveness of HIV prevention (section 6). The report closes with a summary and proposed future activities of the Working Group (section 7).

2 Modernising HIV surveillance

In 2015, the Federal Office of Public Health (FOPH) commissioned Dr. Bertino Somaini to develop a proposal for the modernisation of HIV surveillance in Switzerland. The Working Group invited Dr. Somaini to present and discuss his proposal at the meeting in October 2015.

In brief, Dr. Somaini suggests strong cooperation between the FOPH and the Swiss HIV Cohort Study (SHCS) to improve the content and quality of surveillance data on new HIV diagnoses and on HIV positive people in Switzerland. He recommends that the FOPH commissions an HIV surveillance centre so that HIV notification data from the FOPH can be linked to the SHCS. The combined dataset should be able to be used to provide information about the HIV care cascade and other analyses relevant to the planning and evaluation of the National Programme on HIV and other STI (NPHS, FOPH 2010). A new reporting system would require physicians to provide a few important items such as viral load and clinical care status once a year. Dr. Somaini proposed a list of key indicators for: people living with HIV, people being tested for HIV, people with behavioural risks and for governance. He also suggested that the centre could be responsible for the coordination of additional investigations, e.g. behavioural surveillance or evaluations.

The Working Group discussed the proposal for the surveillance centre and the key indicators.

2.1 HIV surveillance centre

In general, the Working Group supports the foundation of an HIV surveillance centre and recommends that the FOPH pursues the project outlined by Dr. Somaini.

The Working Group sent a letter sent to the FOPH at the beginning of November 2015, including the following points:

- A Swiss HIV surveillance centre has the potential to become a pioneer for monitoring and evaluation of HIV, other diseases and future developments in medical care.
- The Working Group has repeatedly pointed out the tremendous, unused potential of the SHCS to contribute to HIV surveillance with clinical data on HIV-infected people (Surveillance Working Group 2012, 2013, see Table 5 in the appendix).
- The linkage of the HIV notification data with the SHCS is a unique opportunity to strengthen clinical surveillance in Switzerland. The SHCS benefits from information about the representativeness of their data. In addition, essential data will allow fuller documentation about the stages of the HIV care cascade (Gardner et al. 2011, Kohler et al. 2015) for the assessment of the impact of test and treat strategies. Questions about quality of life of HIV-infected people, comorbidity of HIV and other STI, causes of death or resistances to therapy could also be addressed. Finally, closer collaboration between the FOPH and the SHCS should allow the swift handling of evidence relevant for prevention work.
- From an HIV prevention perspective, information on the place (country) of infection in migrants from high prevalence countries is pivotal (Surveillance Working Group 2014). New procedures to model place of infection based on data on viral load at time of diagnosis, date of entry and course of infection are used in other countries such as the UK (Rice et al. 2012). These models suggest that clinical reporting data (by physicians) probably underestimates the proportion of new HIV infections that take place in the country of settlement. A consolidation of surveillance and HIV cohort data would enable such innovations to be adopted more quickly.
- A revision of the clinical data reporting form for new HIV-diagnosis is planned and further measures for improving the return rate and the completeness of these forms seem to be contemplated. Both the FOPH and the SHCS will benefit from more complete data.

- An HIV surveillance centre that actively promotes links to the monitoring of behavioural surveillance data, evaluation of HIV policy, and triangulation of biological, behavioural and clinical data would improve public health.

The Working Group also raised three major concerns that should be taken into account.

- The planned cooperation should make sure that the SHCS preserves its academic freedom, including an independent research agenda, freedom to publish and data ownership. The Working Group praised the enormously important research activities of the SHCS and emphasised the importance of sustained financial support from the Swiss National Science Foundation.
- The Working Group is seriously concerned that surveillance of STI other than HIV will be neglected by the focus on HIV. The Working Group strongly recommends that the FOPH adequately integrates other STI into its plans to modernise surveillance (see sections 2.2 and 3).
- The Working Group would like to emphasise the importance of timely communication with all partners, including physicians, who will need to collect additional data.

Recommendation 1

The FOPH should pursue the project of an HIV surveillance centre as outlined by Dr. Somaini.

2.2 Key indicators for the planning and the assessment of the NPHS

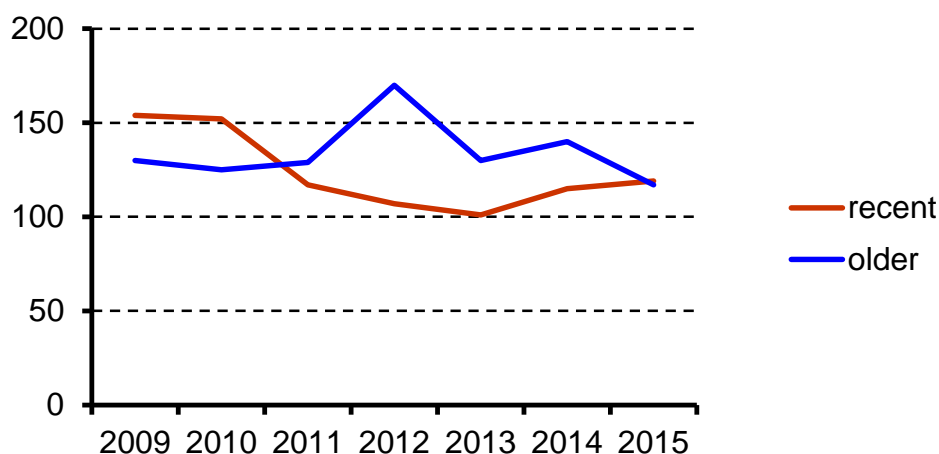
The Working Group welcomed the concept of key indicators for relevant target populations that incorporate different sources of surveillance data (incl. epidemiological data, behavioural, clinical and policy data). So far, the plans are closely linked to the foundation of an HIV surveillance centre and thus cover only part of the remit of the NPHS. The Working Group is strongly convinced that an integrated programme that covers both HIV and other STI is essential (Surveillance Working Group 2012: 4). Therefore, it recommends the development of a list of key indicators for HIV **and other STIs** with information on the data sources and possibly also with characteristics on the available data (e.g. answer categories, scales).

The key points of the Working Group's discussion about the indicators presented by Dr. Somaini are summarised below.

In general, the Working Group agrees on the proposed list of **indicators for HIV-infected people**. It proposed some important additional indicators:

- An indicator for the reason for testing. This indicator would distinguish between provider initiated counselling and testing (PICT) and voluntary counselling and testing (VCT) (FOPH 2015a). This information would help with the interpretation of trends in newly diagnosed HIV infections amongst men having sex with men (MSM), as presented at the data triangulation workshop (Figure 1, FOPH 2015c, e). The available data on the number of HIV tests performed amongst MSM in Switzerland is fragmented. The available data collected by the VCT sites show a slight increase in testing uptake amongst MSM since 2009 (FOPH 2015d, e). Additional data about infections diagnosed as a result of PICT could help determine whether general practitioners have initiated more tests for patients whose clinical presentation might result from underlying HIV primary infection.

Figure 1: Recent and older HIV infections among MSM in Switzerland by year of diagnosis, 2009-2015



Source FOPH 2015c; HIV cases notified until 30.9.2015 projected to a full year. Recent infections detected by an algorithm on the banding intensities in the immunoblot used for confirmation; corrected for the sensitivity and specificity of the algorithm

- An indicator on previously contracted STIs is important, given the role of other STIs in facilitating HIV acquisition and high rates of STI in HIV-infected MSM.
- Information about the sexual identity of the patient should be collected (incl. transgender and inter-sex people).
- The inclusion of key factors associated with the risk of contracting HIV and other STI, with late presentation and with outcomes in Switzerland should be considered. Ethnic group and (neighbourhood) socio-economic position (Gueler et al. 2015) are important indicators.

Regarding the **indicators for people being tested for HIV** the Working Group agreed that information about the number of negative tests performed is important to include (Surveillance Working Group 2012). Further, the Working Group also recommends including information on the reasons of testing (see above), previous testing behaviour as well as STI history and coinfections.

Regarding the **indicators for persons with behavioural risk**, the Working Group pointed out that the list of indicators presented needs further development, drawing on the work of the IUMSP, whose important work on behavioural surveillance must be continued.

The Working Group only touched on the discussion on **indicators for governance**. Such indicators are important and the Working Group will come up with a proposal, informed by the study on the effectiveness of Break the Chains 2015 and other previous monitoring and evaluation experiences (see section 6).

Recommendation 2

The list of key indicators for the planning and assessment of the NPHS should cover HIV **and other STIs** and provide information on the data sources (e.g. notification data, SHCS data, survey data) and data characteristics.

Recommendation 3

Indicators on the reasons for HIV testing, test history and other STIs should be included in the list of key indicators.

Recommendation 4

Behavioural surveillance needs to be sustained as an integral part to reach the goals of modernisation of HIV and STI surveillance.

3 Biological surveillance

The Working Group appreciated the presentation of the trends in newly diagnosed HIV infections among MSM since 2009 at the data triangulation workshop (FOPH 2015c). The Working Group would like future presentation to include the following:

- Trends in STIs other than HIV.
- Longer term trends. Overall trends in the number of new diagnoses of both HIV and other STI provide important context for understanding more recent trends. Some epidemiological data were only presented for the last two years (2014/2015), which is of limited use.

Based on this presentation and on the background information compiled by its scientific secretariat (Frey/Goodman 2015), the Working Group reviewed the implementation of its previous recommendations for the improvement of biological surveillance in Switzerland. Table 3 in the appendix compiles the recommendations presented in the Working Group's reports 2012, 2013 and 2014. It highlights any activities taken for the implementation of the recommendations.

The Working Group acknowledges that the FOPH initiated the following promising steps for the improvement of HIV/STI surveillance in Switzerland:

- The FOPH has strengthened the analyses of complementary data sources for HIV surveillance (e.g. FOPH 2015b, d).
- The FOPH has revised the notifications forms for syphilis and gonorrhoea (enacted since January 2015).
- Information on the total number of HIV, chlamydia and gonorrhoea tests performed per year will be collected as of 2016 (Federal Department of Home Affairs FDHA 2015a, b).
- The FOPH plans to improve data on antimicrobial resistant gonorrhoea in the framework of the national strategy on antibiotic resistance that should be implemented in 2016.
- The FOPH elaborated plans to modernise HIV surveillance (section 2).

The analyses of complementary data sources for HIV surveillance are now incorporated in published surveillance reports (FOPH 2015b). It is too early to assess the impact of the other steps taken and plans formulated for the implementation of the recommendations. The Working Group is looking forward to assessing the improvements achieved with the revised notification forms for syphilis and gonorrhoea and to see first steps on the implementation of the other promising plans at its next meeting in autumn 2016.

The Working Group notes that the general recommendation to strengthen HIV and STI surveillance capacity at the FOPH remains important. Although the Working Group has no precise information on

surveillance capacity it is concerned that the surveillance of STIs other than HIV receives too little attention. For instance, trends in reported syphilis, gonorrhoea or chlamydia cases were not presented at the data triangulation meeting. In addition, STIs other than HIV are almost completely omitted in the plans for the modernisation of HIV and STI surveillance.

Recommendation 5

Establish sufficient capacity for surveillance of STIs other than HIV that allows for timely analyses and implementation of important improvements.

4 Behavioural surveillance

The Working Group also reviewed the implementation of its previous recommendations for the improvement of behavioural surveillance in Switzerland. Table 4 in the appendix compiles the recommendations presented in the Working Group's reports 2012, 2013 and 2014. It highlights any activities taken for the implementation of these recommendations. The Working Group shares the opinion that the improvements in the field of behavioural surveillance are substantial and the Institute of Social and Preventive Medicine of the University of Lausanne (IUMSP) considerably contributed to the data triangulation.

The Working Group is impressed by the ANSWER study (Simonson et al. 2015) that provides quantitative data on HIV/STI relevant behaviours of migrants from Sub-Saharan Africa. This evidence should be used to steer prevention interventions among this target population. For instance, the data show crucial differences in HIV treatment uptake among migrants with different legal residence permits. There are also remarkable differences in behaviours among first and second generation migrants. Further, the Working Group also appreciates the efforts of the IUMSP to disseminate the survey results to the target population. The Working Group recommends repeating this survey at an interval of approximately three years.

The Working Group also appreciates current efforts to strengthen the surveillance of sexual health among sex workers (Lociciro et al. 2015). It welcomes the survey the IUMSP is conducting among sex workers in Switzerland in winter 2015/2016 and is looking forward to discussing the results at its next meeting in autumn 2016. In contrast, no progress was achieved concerning the collection of information related to the consumption of paid sex among the general population. The Working Group recognized that the responsible actors of the federal administration refused to integrate the questions about "paying for sex" in the next Swiss Health Survey 2017 (SHS) (Federal Council 2015). The reasons for refusal relate to the length of the questionnaire and the priority given to other health issues.

The Working Group acknowledges that the sexual health module within the SHS will continue in 2017. Further, it appreciated the preparatory work of the IUMSP for the integration of additional questions about "paying for sex", "sexual identity"¹ and "transgender" (Lociciro/ Bize 2015a). The Working Group strongly supports the inclusion of a question on "sexual identity". It is convinced that Switzerland should follow the international state of the art (Jorgensen et al. 2015; Haseldon/Joloza 2009; Lociciro/ Bize 2015a) and is confident that the responsible actors are able to find adequate wording for the respective question in German, French and Italian.

The Working Group encourages the FOPH to improve the surveillance data of sexual health among the general population. In particular, data on "paid sex", "transgender" and "sexual violence" are crucial for

¹ We refer here to sexual identity defined as subjective view of oneself. The question on sexual identity should be asked as an opinion question: "Which of the following options best describes how you think of yourself? Heterosexual or straight / gay or lesbian / bisexual / other / prefer not to say." (see. Haseldon/Joloza 2009). Lociciro and Bize (2015a) labeled this question "question sur l'orientation sexuelle".

public health policy (Surveillance Working Group 2014). As these questions will not be included in the SHS, the FOPH should collect such data alternatively and reconsider the Working Group's recommendation to periodically collect more detailed population-based data (Surveillance Working Group 2014: 7-8, recommendation Q in Table 4 in the appendix).

Finally, the Working Group briefly discussed new data on MSM and would like to highlight two findings. First, the Working Group sees the increase in condom-less sex with occasional partners as a concern (Kouyos 2015; Lociciro and Dubois-Arber 2014). Second, Gaysurvey 2015 indicates that MSM are badly informed on pre-exposure prophylaxis (PrEP) (Lociciro/Bize 2015b). This finding should be taken into account regarding the discussion on the introduction of PrEP and the elaboration of guidelines about PrEP.

Recommendation 6

The ANSWER study – survey among migrants from high prevalence countries – should be repeated at an interval of approximately three years.

Recommendation 7

The Swiss Health Survey 2017 should include a question on sexual identity. If it is not possible to integrate the question on paid sex, the FOPH should collect such data in a different way.

5 Data triangulation, accessibility and dissemination of evidence

The data triangulation workshop 2015 focussed on MSM and in particular, on the findings of the study on the effectiveness of Break the Chains 2015. In total 32 data analysts and policy makers attended the workshop. The Working Group is convinced that the annual data triangulation workshops are important and have supported the exchange among the analysts and policy makers. The Working Group will thus also organize the workshop in 2016.

Further, the Working Group has addressed in its last year's report that data triangulation, accessibility and dissemination should not be limited to the data triangulation workshop and existing reporting activities of the involved actors but involve further improvements. The Working Group acknowledges that the IUMSP is strengthening its dissemination efforts, e.g. is currently working on lay summaries to communicate the ANSWER study findings to the affected communities.

Further, the current plans to found an HIV surveillance centre and to elaborate a list of key indicators also aim to strengthen the linkage between different sources of surveillance, research and evaluation. Thus, the Working Group emphasizes that the implementation of these modernization plans should strongly encourage activities that strengthen the data triangulation, accessibility and dissemination of evidence. For instance, the list of key indicators should be finalized, published on a website and connected with the data sources (database of reports, publications, user friendly abstracts or graphs). Thus, the Working Group recommends using the opportunity of the modernization plans not only to strengthen data linkage and triangulation but also to improve the accessibility and dissemination of evidence.

Recommendation 8

Data triangulation should be more systematic and disseminated more widely. The planned HIV Surveillance centre should improve the accessibility and dissemination of evidence by appropriate means (e.g. database with surveillance reports, etc.).

6 Innovation in HIV/STI surveillance and evaluation

6.1 Advancing the measurement of effectiveness of HIV prevention

In its third report the Surveillance Working Group (2014) recommended a study on the effectiveness of the prevention campaign Break the Chains (BTC) 2015. BTC is a community campaign targeting MSM that are most affected by HIV in Switzerland. It is considered as the core intervention of the FOPH and its partners in the fight against HIV among this target population. The FOPH and its partners have rolled out this campaign in 2012 and repeated it each spring, with some adaptation.

The FOPH commissioned a study and first results were presented at the data triangulation workshop in October 2015. The Working Group notes that the study was conducted as recommended and included an analysis of the implementation of BTC (Frey et al. 2015 a, b), a monitoring of the resources spent for BTC 2015 (Blank and Schwenkglens 2015), and a measurement of the effects among MSM with a pre- and post-survey (Lociciro and Bize 2015c). Additionally, a further research team conducted a pre-study on the question how social interactions among MSM foster the effectiveness of BTC (Miesler and Drevs 2015).

The Working Group congratulates the researchers for having conducted these studies in a short time period and is looking forward to more consolidated analyses that synthesize the findings of the different parts of the study. It strongly recommends publishing the results in peer-reviewed journals.

The Working Group notes that the analyses provided new, possibly unexpected, results but it would first need the consolidated analyses to assess the implications both for prevention policy and for the advancement of the idea of “third generation surveillance”. It recommends that the researchers of the study on the effectiveness of BTC 2015 should reflect on the lessons learned for monitoring and surveillance. The Working Group aims to elaborate a list of core indicators on governance that can be integrated in the concept proposed by Bertino Somaini.

Recommendation 9

The researchers should finalize their analysis about the effectiveness of BTC 2015 and seek to publish the findings in peer-reviewed journals. The findings should be used to inform prevention campaigns for MSM and key indicators on governance. The relevant parties should aim to adapt the next prevention campaign based on the findings on the effectiveness of BTC 2015.

7 Summary and prospects

The Working Group formulated the present report on the bases of the presentations and discussions at the data triangulation workshop and its meeting, October 2015. Further, the Working Group received background information provided by its scientific secretariat (Frey and Goodman 2015). The following table provides an overview of the recommendations.

Table 2: Surveillance Working Group's recommendations 2015

<p>Modernisation of HIV/STI surveillance</p> <ol style="list-style-type: none"> 1. The FOPH should pursue the project of an HIV surveillance centre as outlined by Dr. Somaini. 2. The list of key indicators for the planning and assessment of the NPHS should cover HIV and other STIs and provide information on the data sources (e.g. notification data, SHCS data, survey data) and data characteristics. 3. Indicators on the reasons for HIV testing, test history and other STI are important to include in the list of key indicators. 4. Behavioural surveillance needs to be sustained as an integral part to reach the goals of modernisation of HIV and STI surveillance. <p>Biological surveillance</p> <ol style="list-style-type: none"> 5. Establish sufficient capacity for surveillance of STIs other than HIV that allows for timely analyses and implementation of important improvements. <p>Behavioural surveillance</p> <ol style="list-style-type: none"> 6. The ANSWER study – survey among migrants from high prevalence countries – should be repeated at an interval of approximately three years. 7. The Swiss Health Survey 2017 should include a question on sexual identity. If it is not possible to integrate the question on paid sex, the FOPH should collect such data in a different way. <p>Data triangulation, accessibility and dissemination</p> <ol style="list-style-type: none"> 8. Data triangulation should be more systematic and disseminated more widely. The planned HIV Surveillance centre should improve the accessibility and dissemination of evidence by appropriate means (e.g. database with surveillance reports, etc.) <p>Advancing the measurement of effectiveness of HIV prevention</p> <ol style="list-style-type: none"> 9. The researchers should finalize their analysis about the effectiveness of BTC 2015 and seek to publish the findings in peer-reviewed journals. The findings should be used to inform prevention policy and key indicators on governance. The relevant parties should aim to adapt the next prevention campaign based on the findings on the effectiveness of BTC 2015.
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The Working Group plans its 2016 meeting again directly after the workshop data triangulation HIV/STI in autumn 2016. The Working Group sets two priorities for its activities in 2016: A) Draw lessons from its work since 2012, B) Contribute to the elaboration of the key indicators for the planning and assessment of the NPHS; in particular regarding governance.

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Table 3: Compilation of the Surveillance Working Group's recommendations for biological surveillance

Recommendations (Surveillance Working Group 2012, 2013, 2014)	Year (number of the recommendation)	Taken up by the FOPH	Remarks
A Sustain the existing HIV/STI surveillance capacity of the FOPH. Establish sufficient capacity for surveillance of STIs other than HIV that allows realizing important improvements.	2012 (2a) 2013 (1)	unclear	The Working Group has the impression that the FOPH's capacity for surveillance of STIs other than HIV is too limited. E.g. the FOPH was not able to present current trends for 2015 at the data triangulation workshop.
B Improve data quality (notification compliance).	2012 (3a) 2013 (5)	yes	The revision of the notifications forms for syphilis and gonorrhoea (simplification, revision of the case definition) was implemented at the beginning of 2015. Data on the impact of the revision on the data quality is not yet available. The creation of the HIV surveillances centre is promising. ⇒ too early to assess the improvement
C Collect information on the number of tests performed. Collect the number of laboratory tests for chlamydia.	2012 (3b) 2013 (7)	yes	The draft ordinance of the new law on epidemics (FDHA 2015a, b) directs that the laboratories have to report the total number of HIV, chlamydia and gonorrhoea tests performed per year (negative/positive test results). The ordinance should be enacted by January 2016. ⇒ too early to assess the improvement
D Improve the data on antimicrobial resistant gonorrhoea.	2012 (3c) 2013 (4)	yes	The FOPH has linked this issue to the national strategy on antibiotic resistance that has been elaborated in the last years and should be agreed on by the Federal Council end of 2015 and implemented thereafter. Recommendation for physicians to do a culture before any antibiotic treatment (Trellu et al. 2014). ⇒ no concrete measure to improve surveillance implemented yet
E Strengthen the utilization of complementary data sources for HIV surveillance.	2012 (3d) 2013 (6, 9)	yes	The FOPH has strengthened the analyses of the data collected by the VCT-sites (BerDa Advisory guidelines and data management system for VCT centres).
F Generate better prevalence data. Initiate a discussion on the value of a general population prevalence survey.	2012 (3e) 2013 (8)	no	
G Strengthen the dissemination of information from biological surveillance of HIV and other STI.	2012 (3f) 2013 (10)	no	
H The laboratory costs for HIV/STI tests should be exempted from the franchise.	2013 (3)	no	

Continuation Table 3

	Recommendations (Surveillance Working Group 2012, 2013, 2014)	Year (number of the recommendation)	Taken up by the FOPH	Remarks
I	The FOPH should assess the feasibility of collecting more objective information about the probable country of HIV infection in migrants from high prevalence countries to improve the targeting of prevention activities.	2014 (1)	yes	The plans for the creation of the HIV surveillance centre are promising and the list of key indicators include the relevant data needed to generate more objective information about the probable country of HIV infection in migrants. ⇒ no concrete measure implemented yet
J	The preparedness of Swiss infectious disease surveillance systems for detecting outbreaks of sexually transmissible infections should be reviewed and assessed in the context of emerging evidence on changing risk behaviours and, if necessary, revised.	2014 (2)	no	The FOPH considers that no changes to its surveillance systems are required
K	The Working Group recommends that decisions about chlamydia screening should be taken at a national level	2014 (3)	no	The FOPH states that decisions rest with the cantons.

Table 4: Compilation of the Surveillance Working Group's recommendations for behavioural surveillance

	Recommendations (Surveillance Working Group 2012, 2013, 2014)	Year (number of the recommendation)	Taken up by the FOPH	Remarks
L	Improve behavioural surveillance for migrants.	2012 (4b) 2013 (12)	yes	The FOPH has commissioned the IUMSP to conduct the ANSWER Study ("African Net Survey We Respond!") (Simonson et al. 2015).
M	Strengthen behaviour surveillance in the field of sex work.	2012 (4c) 2013 (13)	yes	The FOPH has commissioned the IUMSP to conduct a survey among sex workers in Switzerland; results should be available in autumn 2016 (Lociciro et al. 2015). In contrast, no improvements are achieved concerning the indicator "paid sex" among the general population.
N	Behavioural surveillance (IUMSP) should take an active part in data triangulation.	2012 (4d) 2013 (14)	yes	The IUMSP is co-leading the data triangulation workshop since 2012.
O	Strengthen the analysis on predictors of risk behaviour. Better exploration of behavioural surveillance data for analyses on the predictors of risk behaviour and for the evaluation of the effectiveness of prevention interventions.	2012 (4a) 2013 (11)	yes	The IUMSP has recently published its reports on the surveys among migrants (Simonson et al. 2015) and among MSM (e.g. Lociciro/ Bize 2015b, Lociciro/Dubois-Arber 2014). Additionally, it contributed to the evaluation of Break the Chains 2015.
P	The forthcoming Swiss Health Surveys (SHS) need to continue the module on sexual health. Questions about paying for sex, sexual identity and transgender, and sexual violence should be collected in future SHS.	2014 (4)	yes	The module on sexual health is continued. The IUMSP has elaborated a proposal for the additional questions about "paying for sex", "sexual orientation" and "sexual identity" (Lociciro/Bize 2015a). While the questions about "paying for sex" and "sexual identity" are not included, the question about "sexual orientation" is included.
Q	The behavioural data on the general population should be strengthened. The FOPH should together with the FSO consider conducting an additional population survey.	2014 (5)	no	

Table 5: Compilation of the Surveillance Working Group's recommendations for clinical surveillance

Recommendations (Surveillance Working Group 2012, 2013, 2014)		Year (number of the recommendation)	Taken up by the FOPH	Remarks
R	Swiss HIV Cohort Study (SHCS) should contribute to HIV surveillance.	2012 (5a)	yes	The creation of the HIV surveillances centre is promising. ⇒ no concrete measure implemented yet
S	Generate systematic information on the representativeness of the SHCS database.	2012 (5b) 2013 (16)	yes	The creation of the HIV surveillances centre is promising. ⇒ no concrete measure implemented yet
T	Initiate a study that investigates the available SHCS data on HIV positive MSM and their sexual behaviour (condom use) in relation to HIV viral load, and syphilis serology.	2013 (15)	no	An analysis of condom use in the SHCS was published (Kouyos et al. 2015) but this did not include an analysis of the association with syphilis serology results

Table 6: Compilation of the Surveillance Working Group's recommendations for data triangulation

Recommendations (Surveillance Working Group 2012, 2013, 2014)		Year (number of the recommendation)	Taken up by the FOPH	Remarks
U	Improve the exchange of information and cooperation between the different actors in the field of surveillance: Strengthen and sustain the efforts of data triangulation. Data triangulation should be more systematic and disseminated more widely.	2012 (2b) 2013 (2) 2014 (6)	yes	The Working Group organized an annual data triangulation workshop since 2012.

Table 7: Compilation of the Surveillance Working Group's recommendations for innovation in HIV/STI surveillance and evaluation

Recommendations (Surveillance Working Group 2012, 2013, 2014)		Year (number of the recommendation)	Taken up by the FOPH	Remarks
V	Generate better evidence on the effectiveness of HIV/STI prevention. The FOPH should commission a study on the effectiveness of Break the Chains 2015.	2013 (17) 2014 (7)	yes	First results of the study on the effectiveness of Break the Chains 2015 were presented at the data triangulation workshop, October 2015.