

# Scale up of TasP<sup>®</sup> in British Columbia, Canada: Opportunities and challenges identified by policy makers and service providers

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## Background

The Canadian province of British Columbia (BC) was among the first jurisdictions to implement HIV Treatment as Prevention (TasP<sup>®</sup>) and scale up the approach to the population level. Since 2010, BC's provincial funding and policy commitments have supported the universal availability of ART for HIV-positive individuals, initiation of ART as soon as possible following seroconversion regardless of an individual's CD4+ count, enhanced efforts to 'seek and treat' all HIV-positive persons through the implementation of voluntary routine testing guidelines across all primary and acute care settings and targeted testing campaigns (1). BC thus represents a critical context within which to identify factors that influenced the implementation and scale-up of TasP (2). This study was undertaken to identify key factors that influenced the implementation and scale up of TasP in BC and how those opportunities and challenges changed or remained stable over time.

## Methods

Semi-structured, in-depth individual interviews were conducted with 11 key stakeholders, including senior policy makers, HIV experts and other health scientists, clinicians and service providers, as well as representatives from AIDS Service Organizations (ASOs). Interviews were conducted by the lead author (RK), recorded, transcribed, and imported into Nvivo 10 for analysis. Our analysis was informed by the Consolidated Framework for Intervention Research (CFIR) constructs (i.e., outer setting, inner setting, characteristics of individuals and intervention characteristics) (3). Initially, we used an open-coding technique to identify two broad themes regarding the implementation and scale up of TasP: 'opportunities' and 'challenges'. As additional interviews were completed, open codes were re-grouped into more explicit conceptual categories (as reflected in the reporting of the analysis below).

## Results

### Outer and inner settings – “compelling arguments” and “soft levers”

Interview participants described their perspectives on the motivations underpinning initial and sustained investments in the implementation and scale up of TasP in BC. Emerging epidemiological evidence (mid 2000s) regarding TasP feasibility grew alongside a broad political desire at that time to reduce HIV-related costs to the health system. Participants credited the sustained investments in TasP as a scientifically feasible action to take, in order to address escalating health care costs. For example:

*The situation the government was faced with was a growing cost to provide HIV medications and to care for people living with HIV [...] going up every year. And so essentially what, I think, [the case for TasP] was able to provide a compelling argument is to say, “Look, if you make this added investment now, we can finally get ahead of the curves. [...] And so it was really fabulous to sort of see how we were able to show [...] do some modeling to start to show how individual treatment could alter population-level dynamics and reinvigorate the province to better reach and engage people [living with HIV]. (008; policy maker)*

Interview participants also described how the political and health policy 'landscapes' during the early 2000s in BC had made it far more feasible at that time to advance medical interventions that addressed the needs of people who use drugs and people living with HIV. Several participants described how the BC government had 'taken up' harm reduction measures as an important strategy to address the local HIV epidemic and that this had an important influence upon TasP's political acceptability at that particular time in BC:

*It was very clear that harm reduction was a front and center element of all of our response to again both drug use and addictions and to HIV issues. [...] Um, you know it never got to the sort of heavy sort of hammer of legislative or enforced options but we certainly were using all the kind of soft levers that we had available in terms of meetings and policy guidance documents [...] The political buy-in for Treatment as Prevention, I think it again stems originally to the political leadership [...] Harm reduction was a core element of provincial policy. (005; policy maker)*

### Intervention characteristics – “enough money to capture people's attention”

During the late 2000s, the quality and validity of evidence that TasP would have the desired outcomes became better established, influencing stakeholder 'buy in' at all levels. Broader perceptions about TasP also were shaped by more symbolic reasons, including the size of the investment made in TasP. The relatively large investment indicated that the government was serious about 'doing things differently' with regards to HIV.

*I'm under no illusion that like it had to be an amount that was getting there and then enough money to capture people's attention. It didn't pay for everything but it was enough money to really capture people's attention and send a message to senior folks in health authorities responsible: 'This is really important to government, we're putting some money behind it and it's a bit unusual, work with us.' (006; policy maker)*

### Characteristics of individuals – “Intangible but invaluable”

Several participants described how the personal traits, intellect, motivation, values and competencies of key decision makers and opinion leaders were crucial to shaping the implementation and scale-up of TasP in BC. For example:

*I had some fabulous people working on my team and there were some really good people – you can track that, it's a big subset of the [leadership group], both of the policy and on the program and operational side, to having worked in our “misspent” youth at places like [local ASO]. [...] So it was not only just sort of like your standard group of folks working in the Health Authority or the Ministry [of Health], it was a particularly energized group of folks who had demonstrated across you know a decade and a half in different roles, that HIV in particular was something that they felt pretty strongly about [...] So there's something in that that is intangible but invaluable. (006; policy maker)*

### Process – “consistence” versus “innovation”

Participants described how the processes (e.g., engaging, executing, planning, reflecting and evaluating) associated with the scale up of TasP were designed in such a way that they could be highly responsive and adaptable to 'real time' data. TasP was viewed as a nimble and evidence-informed intervention that had the potential to be effectively adapted across BC's highly decentralized service delivery systems (e.g., multiple regional health authorities). However, this was also thought to provide challenges during the scale up. For example:

*There's very little sort of consistency in the health system in BC. [...] I mean it's partly a problem, it's partly also a positive in it allows for innovation and sort of experimentation and you know those can be really good things and so, you know, if you use part of the top down mandate everybody shall do this and that's what they do then you know you don't necessarily get new ideas gurgling up because somebody's willing to take a risk here where others aren't. So you know that's like one of the positives about it but then of course the challenge is okay, you know, say you do have something great and innovative that seems to be working, it sort of ends up staying right where it started and you know it never kind of gets picked up elsewhere. (005; policy maker)*

## Conclusion

Our findings identify a set of TasP implementation trajectories that have resulted in a highly adaptive approach to systems-level scale up of TasP in BC. Key factors that influenced scale up of TasP included: (i) intervention characteristics (e.g., stakeholders' perceptions about the relative advantage of implementing the intervention, complexity); (ii) inner setting (e.g., implementation climate, leadership engagement); (iii) outer setting (including social and political factors that created opportunities to implement new 'systems level' approaches to HIV intervention); (iv) characteristics of individuals (including key influencer factors (e.g., decision makers); and (v) intervention processes (including the importance of maintaining “nimble and evidence-informed” adaptations across a highly-decentralized service delivery system; the capacity to adapt features of TasP programming based on 'real-time' program data). These findings have implications for how BC can successfully scale-up other 'systems-level' interventions that have demonstrated efficacy (e.g., direct-acting antiviral treatment for HCV; combination approaches to addiction treatment), and important insights for other jurisdictions that are currently (or will be) scaling up TasP. First, these findings provide key 'tangible' factors that are critical to the success of a systems-level intervention scale-up, including the importance of maintaining nimble and evidence-informed adaptations across various facets of the health care delivery system. Second, these findings also underscore the importance of how key social and political features of implementation context influence scale up, including, for example, how the implementation of 'soft' policy measures can enhance the overall acceptability of 'doing things differently' within and across health care delivery systems.

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