

Characteristics and Service Utilisation of New Patients Attending a Sexual Health Service during the Gold Coast Commonwealth Games 2018

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Background:

In 2018 the City of Gold Coast hosted the Commonwealth Games (GC2018), an international multi-sport event involving athletes, and an expected 100,000 visitors from around the world.¹

Past experiences with large sporting events provide conflicting findings on rates of sexually transmissible infections (STI) and demand for local sexual health services. During the previous Commonwealth Games in Glasgow, there was no increase in STIs, and no evidence of increased demand on sexual health services.² Similarly, the 2012 Olympic Games in London, and 1996 Games in Atlanta had minimal impact on STI services and STIs diagnosed.^{3,4} In contrast, during the Sydney 2000 Olympic Games, a large sexual health service reported a higher proportion of symptomatic patients and a higher yield of bacterial STIs.⁵

With an anticipated potential increase in service demand for the sexual health service during GC2018, planning at Gold Coast Sexual Health Service (GCSHS) included a change in the mode of operation from a mostly booked appointment service, to a walk-in only service. Supplies of commonly used medications, including post-exposure prophylaxis for HIV (PEP), antibiotics used for STI treatments and emergency contraception, were increased. Across the health service, employees requiring leave from work during the Games were subject to a ballot process, to ensure an 'all hands-on deck' approach during this potentially busy period.

Aim:

To describe the characteristics and service utilisation of new patients attending GCSHS during GC2018 and compare them with new patients attending the service during the same period in 2017.

Method:

All new clients attending GCSHS during the GC2018 period, and the two-week periods pre and post-Games were reviewed to identify reasons for presentation, demographics, STI diagnosis and provision of post-exposure prophylaxis for HIV (PEP).

During the 2018 period, information was also collected on usual place of residence and whether visits to the Gold Coast were associated with GC2018.

Data were benchmarked against a comparison group who attended during the corresponding period in 2017. Differences observed were calculated for significance using chi-square tests.

Table 1: Comparison GC2018 period vs 2017

	2017		2018		p-value
	Number	%	Number	%	
Number of new patients (% of GCSHS)	434 (34)		555 (37)		
Male	241	55.5	288	51.9	
Female	193	44.5	264	47.6	0.294
Partners opposite sex last 12m	330	76.0	429	77.3	
Partners same/ both sexes last 12m	104	24.0	125	22.5	0.605
Mean age (years)	30		30		
Australian born	222	51.2	256	46.1	
Non- Australian born	212	48.8	298	53.7	0.123
Attendance Reason					
Asymptomatic	242	55.8	297	53.5	0.094
Symptomatic	101	23.3	166	29.9	
STI Contact	42	9.7	36	6.5	
PEP for HIV	13	3.0	15	2.7	
Other reason (includes sex worker check, GP referral, HIV management, sexual assault, pre-exposure prophylaxis, treatment, counselling, contraception)	36	8.3	39	7.0	
Diagnosis					
STI diagnosed	92	21.2	122	22.0	0.469
Chlamydia	41	9.2	42	7.6	
Gonorrhoea	9	2.1	11	2.0	
Herpes	13	3.0	15	2.7	
Syphilis	5	1.2	8	1.4	
Other STI	24	5.5	45	8.1	
Return Visit to service					
Returned within 3 months	130	30.0	133	24.0	0.03
Place of Residence					
Live on Gold Coast (GC)			424	76.4	
				% of non-GC	% of total
Live elsewhere in Queensland			33	25.2	5.9
Live elsewhere in Australia			30	22.9	5.4
Live overseas			56	42.7	10.1
Visit associated with GC2018			23		4.1



Results:

- New clients presenting to GCSHS during GC2018 increased by almost 28%, compared with the same period in 2017 (n=555 vs n=434).
- Of all new attendees, only 4.1% (n=23) stated their visit to the Gold Coast was associated with GC2018. The majority of new attendees (424/555 or 76%) lived on the Gold Coast.
- There were no significant differences between the 2017 and GC2018 new attendees for age (mean age = 30, both groups), gender (p= 0.294), or being born outside Australia (p= 0.123).
- There were no significant differences between the 2017 and GC2018 groups for diagnosis of an STI (p= 0.469)
- Reasons for presentation showed no significant differences between the two groups (asymptomatic STI screening [56% and 54% in 2017 and 2018 respectively] and patients with symptoms of an STI [23% and 30%]).
- Demand for HIV post exposure prophylaxis and contraceptive services remained low (3% and <1 % respectively in 2017), and did not increase during the GC2018.
- New clients attending during the GC2018 period were more likely to make a return visit to the service within three months.

Conclusion:

- The GC2018 event had a minimal impact on the number of new clients attending GCSHS.
- The increase in absolute numbers of new clients during GC2018 is likely reflective of an upward trend in overall attendances at GCSHS which preceded the Commonwealth Games. The majority of the new clients attending during GC2018 lived locally, and the service did not experience an influx of clients from out of area.
- The most common reasons for presentation for new clients remained "core" sexual health clinic services including asymptomatic screening, patients with symptoms and patients in contact with an STI.
- Previous concerns that large scale events such as GC2018 will increase attendances for HIV PEP, sexual assault follow-up or emergency contraception are refuted by this study.
- Therefore, unless sexual health services intend to specifically advertise or tender services to mass-gathering events, demand for sexual health services and the services delivered, are anticipated to remain unchanged.
- This study may contribute to sexual health service planning for future large-scale mass gathering events on the Gold Coast or elsewhere.

References:

- Tourism Australia. 2018. Available online at <http://www.tourism.australia.com/en/about/our-campaigns/gold-coast-2018-commonwealth-games.html> [verified 4 October 2018].
- Metcalfe R, Acquah RR, Simpson J, Allardice G, Winter A. An observational study of the impact of the 2014 XX Commonwealth Games on the sexual and reproductive health services in Glasgow, Scotland. *Sexual Health* 2016; 13: 480-483.
- Sile B, Mohammed H, Crook P, Hughes G, Mercer C, Cassel J, Coyne K, Hartley A, Hall V, Brook. Epidemiology of Sexually Transmitted Infections in Visitors for the London 2012 Olympic Games: A Review of Attendees at Sexual Health Services. *Sexually Transmitted Diseases* 2015; 42(12):710-6.
- Brennan RJ, Keim ME, Sharp TW, Wetterhall R, Williams J, Baker EL, Cantwell JD, Lillibridge SR. Medical and public health services at the 1996 Atlanta Olympic Games: an overview. *eMJA* 1997; 167: 595-8.
- McNulty AM, Rohrsheim R, Donovan B. Demand for sexual health services during the Olympic Games: both sides of the Sherman effect. *International Journal of STD & AIDS* 2003; 14(5):307-8.