The persistent urban challenges of migration and informal settlements in the context of HIV:

towards the development of a framework to guide the appropriate and equity promoting urban health and developmental responses of local government within

Johannesburg, South Africa

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I, JOANNA VEAREY do solemnly declare, in accordance with Rule G27, that this thesis is a construction of my own work. In addition, this thesis and all of its contents has not been used as a submission for any other degree or submitted at any other university.

Joanna Vearey

Johannesburg, April 2010
Public health

“…an instrument for promoting and enhancing the health and well-being of individuals and their communities. This is a values position in that it gives priority to health and well-being ahead of other values, such as the economic abundance of a nation. It is also a moral position in that the implicit message is that we should value health and well-being highly.”


Urban health

“…concerns itself with the determinants of health and diseases in urban areas and with the urban context itself as the exposure of interest. As such, defining the evidence and research direction for urban health requires that researchers and public health professionals pay attention to theories and mechanisms that may explain how the urban context may affect health and to methods that can better illustrate the relation between the urban context and health.”

(Galea & Vlahov, 2005: 342)

“Cities have historically been associated with the evolution of ideas of public health and practice.”

(McMichael, 2000: 1117)
Health equity

“The absence of disparities in health (and in its key social determinants) that are systematically associated with social advantage/disadvantage.”

(Braveman & Gruskin, 2003: 256)

Governance

“... the exercise of political, economic and administrative authority to manage a nation's affairs. It is the complex mechanisms, processes, relationships and institutions through which citizens and groups articulate their interests, exercise their rights and mediate their differences.”

(UNDP, 1997: x)

Participatory governance

“... governance that actively seeks the inclusion of the people, especially the poor, in the processes and systems of government. It emphasizes the need to introduce mechanisms to encourage the involvement of those who do not find it easy to participate in state structures and processes.”

(Barten, Mitlin, Mulholland, Hardoy, & Stern, 2008: 2)
Abstract

Rationale
Understanding how to ensure and sustain the health and health equity of urban populations is of increasing importance as over half of the world population is now urban (UNFPA, 2007). Urbanisation is taking place rapidly across Africa, with fifty percent of the continent expected to be residing in urban areas by 2030 (UNFPA, 2007). South Africa has experienced a faster rate of urbanisation compared to neighbouring countries, with almost sixty percent of the population estimated to be urban (Kok & Collinson, 2006). This process of urban growth is accompanied by in-migration from within the country and across borders. Urban growth places pressure on limited, well-located and appropriate housing, resulting in the development of informal settlements within and on the periphery of urban areas. In addition to the multiple exposures to a variety of health hazards in informal settlements, HIV presents a contextual challenge, particularly in South Africa where the highest HIV prevalence is found within urban informal settlements (Shisana, Rehle, Simbayi, Parker, Zuma, Bhana et al., 2005). South African local government has a ‘developmental mandate’ which calls for government to work with citizens to develop sustainable interventions to address their social, economic and material needs (The Republic of South Africa, 1998a). This requires local government to address the challenges of urban growth, migration, informal settlements and HIV, as outlined above (Bocquier, 2008; Landau & Singh, 2008; Landau, 2007). The current (2007 – 2011) South African National Strategic Plan (NSP) for HIV signalled a welcome shift in HIV policy, with recognition of the role of government in ensuring that (1) internal and cross-border migrant groups and (2) residents of informal settlements are able to access the continuum of HIV-related services, which includes prevention, testing, support, treatment, and access to basic services. However, guidelines are lacking to assist local government in addressing HIV-related concerns with migrant groups and in informal settlements at the local level. As a result, migrant groups and residents of informal settlements struggle to access HIV-related services, including healthcare, adequate housing, and basic services such as water, sanitation and refuse removal. Given the developmental mandate of local government in South Africa (The Republic of South Africa, 1998a), this raises the question: how should local government respond to the urban challenges of migration and informal settlements in the context of high HIV prevalence?
This thesis explores how the challenges of migration and informal settlements – within a context of high HIV prevalence – interact to generate a specific urban reality that requires an appropriate urban health response at the local government level. The question of how to address the gap between discourse, theory and action is tackled.

Various frameworks for urban health have been developed that aim to assist in understanding the impact of city living on urban health, several of which draw on the concept of the social determinants of urban health (SDUH) (for example Galea, Freudenberg, & Vlahov, 2005; WHO, 2008b, 2008a). However, as I will go on to argue, none of the existing urban health frameworks deal adequately with the specific complexities of developing country urban environments. In particular, the frameworks have failed to adequately account for guiding local government in responding to the challenges identified above, namely: urban growth and informal settlements; internal and cross-border migration; high HIV prevalence; and, the responsibilities of a developmental local government.

Aim

Based on the findings from four studies, this PhD research aims to generate a revised urban health framework that will address the following specific challenges that I argue are associated with developing country contexts: (1) urban growth and informal settlements; (2) internal and cross-border migration; (3) high HIV prevalence; and, (4) the responsibilities of developmental local government. It is proposed that this revised framework will assist local government in responding to the interlinked challenges of informal settlements and migration in a context of high HIV prevalence.

Methods

A series of four studies were undertaken in Johannesburg. A review of international and local literature – including existing policy – was undertaken. In order to engage with the complexity of the urban environment, the four studies draw on both quantitative and qualitative methods. These include: a cross-sectional household survey across Johannesburg inner-city and one urban informal settlement (n = 487); a cross-sectional survey with ART clients at four ART sites in the inner-city (n = 449); and semi-structured interviews with community health worker volunteers, healthcare providers, local level policy makers and programmers involved with urban health and HIV in Johannesburg. By reflecting on involvement in participatory photography and film projects, the experiences of rural
migrants who enter the city through ‘hidden spaces’ are examined; the concept of ‘being hidden’ is explored as a tactic employed by marginalised groups so that they are able to find a way to enter and participate in the city. Through the four studies, a series of four central themes were identified: (1) rights to the urban social determinants of health; (2) urban livelihoods; (3) policy and governance; and (4) urban methodologies. These four themes assist in synthesising the study findings and generating a revised approach to guide local government in responding to urban health challenges in a developmental way.

Key findings
The developmental mandate of local government is evolving very slowly (Paper I, V). Local level responses to the interlinked urban health challenges of migration, informal settlements and HIV are lacking (Paper I, V). Where they do exist, HIV is not viewed as an intersectoral developmental challenge and vertical HIV programmes prevail (Paper V). It will be argued that informal settlements require integrated local developmental responses (Paper V). In general, policies and guidelines that outline the right to basic healthcare and ART for cross-border migrants are not implemented at the local level (Papers I and III). In addition, residents of informal settlements struggle to access adequate housing and basic services (Papers IV and V). Some internal migrant groups, who reside in ‘hidden spaces’ of the inner-city, are found to employ deliberate tactics in order to evade the state, whilst others are marginalised through a lack of state intervention (Paper II). The research shows that innovative methods are required to engage with urban populations, both for research and intervention purposes. Participatory approaches are found to be useful methods for engaging with urban migrant groups and this research draws on participatory photography and film projects as examples (Paper II, V). It is essential that urban public health practitioners and other development professionals learn how to engage with the complexities of the urban environment.

A review of existing urban health frameworks finds that whilst these frameworks are themselves complex, and include the multiple levels and determinants that ultimately impact health outcomes, they result in generalised and static models of urban health. I argue that these existing frameworks are unable to inform responses to the specific complexities present within a particular urban context. Through the synthesis of the four study findings, an alternative approach to assist local government and other stakeholders in responding to urban health challenges is proposed. The idea of ‘concept mapping’ is suggested as a way to
enable local government, and other actors, to engage with the complexities of the urban context in a participatory way. A core set of components have been identified that can be used to guide the creation of city-specific ‘concept maps’, that are able to work towards identifying and addressing the specific urban health needs associated with different areas within a city. A recommitment to intersectoral action, ‘healthy urban governance’ and public health advocacy is considered critical to the effectiveness of such an approach. It is suggested that the resultant ‘concept map’ will assist local government in responding in a developmental way to the interlinked challenges of migration and informal settlements in a context of high HIV prevalence.

Implications

Based on the findings of the PhD research, a new approach to urban health is suggested. ‘Concept mapping’ is presented as a new tool to assist local government in achieving its developmental mandate and address urban health. Whilst developed to address the challenges faced by urban migrants and residents of informal settlements in a context of high HIV prevalence, the concept map approach is likely to be a useful tool for considering the health and development needs of other urban groups. Future research is needed to evaluate the effectiveness of the application of participatory ‘concept mapping’ to assisting local level urban health policy makers, planners, and other stakeholders respond to the interlinked challenges of migration and informal settlements in a context of HIV.

Keywords: urban health; HIV; informal settlements; migration; health access; governance; local government; National Strategic Plan; framework; concept mapping; participation
Original papers


III. Vearey, J. (2010) Learning from HIV: international migration, health seeking and access to healthcare in South Africa *Global Public Health* (revised manuscript resubmitted in January 2010 as per reviewers comments)


Acknowledgements

I came to Johannesburg in 2003 for a six-week MSc research placement at the Reproductive Health and HIV Research Unit (RHRU), University of the Witwatersrand. It was during this process, under the mentorship of the inspiring Monique Oliff, that I became ‘hooked’ on Johannesburg; Jozi got under my skin. I returned for a six month internship in October 2003, which was soon extended to a year, then two, then three…. It was during my time at the STI/HIV Research Directorate of RHRU (where I remained until June 2007) that I, through the encouragement and support of Monique, decided to take the plunge and register for a PhD.

I have been very fortunate to have been guided through my PhD-journey by two wonderful, engaged and encouraging supervisors, Liz Thomas and Ingrid Palmary. I thank you both for your friendship and mentorship; very few PhD students have the opportunity to engage with such committed supervisors. This PhD reflects a team effort; I would not have managed it without you both. I especially thank you for your continued input and ability to put up with my mania. Through this PhD journey, you have both provided me with opportunities to explore new areas of research and gain skills that span the research-planning to write-up continuum. I hope that as this PhD process draws to a close, we will find new ways to continue to work together.

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And to my long suffering parents; thank you for your unending support, encouragement, advice and love. This PhD is a testimony to you both. Words escape me as I try to find a way to express my gratitude to you both for guiding me through this journey; it’s certainly been an adventure.

Finally, I would like to dedicate this PhD thesis to Poppa (1909 – 2008); a wonderful man, who is dearly missed. Thank you for wishing me well into this journey, and I know that you’re with me as I near the end.

Johannesburg, April 2010
Structure of the thesis

This PhD is being written through a publication route, with the thesis consisting of a series of six academic papers (two are published, one is in press, one has been resubmitted in response to reviewers comments and two are under review) that is preceded by a ‘cover story’. I also include images from two ‘photo stories’ that present some of the images generated through two participatory photo projects that contribute to this thesis.

The cover story

I will begin by presenting – upfront - the research question, research aim and the specific research objectives that this thesis aims to address.

A background section follows that will ‘set the scene’ for my research that consists of a case study of Johannesburg. This section draws on the literatures, presenting the challenges facing local urban governments. This section concludes by defining developing country urban contexts as presenting six central development challenges to local government.

This conceptual research framework is then presented. This framework has been developed to assist in ‘unpacking the complexity of developing country urban contexts’, drawing on (1) the social determinants of urban health and (2) the urban livelihoods literature.

I then move to present the four central thesis themes that arose from the analysis of the empirical data, and has guided the synthesis of the research findings: (1) rights to the social determinants of urban health; (2) urban livelihoods; (3) policy and governance; and, (4) urban methodologies.

An overview of the data and methods applied are then presented.

I have divided the results section into three parts. Firstly I will provide a summary of the synthesis of the research through the four central thesis themes. Secondly I will present a

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1 The term ‘cover story’ originates from Umea University in Sweden. It has been adopted within the School of Public Health, University of the Witwatersrand to refer to the written piece that synthesises the set of publications that together form the requirements for submission of a PhD.
review of existing urban health frameworks. The third and final results section presents a revised approach to urban health; this moves away from the application of a static framework to guide appropriate developmental responses to urban health at the local level.

I use the discussion section to elaborate on the guiding concepts that I apply to a revised approach to urban health, calling for a recommitment to intersectoral action, healthy urban governance and public health advocacy.

A section outlining the limitations of this research follows.

Finally, the concluding section of the ‘cover story’ summarises the research findings and the revised approach to urban health that I have generated. This section concludes with suggestions for future research.

The photographs

The photographic images included within this cover story were taken by participants in the 2007 participatory photography project held in the Benrose area of inner-city Johannesburg (please see Paper II for further discussion about this process). I have included the photographer’s name where they were happy to be acknowledged; in other cases, the image is presented without the photographer’s name. I have not included titles for the images; not all of the photographers created captions for their photographs; there is no static – or single - interpretation of what the photographs present (or represent).
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immunodeficiency Syndrome</td>
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<tr>
<td>ART</td>
<td>Antiretroviral Treatment</td>
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<tr>
<td>CBO</td>
<td>Community Based Organisation</td>
</tr>
<tr>
<td>CSDH</td>
<td>Commission on the Social Determinants of Health (WHO)</td>
</tr>
<tr>
<td>dplg</td>
<td>National Department of Provincial and Local Government</td>
</tr>
<tr>
<td>FMSP</td>
<td>Forced Migration Studies Programme</td>
</tr>
<tr>
<td>GKN</td>
<td>Globalization Knowledge Network (of the CSDH)</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>IOM</td>
<td>International Organization for Migration</td>
</tr>
<tr>
<td>KNUS</td>
<td>Knowledge Network on Urban Settings (of the CSDH)</td>
</tr>
<tr>
<td>MRC</td>
<td>Medical Research Council</td>
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<tr>
<td>NGO</td>
<td>Non-governmental Organisation</td>
</tr>
<tr>
<td>NSP</td>
<td>National Strategic Plan for HIV &amp; AIDS and STIs</td>
</tr>
<tr>
<td>SDH</td>
<td>Social Determinants of Health</td>
</tr>
<tr>
<td>SDUH</td>
<td>Social Determinants of Urban Health</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmitted Infection</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<tr>
<td>UN-HABITAT</td>
<td>United Nations Human Settlements Programme</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Research question

Given the developmental mandate of local government in South Africa (The Republic of South Africa, 1998a), how should local government respond to the urban challenges of migration and informal settlements in the context of high HIV prevalence?
Aim and objectives

Research aim

Based on a review of the literature and the synthesis of four studies conducted in Johannesburg, the PhD aims to generate a revised approach to urban health that will assist local government respond to the persistent urban challenges of migration and informal settlements within a context of high HIV prevalence.

Research objectives

(1) To undertake a review of international, national and local literature to explore the role of local government in developing country urban settings in responding to the interlinked urban health and developmental challenges of migration and informal settlements within a context of high HIV prevalence;

(2) To review existing approaches to urban health, including urban health frameworks, and to assess their applicability to developing country urban settings;

(3) To conduct and analyse four studies within Johannesburg that explore local government responses to the interlinked challenges of migration and informal settlements within a context of high HIV prevalence; and

(4) To apply the findings of these four studies to the review of existing approaches to urban health in order to generate a revised approach to urban health in Johannesburg.
Background: setting the scene

In this section, I will “set the scene” for my research, by providing an overview of the complexity of developing country urban contexts, focussing on Sub-Saharan Africa, and on my case study: the (in)famous city of Johannesburg, South Africa (see Map 1). I will outline what I consider to be the key challenges facing those responsible for ensuring – and sustaining – the good health of urban populations in developing countries. These key challenges have been identified through (1) a review of the literature and (2) the four studies that form this PhD research. The four studies draw on a range of urban experiences – focussing on poor urban non-migrant and migrant (internal and cross-border) groups residing in diverse urban spaces that span across the city: from the central city through to the periphery, and engage with residents of both formal and informal housing. The findings from the four studies are used in later sections of the thesis to critique existing urban health frameworks. Findings from the four studies lead me to argue that existing frameworks are unable to engage adequately with the complexities of specific developing country urban contexts. In particular, I will go on to argue that current frameworks do not deal adequately with what I consider to be the key – and interlinked - challenges of migration and informal settlements in a context of high HIV prevalence. A central limitation of the existing frameworks is that - by definition - frameworks provide “an oversimplification of a complex reality and should be treated merely as a guide or lens through which to view the world” (Rakodi, 2002: 8). As a result, the existing frameworks lack adequate suggestions for where and how to intervene in order to improve the health of a specific urban population, and cannot provide guidance about who should intervene. Findings from the four studies highlight the complexity of a specific developing country urban context, and have informed the development of a revised approach to urban health. This revised approach provides an analytical and participatory tool that aims to assist local government in identifying the challenges and opportunities within their specific context. This will enable local government to act in a developmental way in order to identify who should respond, where to respond, and how to respond to the interlinked health and development challenges of migration and informal settlements, within a context of high HIV prevalence.

In this research, I define developing countries as those that present a set of six central development challenges to local governments. These are presented in detail in a later part of the background section (see Table 2). These challenges are: (1) urban inequalities; (2) migration; (3) informal settlements; (4) urban HIV prevalence; (5) a concentration of residents with “weak rights to the city” (Balbo & Marconi, 2005: 13) ; and, (6) a dependency of survivalist livelihoods.
Urban health

Understanding how to ensure and sustain the public health of urban populations is of increasing importance as over half of the world’s population is now urban (Harpham, 2009; UNFPA, 2007). Ensuring good health presents many challenges within the complex urban contexts of developing countries (for example, see Barten, Mitlin, Mulholland et al., 2008; Galea & Vlahov, 2005; Harpham, 2009; Harpham & Molyneux, 2001; Harpham & Tanner, 1995; Rossi-Espagnet, 1983; Thomas, 2006; Waelkens & Greindl, 2001). These challenges will be described below, and include: rapid, unplanned urban growth; the migration of

\[\text{\footnotesize{\textsuperscript{3}}It is important to recognise that whilst there is agreement that the global urban population is increasing, there is debate around the model of urban growth predications employed by the UN (Bocquier, 2008). According to Bocquier, this is because the model used by the UN assumes that all countries will eventually achieve the same high level of urbanisation, yet there is no historical verification to support this assumption (2008). The result, as suggested by Bocquier, is that projections of urbanisation have been overestimated. However, even if absolute projections are overestimated, the proportion of urban poor is likely to remain the same – or even increase – when the process of urbanisation stabilises.}\]
people to cities – from both within a country and across borders; inadequate tenure and housing opportunities, resulting in increases in urban informal settlements; the context of urban poverty, with expanding numbers of recently urbanised migrant residents adding to the urban poor; higher HIV prevalence than in rural areas; and, increasing intra-urban inequalities that contribute to disparities in the health of developing country urban populations (Dyson, 1993; Freudenberg, Galea, & Vlahov, 2005; Garcia-Calleja, Gouws, & Ghys, 2006; Harpham & Molyneux, 2001; Montgomery, 2009; UN-HABITAT, 2003; UNFPA, 2007; WHO, 2008b, 2008a). These disparities in health outcomes are experienced by urban poor groups\(^4\), who tend to be concentrated in unhealthy spaces in the city (for example see Hardoy, Mitlin, & Satterthwaite, 2001; Mitlin & Satterthwaite, 2004b; Vlahov, Gibble, Freudenberg, & Galea, 2004; WHO, 2005, 2008b, 2008a). It is essential to acknowledge that research and interventions that aim to improve the health of urban poor groups, take place in a context where “many countries do not welcome urbanization, and urban poverty remains largely unaddressed” (Garau, Sclar, & Carolini, 2005: 13).

Cities of the world vary greatly (for example, see Taylor, Walker, Catalano, & Hoyler, 2002). This research makes use of Johannesburg as an example of a developing country urban context; itself a unique urban space. I will now go on to describe the factors that I argue make Johannesburg unique. Whilst Johannesburg does not represent all developing country urban contexts, I believe that this thesis considers issues that are reflected in other, similar urban centres. In the following sections, I will explore how these factors intersect to produce the unique reality of Johannesburg, and what the implications of these factors are for a revised approach to urban health.

**Urbanisation**

“…perhaps unfortunately for the current science, there are multiple and inconsistent definitions of both urbanization and urban. An appreciation of this complication is essential to understanding how urbanization may affect human health. It is generally accepted that urbanization is the process of becoming urban, and it reflects aggregate population growth in cities, be it through natural population increase or migration.”

(Galea & Vlahov, 2005: 353)

\(^4\) I will define what I consider to be “urban poor groups” later in this background section.
Despite the lack of a universal definition for the terms ‘urban' and ‘urbanisation' (WHO, 2008a), there is agreement that urban growth will continue, and the rate of urban growth is predicted to be greatest in lower income countries, with the urban population in Africa set to double between 2000 and 2030 (UNFPA, 2007). Urbanisation has been shown to be important for economic development. Bocquier explains that

“No developed country is poorly urbanised; no developing country can expect to improve its economic position without urbanisation. We should stop thinking of urbanisation as external to development: urbanisation is development” (2008: iii).

However, as will be highlighted below, whilst the benefits of urbanisation to economic development have been observed at the macro-level, recent studies have challenged the notion of an urban advantage to development at the micro-level, (Bocquier, 2008). Within the global north, rapid urban growth was associated with overall reductions in mortality, fertility and poverty, and associated with major economic progress and improvements in living conditions in urban areas. In contrast, urbanisation in developing countries has been more recent, more rapid and has not been accompanied by the same levels of economic growth. As a result, within the context of developing countries, it is anticipated that the developmental gains of urbanisation will come more slowly. Bocquier (2008) suggests two key reasons for this: (1) the proportion of informal settlement residents may increase; and (2) the total proportion of the population that becomes urban may be lower than anticipated. Whilst this may have benefits (such as reducing the growth of urban informal settlements), fewer individuals will have the opportunity to experience the benefits associated with urban life (Bocquier, 2008). Bocquier concludes by warning that “urbanisation trends will not solve the current inequality dilemma, and the world might actually end up more unequal twenty years down the road” (2008: v). It is important to consider that present urbanisation, and current economic development in the global South does not necessarily result in a developmental benefit to urban poor groups and efforts to address the inequalities typical of developing country cities will need to be increased. Urbanisation is recognised as a determinant of health (WHO, 2008a); urban change affects the health of populations.

Urbanisation in South Africa is taking place at a faster rate than other African countries, with almost 60% of the South African population already urban (Kok & Collinson, 2006).
Johannesburg is a young city, established during the 1880s when gold was discovered. In just over 120 years, the city has grown to form what is now the economic hub of Sub-Saharan Africa. Home to an estimated 3.9 million residents, the City predicts that the population will reach 4.2 million by 2010, increasing by a further 1 million people by 2015 (City of Johannesburg, 2008). This translates to an average growth rate of 4.16% per year, higher than other urban areas in the country (City of Johannesburg, 2008).

**Migration**

Urbanisation is associated with a high frequency of migration to urban hubs: this includes rural-to-urban migration, circular labour migration, and movement across borders by those seeking asylum (Garenne, 2006). Sub-Saharan Africa is a region that is long associated with the movement of people; since the end of apartheid, migration patterns into South Africa have shifted, and previously “forbidden cities” (Landau, 2005a: 1115) such as Johannesburg have become a destination for people from across the country, the continent, and beyond. As a “city of migrants” (Crush, 2005: 113), Johannesburg has always been a cosmopolitan centre, home to a heterogeneous population of migrants, many of whom come from within South Africa (internal migrants) (Beavon, 2004). A 2002 survey highlighted the internal movements of South African citizens: 68% of inner-city residents (three-quarters of whom were South African) had moved to their household in the last five years (in Landau, 2006a). Map 2 below shows the distribution of internal migrants within urban areas across South Africa, highlighting their concentration within Gauteng province of which Johannesburg is a part. It is estimated that almost 35% of Johannesburg’s residents were born in a province outside Gauteng (UNOCHA & FMSP, 2009). As will be described below, Johannesburg is also home to a concentration of cross-border migrants.

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5 In this research, ‘City’ refers to the City of Johannesburg Municipality.

6 During apartheid, cities were ‘off-limits’ to most black South Africans, who required special permission and permits in order to enter the city.
International migration

Globally, 200 million people are estimated to be international migrants (those who have crossed borders), equating to roughly 3% of the world's population (Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 2005; The Global Commission on International Migration, 2005). The African continent is typified by diverse migration configurations, including internal and cross-border movements, and is home to 9% of the world's international migrant population (Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 2005; Zlotnick, 2006). It is estimated that there are 17 million international migrants across Africa (18% of whom are estimated to be refugees), accounting for less than 2% of the total African

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7 Thematic data source: Stats SA, 2001 Population Census. Geographic data source: Municipality Demarcation Board of South Africa, 2001. NOTES: (1) Stats SA only provides a 10% sample of the Census, but the data have been weighted according to their recommendations. (2) Since the data relate to the Census 2001, Province and District Municipality boundaries reflect the 2001 administrative sub-division of the country. For this reason, some of the District Municipalities have cross-boundaries in two different provinces.
population (Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 2005). Although considered by many to be the main migrant receiving area in the continent, the southern African region is home to just 9% of Africa’s international migrant population, with approximately 3% of the region’s population estimated to be international migrants (Zlotnick, 2006).

Whilst popular estimates of the international migrant population within South Africa vary considerably, analysis of national census and community survey data suggest that there are approximately 1.6 million international migrants in South Africa, which equates to 3.4% of the total South African population (CoRMSA, 2009). International migrants in South Africa tend to be concentrated in urban areas, as highlighted in Map 3 below. The highest proportion lives in Johannesburg and its adjacent municipalities.

Map 3: Map showing percentage of international migrants living in urban settlements by district municipalities

(UNOCHA & FMSP, 2009)

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NOTES: (1) Stats SA only provides a 10% sample of the Census, but the data have been weighted according to their recommendations. (2) Since the data relate to the Census 2001, Province and
It is estimated that 6.7% of Johannesburg’s total population are international migrants (UNOCHA & FMSP, 2009). While rigorous data on such ‘hidden’ migrant populations is scarce (Banati, 2007; Jacobsen & Landau, 2003; Vigneswaran, 2007), particularly within urban areas (Jacobsen, 2006), a 2002 survey found that almost a quarter of Johannesburg’s inner-city residents were born outside South Africa (Leggett, 2003). More recent survey data suggests that in certain inner-city neighbourhoods, over half of the residents are non-nationals (Landau, 2006a and Paper IV). These findings show that cross-border migrants are concentrated in particular spaces in the city. I will go onto explore how place impacts the urban experiences of different migrant groups, depending on where they enter and settle in the city (see Paper IV). This is achieved by comparing the experiences of different urban groups residing in the central city and on the periphery.

There are different categories of international migrants present in South Africa, with many possessing a range of temporary visitor permits including work and study permits. A small number are refugees and asylum seekers: individuals who have been forced to flee their own countries and are seeking safety in South Africa. In accordance with the South African Constitution’s commitment to human rights and dignity, South Africa has a refugee policy that facilitates individuals’ freedom and protection through enabling the temporary integration of refugees into local communities (Landau, 2006b). Unlike other countries in the region, no refugee camps exist in South Africa and many refugees and asylum seekers find themselves in complex urban environments such as Johannesburg. These individuals are assured the right to access existing welfare services, such as healthcare. Refugees and asylum seekers within South African cities are expected to become self-sufficient by earning a living and temporarily integrating within the host community (Landau, 2006b). However, a restrictive immigration policy (The Republic of South Africa, 2002, 2004) makes it difficult for low and moderately skilled labour migrants to legalise their stay in South Africa,
sometimes encouraging such individuals to make use of the asylum process as a “backdoor” to legalising their stay in South Africa (Crush & Dodson, 2007; Landau, 2005b). It is possible for highly skilled workers to apply for permanent residence but others are excluded, often criminalised, and often unable to access social services, and risk detention and deportation (Landau, 2005b). The result is a large population of undocumented cross-border migrants, who are exposed to the risk of arrest, detention and deportation (Vigneswaran, 2008) and - being undocumented - struggle to access basic services, including healthcare (for example, see CoRMSA, 2009).

While the policy set out by South Africa’s immigration acts is progressive, and various acts10 exist to afford many rights to refugees, implementation remains challenging (Bailey, 2004; Landau, 2006b). Despite protective policies, international migrants in the city regularly experience limited access to required documentation, health and social services, and economic, social and physical opportunities (Bailey, 2004; CoRMSA, 2009; Crush, 2005; Jacobsen, 2006; Landau, 2006b, 2006a; Landau, 2007; Pursell, 2006; Vearey, 2008). In 2008, a series of violent attacks against non-nationals highlighted the xenophobic tensions present within South Africa (Misago, Landau, & Monson, 2009). It is argued that local governments are not currently responding adequately to migration in urban areas.

“The consequences of ineffective and inappropriate responses to migration include economic losses, threats to security and health, low degrees of social capital, and less liveable cities. Rather than ensuring that all city residents participate in planning processes and have access to markets, accommodation and critical social services, discriminatory practices are creating an underclass comprised of non-citizens from throughout the continent and domestic migrants who may be similarly excluded.”

(Landau & Singh, 2008: 187)

In summary, internal migration of South Africans into Johannesburg is taking place at a higher rate than cross-border migration into the city. A small number of cross-border migrants are asylum seekers and refugees, protected by the Refugee Act (The Republic of South Africa, 1998c). The majority of cross-border migrants are governed by the

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Immigration Act (The Republic of South Africa, 2002, 2004), experience challenges in legalising their stay, and as a result are undocumented (Landau, 2006b; Vigneswaran, 2008). It is this undocumented cross-border migrant population that experience the most challenges in accessing public healthcare services and good quality living environments Johannesburg (CoRMSA, 2009).

Different migrant groups are found to enter and settle in the city in different ways - with cross-border migrants concentrated in the central-city - resulting in different urbanisation experiences (see Paper II and IV, for example). Urban informal settlements are recognised as being important for many migrant communities (Banati, 2007); these informal areas are found to act as entry points for many internal, rural migrants seeking employment opportunities within the city (see Paper IV, for example). The different urbanisation experiences that are associated with ‘place’ in the city (the central-city or the periphery) are associated with different health consequences; ‘place matters’ when developing urban health responses (Paper IV). I will now go onto discuss the challenges that urban informal settlements present to local government.

**Urban informal settlements**

“The need for illegal occupation of land and informal dwelling arrangements stems from a deep marginalisation and exclusion from formal access to land and development. Informality has made possible the survival of a large percentage of the urban population, enabling a range of precarious livelihoods. The way informality does this is not compatible with formal processes.”

(Huchzermeyer & Karam, 2006: 4)

Migration and urban growth place pressure on well-located and adequate urban housing. As a result, as developing country cities continue to grow, so too do urban informal settlements11 (Bocquier, 2008; Cohen, 2006). The process of urbanisation “… promotes inequities through the expansion of deprived settlements and the inability of municipal

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11 In this research, the term ‘informal settlement’ is used to describe unplanned settlements, this definition does not include other forms of informal housing - such as backyard shacks on the property of formal houses (Huchzermeyer, 2004: 148). The term ‘informal settlement’ is used over ‘slum’ as it is argued that the term ‘slum’ “confuses the physical problem of poor quality housing with the characteristics of the people living there” (Gilbert, 2007: 697). However, the UN agencies continue to use the term ‘slum’.
authorities to respond to the growing demands of an increasing population for basic social and environmental amenities” (Konteh, 2009: 70 - 71). One billion people are estimated to reside in urban informal settlements globally and within Sub-Saharan Africa, almost three-quarters of the urban population resides informally (UN-HABITAT, 2003). It is well documented that residents of informal settlements experience poor health outcomes (David, Mercado, Becker, Edmundo, & Mugisha, 2007; Hardoy, Mitlin, & Satterthwaite, 2001; Vlahov, Freudenberg, Proietti, Ompad, Quinn, Nandi et al., 2007; WHO, 2005), particularly in a context of HIV (Ambert, 2006; Ambert, Jassey, & Thomas, 2007; Thomas, 2006).

Of the estimated 2.4 million households in South Africa (16% of the total population) residing in informal settlements nationally (Leibbrandt, Poswell, Naidoo, & Welch, 2006; SACN, 2006) just over 1 million households are located in the nine major cities of South Africa (Del Mistro & Hensher, 2009). As Huchzermeyer explains, “the officially unplanned, illegal occupation of urban and peri-urban land for residential purposes is an ongoing phenomenon of South African towns and cities” (Huchzermeyer, 2004: 3). The City of Johannesburg estimates that one quarter of the city’s residents reside informally within and on the edge of urban areas (City of Johannesburg, 2008).

Informal settlements have received attention in recent years, through the United Nations Millennium Development Goals (MDG) (United Nations, 2000). This links to the “Cities Without Slums” target of MDG 7. Target 11 states: “By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers”. Whilst the attention drawn to informal settlements is welcomed, there is a need for caution when considering how the MDGs are interpreted; in South Africa, the MDG target has been (mis)interpreted as the ‘eradication of informal settlements’ (for useful discussion, see Huchzermeyer, 2006; Huchzermeyer & Karam, 2006).

12 “Eradicating extreme poverty continues to be one of the main challenges of our time, and is a major concern of the international community. Ending this scourge will require the combined efforts of all, governments, civil society organizations and the private sector, in the context of a stronger and more effective global partnership for development. The Millennium Development Goals set timebound targets, by which progress in reducing income poverty, hunger, disease, lack of adequate shelter and exclusion — while promoting gender equality, health, education and environmental sustainability — can be measured. They also embody basic human rights — the rights of each person on the planet to health, education, shelter and security. The Goals are ambitious but feasible and, together with the comprehensive United Nations development agenda, set the course for the world’s efforts to alleviate extreme poverty by 2015.” (United Nations Secretary-General BAN Ki-moon)
“While ‘poverty eradication’ is clearly related to measures to improve the well-being of the poor, the ‘eradication of informal settlements’ can be misunderstood as a blanket mandate to remove shacks, in the absence of solutions that eradicate poverty, remove vulnerability and promote inclusion.”

(Huchzermeyer, 2006: 44)

In the South African context, interventions within informal settlements have been guided by market-driven mechanisms for the delivery of housing (such as government subsidised housing, Huchzermeyer, 2004). This materialises in informal settlement residents being relocated to ‘greenfield’ sites, rather than the re-planning and upgrading of settlements in situ. Such processes ignore “existing community organisation, collective and individuals ideas for improvement, and fragile livelihoods depending on the informally established land-use pattern and inter-household ties… have largely been overridden by the mandate to deliver standardised units” (Huchzermeyer, 2004: 3). It has been difficult to implement subsidy-funded interventions that could build on – and strengthen – existing community structures and ideas (Huchzermeyer, 2004). In 2004, a new housing policy “Breaking New Ground” was unveiled; for the first time, an informal settlement upgrading policy was included, emphasising in situ upgrading (Department of Housing, 2004). However, five years on, in situ upgrading is lacking (Huchzermeyer, 2009).

“The funding available for land rehabilitation allows for creative responses through in situ upgrading. However, these will be limited by engineering knowhow and creativity, a paradigm shift among civil engineers been called for as much as among planners and project managers…… Where municipalities are not willing to explore such solutions, an increasingly informed civil society will be calling for innovative measures, taking their rightful position as active participants in the ‘design, implementation and evaluation of projects’.”

(Huchzermeyer, 2006: 50)

13 For example, the organisation Abahlali baseMjondolo, the South African shack dwellers movement, was established in early 2005. Abahlali baseMjondolo is the largest social movement of the poor in post-apartheid South Africa. The movement’s key demand is for ‘Land & Housing in the City’ but it has also successfully politicized and fought for an end to forced removals and for access to education and the provision of water, electricity, sanitation, health care and refuse removal as well as bottom up popular democracy. Amongst other victories the Abahlali have democratized the governance of many settlements, stopped evictions in a number of settlements, won access to schools and forced numerous government officials to ‘come down to the people’. For more information, visit http://www.abahlali.org
In summary, one quarter of Johannesburg’s residents are estimated to reside in urban informal settlements (City of Johannesburg, 2005). Informal settlements currently experience a poor realisation of upgrading and require a developmental response from local government to address their basic service needs. In addition to the upgrading and basic service needs of urban informal settlements, they are also found to have high HIV prevalence; South African informal settlements have double the HIV prevalence of other urban areas (Shisana, Rehle, Simbayi et al., 2005). I will now turn to consider HIV from a developmental perspective, highlighting that developmental responses are urgently required from local government in order to address both the determinants of vulnerability to HIV, and the impact of HIV. This requires recognition that responses to HIV encompass more than health service delivery alone.

**HIV**

Sub-Saharan Africa is the region most affected by HIV globally; home to just 10% of the world’s population, it has almost 70% of all people living with HIV (UNAIDS, 2008). HIV in Sub-Saharan Africa is increasingly associated with urban areas (Dyson, 1993; Garcia-Calleja, Gouws, & Ghys, 2006; Montgomery, 2009), and urban informal settlements in particular (Kyobutungi, Ziraba, Ezeh, & Ye, 2008; Shisana, Rehle, Simbayi et al., 2005). Latest estimates from UNAIDS suggest that in Southern and Eastern Africa, 28% of people living with HIV are found in the fourteen major metropolitan areas of the region (van Renterghem & Jackson, 2009); highlighting that – in addition to the range of additional urban health risks - HIV is a central urban health and development challenge.

AIDS was first recorded in South Africa in 1983, and was initially identified within men who have sex with men and people receiving unsafe blood transfusions (Abdool Karim, 2005). By the 1990s, heterosexual sex had become the dominant mode of HIV transmission, accompanied by perinatal transmission of HIV (Abdool Karim, 2005). South Africa is now home to the largest population of people living with HIV globally - 5.7 million people were estimated to be living with HIV in 2008 (WHO/UNAIDS, 2008).
“The introduction of HIV to a society in political transition was one of the most peculiar vulnerability factors in this country. The transition from apartheid comprised undoing years of one of the most systematic and cruel forms of oppression of a people seen in the world – It is this history that has rendered the majority of the population, who had poor access to information and resources, at risk for HIV infection.”

Barbara Hogan, Former Minister of Health, speaking at The HIV Vaccine Research Conference, Cape Town, 13th October 2008

In 2009, national HIV prevalence is estimated at 10.9% with urban prevalence higher than in rural areas (Shisana, Rehle, Simbayi, Zuma, Jooste, Pillay-van-Wyk et al., 2009). Within South Africa, 50.5% of all people living with HIV are estimated to reside in four cities and as a province, Gauteng is estimated to be home to just over 1.5 million people living with HIV (van Renterghem & Jackson, 2009). South African urban informal settlements have double the HIV prevalence of urban formal areas; 25.6% compared to 13.9% for adults aged 15 – 49 years (Shisana, Rehle, Simbayi et al., 2005). South Africa began to roll-out a national antiretroviral treatment (ART) programme in the public health sector in April 2004. In 2008 only 28% of those in need of ART were able to access treatment, with 1.7 million people requiring immediate access to treatment in South Africa (WHO/UNAIDS, 2008).

HIV impacts individuals, households, and broader development through its impact upon the livelihood strategies of households. It is recognised that chronic and debilitating sicknesses - such as those that may be associated with HIV or AIDS – present an initial shock, followed by a long-wave stress, on the livelihood strategies of individuals and their households (Barnett & Whiteside, 2002).

“Shocks are acute events, such as specific episodes of violence or illness; stresses are chronic, longer-lasting situations, which include the pressure to provide for others (including the sending of remittances), hunger, the fear of violence (such as related to xenophobia), or unemployment. HIV is considered a stress in as much as it is a long-wave event (Barnett, 2006). The presence of HIV within an urban environment presents a range of stresses to city residents; if an individual is HIV-positive, the living environment can impact negatively on an individual’s health and access to treatment or counselling and the related continuum of care that are required.”
In this research, HIV is considered to be a central development challenge. Whilst addressing HIV is not specifically mandated to local government\textsuperscript{14}, its developmental mandate means that local government can (and must) take action on the determinants that increase vulnerability to HIV, and on the impacts of HIV. Viewing HIV as a central development challenge requires local government to “get the basics right” in order to ensure the provision of basic services (including healthcare) in order to address both vulnerability to, and the impact of, HIV infection (Ambert, 2006; Ambert, Jassey, & Thomas, 2007; Thomas, 2006). This is of particular importance within urban informal settlements.

The current South African National Strategic Plan (NSP) for HIV & AIDS and STIs signalled a welcome shift in HIV policy, with recognition of the importance of “mobility and labour migration” and informal settlements (NDOH, 2007). A key guiding principle to the successful implementation of the 2007 – 2011 Plan is towards “ensuring equality and non-discrimination against marginalised groups”; refugees, asylum seekers and foreign migrants are specifically mentioned as having “a right to equal access to interventions for HIV prevention, treatment and support” (NDOH, 2007: 56). Importantly, Priority area 4 of the Plan reinforces human rights and access to justice, with goal 16 being to ensure “public knowledge of and adherence to the legal and policy provision” (NDOH, 2007: 119). However, despite the NSP identifying the needs of vulnerable groups (including migrants and residents of informal settlements), guidelines are lacking to assist implementation at the local level.

Whilst this research is focussed on the challenge of HIV in urban contexts, it is important to reflect on the connections between migration and HIV. Linkages between migration and the spread of HIV have been demonstrated (Anarfi, 2005; Banati, 2007; Lurie, 2000). Migration has been shown to increase vulnerability to HIV – both for migrants and their partners who remain behind (Anarfi, 2005; IOM & UNAIDS, 2003; Lurie, Williams, Zuma, Mkaya-Mwamburi, Garnett, Sturm et al., 2003; UNAIDS, 2001). It has been shown that it is the

\textsuperscript{14} Only the nine metropolitan municipalities (including the City of Johannesburg) are responsible for the provision of primary health care; other local governments have no health provision function. Local governments are not responsible for the provision of ART; this is the responsibility of provincial governments. At present, no government sphere is specifically mandated to address HIV prevention.
conditions associated with the migration process that affect the vulnerability of individuals to HIV, rather than being a migrant per se (Banati, 2007; IOM & UNAIDS, 2003; UNAIDS, 2001). However, it is important to emphasise the bi-directionality of migration and HIV infection; a prospective study conducted in rural South Africa showed that in almost one third of discordant couples, it was the female partner who ‘remained at home’ that was infected with HIV (Lurie, 2006; Lurie, Williams, Zuma et al., 2003). In mature epidemics, such as found in countries within Sub-Saharan Africa, the process of circular migration between rural and urban areas are no longer thought to contribute to the spread of HIV (Coffee, Lurie, & Garnett, 2007; Mundandi, Vissers, Voeten, Habbema, & Gregson, 2006).

Having outlined a number of the factors associated with the health of urban communities – in particular migration, informal settlements and high HIV prevalence – I will now go onto discuss the role of local government in addressing these urban health concerns.

**Responding to urban health: a focus on the role of developmental local government**

Whilst urban growth is recognised as impacting negatively on urban poor groups (due to exacerbating economic, environmental and health challenges), cities should be able to respond effectively (Bocquier, 2008). This research focuses on the role and responsibility of local government in addressing the urban health needs of its residents. It is important to recognise that only in the nine South African metros (including the City of Johannesburg) is local government responsible for the provision of primary healthcare services and environmental health. In other contexts, these are the responsibilities of provincial government.

This research focuses on local government for two key reasons. Firstly, local governments experience the impact and effects of migration, informal settlements and a high HIV prevalence; “…it is local governments and service providers who must channel resources to those in need, and translate broad objectives into contextualised and socially embedded initiatives” (Landau & Singh, 2008: 177). It is essential that local government is able to respond to these challenges in an integrated way.
“Although each sphere of government has jurisdiction over the specific powers and functions assigned to it by legislation, these must be performed in a cooperative, collaborative and co-ordinated manner. Local Governments are the point of integration and co-ordination, vertically and horizontally. IDPs\(^{15}\) are intended to be the planning instrument to promote this integration and co-ordination between the spheres and sectors of government.”

(dplg, 2007: 21)

Secondly, South African local government has a ‘developmental mandate’ - a “local government committed to working with citizens and groups within the community to find sustainable ways to meet their social, economic and material needs and improve the quality of their lives” (The Republic of South Africa, 1998a: 23). It is essential to understand that “the centrepiece of developmental local government is the Integrated Development Plan (IDP)” (Pillay, Tomlinson, & du Toit, 2006: 15); “The IDP is prepared by local, district and metropolitan municipalities for a five-year period which coincides with the term of the elected council. It is primarily a plan concerned with directing and coordination the activities of an elected municipal authority” (Harrison, 2006: 186). The IDP is a participatory process that provides a “long-term vision for a municipality”\(^{16}\) and is designed to assist local government in promoting economic and social development (Pillay, Tomlinson, & du Toit, 2006: 15). Through the IDP process, the developmental mandate requires local government to \textit{inter alia} address the challenges of urban growth, migration, informal settlements and HIV, as outlined in the previous sections (Bocquier, 2008; dplg, 2007; Landau & Singh, 2008; Landau, 2007; MRC, INCA, & dplg, 2007). Importantly, a ‘developmental mandate’ highlights the need to establish partnerships across local government departments; achieving this

“…means thinking beyond the narrow confines of a set of delinked service sectors. The White Paper explicitly recognises that South African municipalities, like

\(^{15}\) Integrated Development Plans.

\(^{16}\) “IDPs provide a long-term vision for a municipality; detail the priorities of an elected council; link and coordinate sectoral plans and strategies; align financial and human resources with implementation needs; strengthen the focus on environmental sustainability; and provide the basis for annual and medium-term budgeting” (Pillay, Tomlinson, & du Toit, 2006: 15). For a useful critique of the IDP Process, see Harrison, 2006.
counterparts in other parts of the world, are responsible for managing space occupied by people: the challenge was no longer only how to provide a set of services, but how to transform and manage settlements that are amongst the most distorted, diverse, and dynamic in the world.”

(Landau & Singh, 2008: 169)

However, major challenges in implementing the developmental mandate of local government have been reported, in part due to the complexity of the mandate and in part due to a lack of skills, capacity and funding within local government (Harrison, 2006; Landau & Singh, 2008; Nel & John, 2006). A key challenge is that local government may lack the tools and information required to respond appropriately (Landau & Singh, 2008). For example, when attempting to plan appropriate responses to migration and to create an ‘inclusive city’ local government requires guidance on what this means, and data on migration to plan appropriate responses (Landau & Singh, 2008; Tomlinson, Beauregard, Bremner, & Mangcu, 2003).

“In addition to a lack of information about population dynamics, local governments are impeded in developing effective responses by lack of coordination – and competition – among government entities and poor performance on the part of the Department of Home Affairs, the Department that issues visas and identity documents to foreigners and South Africans. The problems of information, coordination, and institutional capacity become most visible at the intersection between HIV/AIDS and human mobility.”

(Landau & Singh, 2008: 183)

Despite local government having a ‘developmental mandate’ and both migration and informal settlements being included in the current NSP, guidance for how to intervene in order to address the interlinked challenges of migration and informal settlements in areas with high HIV prevalence are lacking. Local government is only specifically mentioned in the NSP once; the importance of mainstreaming HIV within local IDPs is emphasised:

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17 For discussion around the meaning and appropriateness of an ‘inclusive city’, see Paper II.
“Local government structures should mainstream HIV and AIDS, TB and STI activities to harmonise with local integrated development plans: issues such as access to transport and poverty alleviation as integral to HIV programmes.”

(NDOH, 2007: 145)

In 2007, the Department of Provincial and Local Government (dplg)\(^\text{18}\) produced a ‘Framework for an Integrated Local Government Response to HIV and AIDS’ (dplg, 2007).\(^\text{19}\) This framework highlights the importance of the IDP process in assisting local governments to respond to HIV in a developmental way (dplg, 2007). To support the implementation of the framework, a Handbook has been developed by the Medical Research Council, in collaboration with INCA and the dplg (MRC, INCA, & dplg, 2007);\(^\text{20}\) “This Framework has been developed by the dplg to assist development and governance role-players and stakeholders understand what contributions we can make in the response to HIV and AIDS” (MRC, INCA, & dplg, 2007: 13). Importantly, the handbook aims to assist local government to “mobilise the voices of HIV and AIDS” (MRC, INCA, & dplg, 2007: 8). Within the handbook, local government has been identified as having four key functions, as shown in Figure 1 below. These functions relate to local government carrying out its mandated duties (“getting the basics right”), as well as enabling, coordinating and connecting other spheres of government to act within their jurisdiction.

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\(^\text{18}\) As of 2009, the dplg has been reassigned as the Department of Cooperative Governance and Traditional Affairs.

\(^\text{19}\) “In line with the mandate assigned to municipalities as part of the vision of developmental local government, municipalities are expected to be active role-players in all efforts to prevent the spread of HIV and to mitigate the negative consequences of AIDS for communities. Municipalities also need to consider the ways in which HIV and AIDS impact on their ability to govern and deliver services effectively. While many municipalities have enthusiastically taken up the mandate to respond to HIV and AIDS, some with notable success, many municipalities have also encountered challenges in terms of knowing how best to direct their efforts and to access technical and financial resources to carry out their HIV and AIDS strategies. The purpose of this framework is therefore to guide local government on how to comprehensively respond to the HIV and AIDS pandemic” (dplg, 2007: 1).

\(^\text{20}\) In mid-2009, whilst the roll-out of the Handbook has been planned, challenges in the appointment of Provincial service providers have delayed the pilot phase.
In order to achieve its developmental mandate, local government requires guidance in developing effective, developmental responses to the interlinked challenges of migration and informal settlements in a context of high HIV prevalence. A review of the literature has enabled me to conclude that existing frameworks do not deal adequately with these challenges (see Results (2), p57). Four studies were then devised to learn more about the relationships between migration and informal settlements in a context of high HIV prevalence, and the role of local government in responding to these interlinked challenges. Reflecting on the synthesis of the findings from the four studies, I have developed a revised approach to urban health. The role of developmental local government and the IDP process are central to this approach. It is anticipated that this revised approach to urban health will assist local government in upholding its developmental mandate in order to improve – and sustain – the health of urban groups.

I will now conclude by describing the other challenges facing local government in responding to urban health in a developmental way. Before I do so, I will summarise what the interlinked challenges of migration and informal settlements in a context of high HIV prevalence mean for developmental local government.
Summary: developmental local government and the interlinked challenges of migration and informal settlements in a context of high HIV prevalence

In the preceding section, I have outlined what I argue to be the central, interlinked challenges that impact urban health. In order to improve the health and health equity of urban populations, local governments need to engage with the interlinked challenges of migration and informal settlements in a context of high HIV prevalence. The developmental mandate of local government is central here, as is the associated IDP process.

Various urban health frameworks have been developed that aim to assist in understanding the impact of city living on urban health, several of which draw on the concept of the social determinants of urban health (SDUH) (Diderichsen, Evans, & Whitehead, 2001; Galea, Freudenberg, & Vlahov, 2005; Solar & Irwin, 2007; Starfield, 2007; WHO, 2008b, 2008a). However, it is argued that none of the existing urban health frameworks deal adequately with the complexities of developing country urban environments. In particular, they fail to consider the interlinked challenges of migration and informal settlements as experienced by urban poor groups in a context of HIV which, as I have argued above, characterise urbanisation in developing contexts.21

As discussed above, urban growth in developing countries is associated with the migration of people from within the country and across borders. At present, local government struggles to respond appropriately to the challenges presented by migration:

“Local government is Constitutionally mandated to create inclusive cities for all residents. International and domestic migration realises important challenges in meeting this mandate. These obstacles are heightened by denial, the lack of policy tools, and a poor understanding of urban populations’ composition, aspirations, and dynamics”.

(Landau & Singh, 2008: 170)

21 A comprehensive review of these frameworks is undertaken in the second part of the Results section.
Urban growth places pressure on appropriate housing, leading to the expansion of informal settlements (Bocquier, 2008). Informal settlements act as entry points to the city for some migrant groups, particularly internal migrants (Banati, 2007). Migration has been shown to increase vulnerability to HIV (Anarfi, 2005; Banati, 2007; IOM & UNAIDS, 2003; Lurie, Williams, Zuma et al., 2003; UNAIDS, 2001); it is the conditions associated with the migration process that affect the vulnerability of individuals to HIV, rather than being a migrant per se (Banati, 2007; IOM & UNAIDS, 2003; UNAIDS, 2001). In South Africa, urban areas have double the HIV prevalence compared to rural areas, and urban informal settlements are found to have the highest HIV prevalence, double that found in more formal urban areas: 25.6% compared to 13.9% for adults aged 15 – 49 years (Shisana, Rehle, Simbayi et al., 2005; WHO/UNAIDS, 2008). Despite the ‘developmental mandate’ of local government, and the recommendations outlined in the NSP, local government lacks guidance in how to respond effectively to the interlinked challenges of migration and informal settlements in a context of high HIV prevalence.

This section has shown (1) that HIV is associated with migration; (2) that urban informal settlements are associated with high HIV prevalence; and (3) that urban informal settlements act as an entry groups for many migrants (particularly internal migrants). Therefore, I have selected four studies that will enable me to explore these relationships in-depth. I will now go onto explore some of the additional factors that I present as typifying the complexity of developing country urban contexts.

The complexity of developing country urban contexts

In the preceding sections, I have identified migration, informal settlements and a high HIV prevalence as central challenges that local government requires guidance in responding to in a developmental way; existing urban health frameworks do not engage with these issues adequately. In addition, a range of other contextual challenges are present. I have identified a set of challenges that I argue typify the complexity of developing country urban contexts. These challenges include: the ‘urban poor’; residents with “weak rights to the city”; a reliance of ‘survivalist livelihoods’; and, urban inequalities and inequities in health. I will now go on to present an overview of these challenges, explaining why any revised approach to urban health must engage with these issues.
The ‘urban poor’

“The lack of acceptance of urbanization has had the most severe impact on the urban poor. Too often poor urban residents, particularly the most recent waves of rural-urban migrants, are treated as a temporary presence on the urban landscape. There is a reluctance to regularize informal patterns of settlement, provide infrastructure and services, or provide alternatives to the ever-present threat of forced eviction.”

(Garau, Sclar, & Carolini, 2005: 14)

This thesis explores the extent to which migrants residing within informal housing, especially those who are infected and affected by HIV, are ‘urban poor’, falling within the peripheries of health and social welfare provision by local authorities. In Johannesburg, the City is presented with a range of challenges associated with household poverty (City of Johannesburg, 2005). According to the 2001 census, 51% of households in the City had an income between R0 and R1,600\(^2\) and households were found to experience challenges in accessing social welfare grants (City of Johannesburg, 2005). It is, however, essential to move away from a purely income-related measure of poverty; levels of income, or consumption, do not reflect levels of access to necessary services, to security, and to good health. To this end, this research builds on Mitlin and Satherwaite’s definition of urban poverty: a concept covering a multitude of “deprivations”, as summarised in table 1 (2004a: 11).

\(^{22}\) In August 2009, R1600 = USD196.
Table 1: Mitlin and Satterthwaite draw on a range of work to generate eight interlinked deprivations that constitute urban poverty

1. Inadequate and often unstable income;
2. Inadequate, unstable or risky asset base;
3. Poor-quality and often insecure, hazardous and overcrowded housing;
4. Inadequate provision of ‘public’ infrastructure (as this increases the health burden);
5. Inadequate provision of basic services, including health services;
6. Limited or no safety net, such as access to grants;
7. Inadequate protection of poorer groups’ rights through the law; and
8. Poorer groups’ voicelessness and powerlessness within political systems and bureaucratic structures.

(Mitlin & Satterthwaite, 2004a: 15)

Linked to this definition, Rakodi usefully defines deprivation as occurring “... when people are unable to reach a certain level of functioning or capability” (Rakodi, 2002: 5). In this paper, it is argued that these deprivations are “interlinked” – representing the complexity of the urban context. This broader definition of poverty - of “interlinked deprivations” - allows for the conceptualisation of approaches that tackle the needs of poor people, and highlights the complex interplay of a range of factors – including urbanisation experiences, health, environment and development - present within urban contexts. Importantly, this definition generates many possible entry points for tackling poverty and inequality, allowing for innovative, integrated programme and policy responses at the local level. In the context of developing country urban environments, HIV is argued to contribute an additional deprivation to ‘urban poor’ groups. The findings presented assist in understanding migration patterns, urbanisation experiences, and will show that different urban poor migrant groups experience different sets of “interlinked deprivations” depending on where they enter and settle within the city (see Paper IV).

Weak rights to the city

Developing country urban contexts can be characterized by large numbers of residents living with “weak rights to the city” (Balbo & Marconi, 2005: 13). In this research, this links to the challenges that many poor, urban non-migrant and migrant groups (both internal and cross-border) experience in realising their rights to access public healthcare, social services, employment, housing, and secure tenure (see Paper IV for example). This research has
engaged with the protective policies in place that assure residents access to basic healthcare, housing and services. However, in this research, weak rights have been identified in various ways. The original papers present and discuss these challenges in detail. Cross-border migrants experience challenges in accessing their right to basic healthcare and ART (Papers I, III). Residents of informal settlements experience challenges in access to adequate housing, basic services (such as water, sanitation and refuse collection) and healthcare (Papers IV, V). Internal migrants, who are found to reside in hostels and informal settlements in the inner-city, struggle to claim their rights to secure livelihoods, basic services and adequate housing (Paper II).

**Survivalist livelihoods**

The livelihoods of the poor are determined by the context in which they are located, and the opportunities and constraints that this context provides. The context (economic, environmental, social, political) determines the assets that individuals are able to access, how they use them, and therefore their (in)ability to obtain a secure livelihood (Meikle, 2002). Urban livelihoods are particularly distinct as a result of the specific complexities presented within a complex urban context (Meikle, 2002). High levels of unemployment aggravate the inequalities experienced within the city, and the number of those without access to a secure livelihood continues to grow (Beall, Crankshaw, & Parnell, 2002). Although migrants may typically struggle to access a secure, formal urban livelihood, it is important to recognise that informal livelihood opportunities in urban areas exceed employment opportunities in rural areas in South Africa (for example, see Cornwell & Inder, 2004).

Individuals working within the informal economy within South African cities are considered among the most marginalised: dependent on ‘survivalist’ activities, they are mostly African, female and young, and therefore susceptible to HIV infection (Vass, 2003). Survivalist livelihood strategies are complex; whilst contributing to immediate survival, they are marginalised, vulnerable and very limited (de Swardt, Puoane, Chopra, & du Toit, 2005). There is a need to explore the survivalist livelihood strategies of urban poor groups, in order to conceptualise how to support these livelihoods, and the health of urban poor groups; this requires consideration of the structural factors underlying poverty, particularly around the vulnerability of livelihoods (Du Toit, 2005). Paper I reports on the impact of access to ART
on the ability of cross-border migrants living with HIV to maintain (or regain) their survivalist livelihood strategies.

Urban inequalities and inequity in health

The Gini coefficient is used to measure equality; a Gini coefficient of 0 indicates perfect equality, and a Gini coefficient of 1 indicates perfect inequality. African cities have very high inequalities, as displayed in Figure 2 below.

**Figure 2: Average Gini coefficient of selected cities by region**

(Figure adapted from UN-HABITAT, 2008: 63)

South African cities are the most unequal in the world, with an average Gini coefficient of 0.73; Figure 3 displays the Gini coefficients of selected South African cities (UN-HABITAT, 2008). Johannesburg (with East London) is shown to have the highest Gini coefficient, of 0.75 (UN-HABITAT, 2008). This makes Johannesburg one of the most unequal cities globally.
Figure 3: Gini coefficient in selected South African cities

![Gini coefficient chart](image)

(Figure adapted from UN-HABITAT, 2008: 72)

“Inequalities in health in urban settings reflect, to a great extent, inequities in economic, social and living conditions that have been a hallmark of most societies since urbanization began.”

(WHO, 2008a)

Inequities (or disparities) in health are considered as differences in health that are unnecessary, avoidable, unfair and unjust (Whitehead, 1992). Health inequities result in intra-urban differences in health status (for example, see Goldstein, Rossi-Espagnet, & Tabibzadeh, 1995; Tanner & Harpham, 1995). Public health should strive to achieve equity in health, which can usefully be described as “the absence of disparities in health (and in its key social determinants) that are systematically associated with social advantage/disadvantage” (Braveman & Gruskin, 2003: 256). Pursuing health equity means pursuing the elimination of health disparities (Braveman, 2006). There are multiple societal influences that affect the distribution of health in populations (Starfield, 2006). Health can be described as a product of many exposures that are superimposed on genetic predispositions; achieving equity in health is therefore a political process based on a commitment to social justice, not just survival of the fittest (Starfield, 2006). Recognition of
this requires an intersectoral approach that engages with range of policies, including those aimed at physical, social, economic and education (Acheson, 1998 in Starfield, 2006).

“Achieving health equity in the urban setting requires action toward fairness and equity within and between countries. Engaging the people themselves, urban communities, and multiple sectors in the urban development process is a must.”

(Kjellstrom, Mercado, Sami, Havemann, & Iwao, 2007: i5).

Local government must find ways to address the underlying structural determinants that result in intra-urban differences in health outcomes. Such action will assist in achieving equity in the health of urban populations.

**Six central development challenges**

Through synthesising the challenges present in the urban context, six central developmental challenges have been identified (see Table 2). These six challenges help in understanding the components of vulnerability; the characteristics of urban vulnerable groups, their urban setting (location), and how urban inequalities lead to poor health outcomes. It is argued that any attempt to improve – and sustain – the health of urban populations requires that local level policy makers and practitioners understand, engage with, and address these challenges.
Table 2: Developing country urban contexts present six central developmental challenges

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Urban inequalities</td>
<td>Urban inequalities – differences between rich and poor groups/places - are a predictor of poor population health. Urban inequalities are experienced in multiple ways, including health outcomes and manifest spatially as intra-urban health inequalities.</td>
</tr>
<tr>
<td>2. Migration</td>
<td>Internal (from within a country) migration and external (cross-border) migration are features of urban growth and of the urban context. This includes those migrating in pursuit of economic opportunities as well as individuals fleeing persecution (asylum seekers and refugees). Many urban migrants remain connected to their household of origin through an interlinked livelihood system.</td>
</tr>
<tr>
<td>3. Informal settlements</td>
<td>Urban growth places pressure on limited appropriate and well-located housing and land tenure opportunities. This results in increases in the numbers of people residing informally in and on the edge of urban areas.</td>
</tr>
<tr>
<td>4. Urban HIV prevalence</td>
<td>Whilst not all developing country urban contexts experience high urban HIV prevalence, this is particularly true in sub-Saharan Africa. In South Africa, urban HIV prevalence is found to be double that in rural areas, and highest within urban informal settlements. HIV provides a contextual challenge which requires much more than a sectoral health response.</td>
</tr>
<tr>
<td>5. Residents with “weak rights to the city”</td>
<td>Despite a commitment to ‘rights for all’ within the South African Constitution (The Republic of South Africa, 1996), urban poor groups may experience challenges in claiming their rights within the city. This can include the right to access basic services, housing, health services and employment.</td>
</tr>
<tr>
<td>6. Survivalist livelihoods</td>
<td>The livelihoods of urban poor groups are determined by the context in which they are located, and the opportunities and constraints that this context provides. Survivalist livelihood strategies refer to individuals working within the informal economy during a time of crisis. A period of survival is when individuals are unable to plan far into the future, and instead spend their energy surviving day to day. (Vearey, 2008)</td>
</tr>
</tbody>
</table>

In this section I have referred to literature that has assisted me in outlining the complexity of the urban context – using Johannesburg as a unique example of a complex developing country urban context. A review of the literature has enabled me to identify six central developmental challenges that I argue typify developing country urban contexts (as outlined in Table 2 above). It is through this review of the literature that I have identified the need for an improved response to urban health at the local level in order to improve health and
healthy equity. It is clear that there is currently a lack of guidance for effective local government responses to what I position as central urban health challenges: internal and cross-border migration; informal settlements, and a context of high HIV prevalence. In order to address this, my research – and this thesis – attempt to explore how local government can effectively develop and implement local-level, contextualised responses to urban health, in order to address health equity.

Whilst the research presented in this thesis makes use of Johannesburg to explore these challenges, the research is also relevant for other South African and developing country urban contexts in Sub-Saharan Africa that are found to experience similar urban complexities.
Unpacking the complexity of the urban environment: introducing the conceptual research framework

I have developed a **conceptual research framework** that has enabled me to **investigate** and suggest how to **respond to** the complexities of developing country urban contexts. The conceptual framework draws on the findings from the six original papers. The conceptual framework makes use of two key concepts: (1) the Social Determinants of Urban Health (SDUH) and (2) urban livelihoods. These concepts are used to explore the experiences of urban poor groups, with a focus on migrants (internal and cross-border) and residents of informal settlements. These concepts are described below. The conceptual framework is illustrated at the end of this section, in Figure 4.

**1. The Social Determinants of Urban Health**

The recognition of the impact of social and political conditions on health (e.g. Starfield, 2006) has led to renewed energy in attempts to address the underlying social determinants of health (SDH). This includes the WHO’s Commission on Social Determinants of Health (CSDH), established in early 2005. The CSDH adopted a broad definition of the SDH, encompassing “the full set of social conditions in which people live and work” (Commission on the Social Determinants of Health, 2007). The associated WHO Knowledge Network on Urban Settings (KNUS)\(^{23}\) was established by the CSDH. Located at the WHO Centre for Health Development in Kobe, Japan, the KNUS focussed on the social determinants of health and urbanisation, namely:

> “issues related to health development, with particular emphasis on health care delivery and urbanisation, delineating the place of health systems in society, and determining links between population, the economy, and the environment, and assessing health needs from a development perspective.”

(Kjellstrom, Mercado, Sami et al., 2007: i2)

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\(^{23}\) [http://www.who.or.jp/knusp/knus.html](http://www.who.or.jp/knusp/knus.html)
A series of fifteen thematic papers were produced; abridged versions were published in a special supplement of the Journal of Urban Health in May 2007. These papers fall into five key themes – highlighted in Table 3 - considered important for the conceptual framework applied to this research. These themes assist in synthesising the findings from the four studies.

Table 3: Five key themes were identified by the KNUS in 2007

1. Urbanisation as a key factor in health equity development: Current economic development models contribute to the proliferation of informal settlements and intolerable living conditions for millions of people.
2. Reducing the burden of disease, disability and death in the urban setting requires attending to the social determinants of health.
3. The urban living environment can threaten or support human health and it is determined by social factors.
4. Building trust, social capital and social cohesion via participatory and empowering processes is critical to creating fairer health opportunities.
5. Healthy urban governance, health services, and integrated approaches to interventions are key pathways to reducing health inequity.

(Kjellstrom, Mercado, Sami et al., 2007: i3)

It is argued the SDUH framework is sufficiently broad and multi-level, and therefore able to engage with the complexity of the urban context. In addition, the SDUH framework usefully engages with issues of health equity and recognises the importance of healthy urban governance. The SDUH framework is a useful tool for exploring the experiences of urban poor groups (with a focus here on migrants and residents of informal settlements).

(2) Urban livelihoods

My conceptual framework (Figure 4) also incorporates an urban livelihoods framework, drawing upon a range of literature (Carney, 1999; Carney, 2002; Chambers & Conway, 1992; Meikle, 2002; Meikle, Ramasut, & Walker, 2001; Rakodi & Lloyd-Jones, 2002). The urban livelihoods literature grew from work on peasant agriculture and their responses to “external shocks and trends, policy change and particular interventions” (Rakodi, 2002: 4).

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Urban livelihoods comes from recognition that few poor households (urban and rural) rely on a single income-generating activity, and that households undertake multiple activities “to ensure their survival and well-being” (Rakodi, 2002: 7). Whilst the exact conceptualisation of what is included within a livelihoods framework may differ between different users of a livelihoods framework, there is agreement around the key components and in its usefulness for guiding analysis and policy (Rakodi, 2002).

“A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base”.

(Carney, 1998: 4)

A livelihoods framework enables me to explore the urban experiences of various city residents. A livelihood consists of a range of assets (outlined in Table 4) that an individual – or a household, or community – has (or has not) to buffer the effects of various ‘shocks’ and ‘stresses’. Assets may be mobilised in different ways and in different contexts. This could - for example - include local government ensuring that households are able to access identity documents in order to apply for social welfare grants. These grants could then assist in buffering shocks and stresses. As outlined in paper I: “Shocks are acute events, such as specific episodes of violence or illness; stresses are chronic, longer-lasting situations, which include the pressure to provide for others (including the sending of remittances), hunger, the fear of violence (such as related to xenophobia), or unemployment. HIV is considered a stress in as much as it is a long-wave event (Barnett, 2006). The presence of HIV within an urban environment presents a range of stresses to city residents; if an individual is HIV-positive, the living environment can impact negatively on an individual’s health and access to treatment or counselling and the related continuum of care that are required” (Vearey, 2008: 369).
Table 4: Assets

| Human capital | The labour resources available to households, which have both quantitative and qualitative dimensions. The former refer to the number of household members and time available to engage in income-earning activities. Qualitative aspects refer to the levels of education and skills and the health status of household members. |
| Social and political capital | The social resources (networks, membership of groups, relationships of trust and reciprocity, access to wider institutions of society) on which people draw in pursuit of livelihoods. |
| Physical capital | Physical or produced capital is the basic infrastructure (transport, shelter, water, energy, communications) and the production equipment and means which enable people to pursue their livelihoods. |
| Financial capital | The financial resources available to people (including savings, credit, remittances and pensions) which provide them with different livelihood options. |
| Natural capital | The natural resource stocks from which resource flows useful to livelihoods are derived, including land, water and other environmental resources, especially common pool resources. |

(Source: Carney, 1998, p7 in Rakodi, 2002:11)

The advantage of including a livelihoods lens within the conceptual framework is that the livelihoods framework deliberately moves beyond narrow notions of ‘poverty’, incorporating issues of deprivation and well-being (Rakodi, 2002). In addition, a livelihoods framework enables household dynamics to be observed over time, rather than focussing on a static view of poverty at a particular moment. Importantly, a livelihoods framework draws on the SDH, through including various social determinants of health within the framework (such as access to appropriate healthcare, housing and basic services). Therefore, a livelihoods lens complements the SDUH within the conceptual framework. The benefits of incorporating a livelihoods lens within the conceptual framework are detailed in Table 5. Of central importance is that

“a livelihoods approach to development draws on a conceptual framework which may be used as a basis for analysis, understanding and managing the complexity of livelihoods, enabling complementarities and trade-offs between alternative supporting activities to be assessed and providing an opportunity for identifying policy objectives and interventions”.

(Carney, 1998 used in Rakodi, 2002: 4; emphasis my own)
Table 5: Benefits of the livelihoods framework to this research

A livelihoods framework is a tool that can:

- Define the scope of and provide the analytical basis for livelihoods analysis, by identifying the main factors affecting livelihoods and the relationships between them;
- Help those concerned with supporting the livelihoods of poor people to understand and manage their complexity;
- Become a shared point of reference for all concerned with supporting livelihoods, enabling the complementarily of contributions and the trade-offs between outcomes to be assessed; and
- Provide a basis for identifying appropriate objectives and interventions to support livelihoods.

(Carney, 1998 in Rakodi, 2002; emphasis my own)

Constraints of a livelihoods approach

Whilst the livelihoods framework is argued to be an effective tool to assist in understanding the lives of urban populations, there are several key constraints which must be considered. Firstly, a livelihoods approach centres around the notion of a ‘household’ that is assumed to be “cohesive, mutually supportive and enduring” (Rakodi, 2002: 7). This may not reflect reality. Secondly, whilst the concept of a livelihood ‘strategy’ recognises the agency of poor urban residents, there is concern about the ability of poor households to control their assets and environment (Rakodi, 2002). And finally, notions of a ‘household strategy’ also present challenges, as this is linked to an assumption that households make decisions collectively; such an assumption may hide “individualistic behaviour, inequalities, conflict and impermeance” (Rakodi, 2002: 8). It is essential that when employing a livelihoods framework, consideration must be given to both the role of the individual and of broader social networks - including communities and global organisations (Rakodi, 2002).

In addition, the livelihoods framework has been used in many ways, with different degrees of success (Du Toit, 2005). A key critique is that a livelihoods approach can ‘de-emphasise’ the role of the state, and ‘over-emphasise’ the way in which the poor help themselves. The result is analysis which may overstate the dynamics at a household level, with little (or no) recognition of the role of macro-level political, economic, and social structures (Du Toit, 2005). As a result, undue responsibility may be placed on the poor to improve their own conditions – something that is not expected of the rich. In addition, concern is raised at the
lack of rigour applied to defining ‘capital’ and assets (Du Toit, 2005). Du Toit argues that a good livelihood analysis will draw on a range of disciplines, including “anthropology, human geography, qualitative sociology, social history, political economy, cultural studies or discourse analysis” (Du Toit, 2005: 23). An urban livelihoods framework assists in bringing together a range of important principles for creating an interdisciplinary response to urban health challenges.

**Application of the livelihoods framework to this research**

The PhD research draws on the urban livelihoods literature and incorporates this within the conceptual framework. In addition, the PhD research contributes to the urban livelihoods literature through building on the work of Jacobsen (2006) by developing a revised urban livelihoods framework that considers the range of different urban migrant groups – see Paper I (Vearey, 2008). This revised framework provides guidance to local government about the importance of ensuring that protective policy, legislation and action is in place, as a basis for urban migrants to strengthen their livelihoods.

**3) Experiences of urban poor migrant groups**

As illustrated in Figure 4 below, the conceptual framework consists of two key concepts: (1) the social determinants of urban health and (2) urban livelihoods. Together, these two concepts assist in synthesising the findings from the four studies, as shown in Figure 4. In Figure 4, I have indicated the original papers that discuss the findings in more depth. Together, the synthesis of these four studies through this conceptual framework have enabled me to generate an understanding of the experiences of urban poor groups, focussing on migrants (both internal and cross-border), and residents of urban informal settlements.
Figure 4: The conceptual framework used to explore the complexity of the urban context

Social determinants of urban health (SDUH)
- Living and working conditions (Paper II, IV, V)
- Access to healthcare services, particularly ART (Paper I, III)
- Access to social services (Paper V)
- Access to secure tenure and housing (Paper II, IV, V)
- Access to basic services (water, sanitation, electricity, refuse removal) (Paper IV)
- Local government intervention and healthy urban governance (Paper V)
- Place: central-city or the periphery (Paper IV)
- Social networks and social capital

Urban livelihoods
Livelihood strategies
- Linked, reciprocal: Urban - Rural
- Informal, survivalist (Paper I, IV)

Assets
- Human capital
- Social and political capital
- Physical capital
- Financial capital
- Natural capital

Shocks (e.g.)
- Pregnancy
- Loss of a job
- Sickness
- Arrival of new household members

Stressors (e.g.)
- Hunger
- HIV
- The pressure to remit

Experiences of urban poor groups
(migrants and residents of informal settlements)

Entry to the city
- Urbanisation experiences (Paper II, IV)

City living
- Household structure (Paper IV)
- Food (in)security (Paper IV)

Surviving the city
- The tactics of urban migrants (Paper II)
- Informal and survivalist livelihoods (Paper I, II, III)

Dealing with sickness
- Access to services (Paper I, III, IV)
- Support systems: the role of the rural household
Thesis themes

Through reviewing the literature, and through application of the conceptual framework to the synthesis of the four studies, I identified four central, cross-cutting themes: (1) rights to the social determinants of urban health; (2) urban livelihoods; (3) policy and governance; and (4) urban methodologies. These themes build on the conceptual framework (presented in the previous section) and were identified through my engagement with the complexity of the urban context; both during the design and implementation of the research, and during the analysis of the data. These themes, which are presented below, reflect the complexity of the urban context and have assisted me to process the data from the four studies.

Rights to the social determinants of urban health

Simply describing the social determinants of urban health within the city - across different spaces and different urban migrant groups – did not capture the challenges that different urban groups experienced in their ability to access the SDUH. It was clear that different urban migrant groups, residing in different urban spaces, differed in their ability to access the SDUH. This was explored through examining the range of rights afforded to different urban groups. It became clear that the differing abilities of different urban groups (internal or cross-border migrant, residing in the central-city or on the periphery) to access these rights required attention – in the research itself and in the development of a revised framework for urban health. The idea of “weak rights to the city” (Balbo & Marconi, 2005: 13) has been drawn on and applied to the South African context. Papers I, II, III, IV and V all engage with the ability of different urban groups to access the SDUH, highlighting challenges in accessing a sustainable livelihood, basic healthcare, ART and basic services.

Urban livelihoods

I have drawn on an urban livelihoods framework within the conceptual framework. Through the research process, it became clear that the complexity of the urban context required me to make use of the analytical resources of the livelihoods literature to a greater depth than I had originally anticipated. In particular, the importance of the interlinked livelihood systems that connect urban migrants with their household of origin was a central
theme across all the studies. As a result, it emerged that an urban livelihoods framework needed to be developed and used as a central concept for exploring the diverse urban experiences of migrants in Johannesburg. Papers I, II, and IV provide insight into the livelihoods of both internal and cross-border migrants residing in Johannesburg. The complexity of these livelihoods, the linkages maintained within the livelihoods, and the number of individuals who are connected to these livelihoods became apparent during the synthesis of the study findings. The challenges that migrants face in developing a sustainable livelihood became clear. Importantly, the livelihoods framework enabled me to explore the impact of access to ART on the livelihoods of cross-border migrants (paper I). The tactics devised by some internal migrants to evade state intervention in their informal livelihood strategies are discussed in paper II; uncovering these tactics serve as a reminder of the complexity of the urban context, and the challenges facing local government as they attempt to intervene to improve urban health.

Policy and governance

A central theme that connected the four studies relates to the range of policies that outline various rights to urban residents and migrants. Through the research, it has become clear that the effective implementation of these policies and the ability of different migrant groups to access the rights mandated varies according to migration status, and to where migrants reside. Health is inextricably linked to policy (Hassim, Heywood, & Berger, 2007). For example, papers I and III show that cross-border migrants struggle to access basic healthcare and ART. Paper II highlights the challenges that internal migrants have in accessing a secure livelihood, adequate housing, and basic services. Papers IV and V present the challenges that both internal and cross-border migrants face in accessing adequate housing and basic services. Paper IV highlights the importance of place (location in the city) in determining whether residents are able to access basic services. The role of urban governance is clearly linked to this. Through assessing the research findings with a ‘policy and governance’ lens, I have been able to determine where protective policy does not translate into practice.
Urban methodologies

During the design and implementation of the research, it became clear that engaging with the complexity of the urban context requires innovative methodologies. This is especially important in the context of developmental local government where participatory processes are required. In addition, engaging with what can be considered ‘hidden’ urban populations requires innovative approaches; both for research purposes and for effective interventions (see Paper VI). For example, in order to explore the experiences of cross-border migrants in accessing ART, it was not possible to interview cross-border migrants living with HIV who were unable to access ART; I was only able to identify those who were successfully accessing ART (Paper I). Exploring the urban experiences of internal migrants residing in inner-city hostels and informal settlements was challenging; the successful implementation of a participatory photography project and participatory film project enabled me to explore these experiences (Paper II). Whilst participatory photo projects present limitations, the images provided me an alternative understanding of these urban experiences (for more discussion, see Paper II). Conducting a cross-sectional household survey in inner-city Johannesburg proved challenging: identifying spaces where cross-border migrants reside, gaining access to buildings, and ensuring the safety of fieldworkers presented problems (see Papers IV and VI). Designing a sampling frame for the survey in the informal settlement was time consuming and difficult; especially with current development work on site which meant that some areas originally identified for the survey were relocated (see Papers IV and VI). Identifying and interviewing city representatives proved challenging (Paper V).

The four themes presented above facilitate the synthesis of the findings from the studies. A summary of the four themes is presented in Table 6. The four themes assist in generating a revised framework for urban health, as outlined in Figure 5. Table 7 then indicates how these themes link the six original papers together.
Table 6: A summary of the four thesis themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key components and description</th>
</tr>
</thead>
</table>
| **Rights to the social determinants of urban health (SDUH)** | • The SDUH assist in engaging with the complexity of the urban context.  
  • Recognition that the concept “urban health” and achieving good urban health for all, are about more than descriptive analysis of the SDUH. Achieving good health relates to how effectively urban residents are able to access the SDUH sustainably.  
  • Exploring the SDUH requires examining whether urban residents are able to claim their rights to the SDUH. The Constitutional responsibility of developmental local government in South Africa to ensure that urban citizens are able to claim their rights to access basic services (water, sanitation, refuse collections), secure housing and healthcare. |
| **Urban livelihoods**                      | • An urban livelihoods lens provides a useful analytical tool for examining the complexity of the urban environment and the experiences of urban residents. In particular, an urban livelihoods lens assists in identifying the urban stresses and shocks that households and individuals face, as well as describing the assets and resources available to them.  
  • The urban livelihoods framework was found to provide a helpful model for mapping out the interlinked livelihood strategies of urban migrant households.  
  • The urban livelihoods framework identified the importance of dual households/interlinked livelihoods - that connect urban and rural areas - to urban migrants.  
  • The urban livelihoods framework also enabled analysis of findings that highlighted the importance of access to ART for migrants engaged in survivalist livelihoods.  
  • The tactics employed by migrants in the city were explored through the livelihoods lens. |
| **Policy and governance**                  | • Key here is exploring intersectoral action and the ability of local government to create an ‘enabling environment’ for action to improve urban health.  
  • Exploring both what policy exists and whether it is effectively implemented is key - especially when considering the ability of urban residents to claim their rights to the SDUH.  
  • Exploring policy and governance enables recommendations to be made that are relevant to the planning and implementation of responses to improve the health of urban populations (including for the revised framework). |
| **Urban methodologies**                    | • Methods for both (1) urban research and (2) the implementation of urban health interventions.  
  • Central here is exploring how best to engage with and give voice to often “hidden” urban populations. |
Figure 5: The four cross-cutting thesis themes are used to synthesise the findings from the four studies in order to generate a revised framework for urban health.
<table>
<thead>
<tr>
<th>Themes</th>
<th>Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover Story</td>
<td>I Migration, access to ART, survivalist livelihoods</td>
</tr>
<tr>
<td>II Strategies of internal migrants in JHB</td>
<td></td>
</tr>
<tr>
<td>III Upholding the right to access health services</td>
<td></td>
</tr>
<tr>
<td>IV Migration, informal settlements, HIV</td>
<td></td>
</tr>
<tr>
<td>V Intervention evaluation</td>
<td></td>
</tr>
<tr>
<td>VI Representation: Sampling in an urban environment</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rights to the social determinants of urban health</th>
<th>Basic services; healthcare; equity; ART access; health access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban livelihoods framework</td>
<td>Access to housing</td>
</tr>
<tr>
<td>Urban livelihoods; impact of access to ART</td>
<td>ART access; health access</td>
</tr>
<tr>
<td>Survivalist livelihoods; strategies and tactics</td>
<td>Livelihoods; food security as an outcome of the livelihood system</td>
</tr>
<tr>
<td>Policy and governance</td>
<td>Overview of developmenta l local government. Migration; access to ART; employment</td>
</tr>
<tr>
<td>Assessing access to health services; policy v’s implementation</td>
<td>Urban development; social protection; local government</td>
</tr>
<tr>
<td>Urban methodologies</td>
<td>Local responses; participatory local government;</td>
</tr>
<tr>
<td>Overview of the methods employed. Ethics and methods; advocacy research; vulnerability; hidden populations</td>
<td>Cross-sectional survey; semi-structured interviews; household survey</td>
</tr>
<tr>
<td>Participatory film and photography; hidden populations</td>
<td>ART access study (survey and interviews); RENEWAL survey; MRMP survey; African cities survey</td>
</tr>
<tr>
<td>Sampling in an urban context; informal and formal</td>
<td>Process evaluation; participatory photography</td>
</tr>
<tr>
<td>Representation; urban household surveys</td>
<td></td>
</tr>
</tbody>
</table>
Data and methods

*Exploring urban experiences in Johannesburg*

As outlined above, developing country urban contexts are complex and – through my research - I draw out the implications of this complexity for local governments who are responsible for ensuring – and sustaining – the health of urban populations. It is impossible – I argue – to take action to improve the health of urban populations without engaging with this complexity. It is this complexity that makes cities the dynamic, sometimes exciting, often overwhelming spaces they are. To engage with this complexity requires understanding the dynamics of the city, in particular to explore who is moving into the city, how they enter, and why they choose to come, how they survive, what specific health needs they have and what health risks they face. To do this, it is essential to engage with the range of urbanisation processes and resultant urban experiences of diverse migrant urban populations. Who is able to access the benefit of urban living, and who misses out? This research focuses on a subset of the ‘urban poor’, internal and cross-border migrants who are found to enter the city and settle within a range of different – and often ‘hidden’ - urban spaces – in Johannesburg. How is the City responding to the needs of urban migrants? This involves getting to grips with the realities of urban living as experienced by different urban migrants as they enter the city, of their livelihood strategies, and to understand how urban migrants do (or do not) engage with the city. In turn, I also explore how the City does (or does not) engage with urban migrants.

In order to engage with the complexity of Johannesburg, and to explore the diverse experiences of poor urban migrant groups, my research spans from the central city, through to the periphery. This includes exploring the urban experiences of the (mostly cross-border) migrant population living in the dense, overcrowded, central-city suburbs of Hillbrow and Berea. I also explore the urban experiences of non-migrant and (predominantly internal) migrants who enter the city and settle within the currently shifting suburbs of Jeppestown and Benrose to the south-east of the central-city; an area constructed through a range of linked ‘hidden spaces’ that include dilapidated single-sex hostels, shack farms (shacks inside abandoned factory buildings), informal settlements, and sub-divided houses and flats. A third urban experience is found through the residents of the peripheral informal settlement of
Sol Plaatjies. I also explore the experiences of migrants living with HIV as they attempt to access antiretroviral treatment (ART) in the inner-city. In addition, I evaluate the attempt of local government to respond to HIV within urban informal settlements.

**Ethics**

Ethical approval was obtained for the studies, from the University of the Witwatersrand Medical Research Ethics Committee: protocols M070612 and M071125. Copies of the Ethics certificates are included in Appendix 1.

**Literature review**

A review of international, national and local literature was undertaken. This included both published and unpublished work. Key search terms included – urban; urban health; public health; framework; developing country; developmental response; urban development; intersectoral action; intersectoral policy; participation; integrated responses; governance; partnerships; migration; informality; HIV. The literature review was informed by the four studies presented below.

**Policy review**

This involved a desktop review of relevant policy, focussing on the local level. Policies and guidelines that relate to health, HIV, migration, and informal housing were reviewed. This involved examining the rights afforded to South African citizens and international migrants, including a review of the Constitution (The Republic of South Africa, 1996), the Bill of Rights (The Republic of South Africa, 1998b), the Immigration Act (The Republic of South Africa, 2002, 2004) and the Refugee Act (The Republic of South Africa, 1998c). The mandate of developmental local government was also reviewed (The Republic of South Africa, 1998a). In addition, informant interviews were undertaken with City representatives. Questions were asked around the NSP, as a central guiding policy. As with the literature review, the policy review was informed by the four studies presented below.
**Review of existing urban health frameworks**

Through the review of the literature, I identified existing urban health frameworks, and approaches to promoting urban health. I undertook a review of these frameworks and approaches, informed by both the literature review and the synthesis of the findings from the studies. This review is presented in Results (2), p57. This was achieved through determining whether they engage with the complexity of developing country urban contexts (as defined through the literature review, and presented in the Background section). I examined the frameworks to determine whether they offered suggestions or guidance for intervention to improve the health and health equity of urban populations in developing country settings. If suggestions for intervention were proposed, I determined if the framework provided guidance for who is responsible to intervene, and how.

**Primary data collection: four studies**

The thesis makes use of four studies:

1. Assessing non-citizen access to ART in Johannesburg inner-city.
2. Migration, housing, HIV and access to healthcare: comparing urban formal and informal
3. Evaluating a local level developmental approach to HIV in informal settlements.
4. Exploring the tactics of urban migrants.

These studies focus on: migrants (internal and cross-border); residents of the central-city; residents of a peripheral informal settlement; healthcare providers involved in the provision of ART; and, stakeholders involved in designing and implementing local responses to migration and informality in the context of HIV. Map 4 indicates the location of the study sites, and an overview of the methodologies and study populations are included in Table 8.
Map 4: Location of the study sites in Johannesburg

Sol Plaatjies informal settlement

The central city: Berea, Denver, Jeppестown and Hillbrow
<table>
<thead>
<tr>
<th>Study</th>
<th>Summary of methodology</th>
<th>Overview of the study population</th>
<th>Paper(s)</th>
</tr>
</thead>
</table>
| 1. Assessing non-citizen access to ART in Johannesburg inner-city    | • Cross-sectional survey with ART clients at four ART sites in inner-city Johannesburg (2 governmental; 2 non-governmental).  
• Semi-structured interviews with healthcare providers.  
• Focus group discussion with refugee HIV counsellors. | • 449 migrant and non-migrant ART clients.  
• 34 healthcare providers.  
• 8 refugee HIV counsellors. | I; III |
| 2. Migration, housing, HIV and access to healthcare: comparing urban formal and informal | • Cross-sectional household survey in inner-city Johannesburg and one peripheral urban informal settlement. | • Interviews conducted with 479 households, obtaining information on 1,500 people.  
• Respondents were either: internal migrant, cross-border migrants, or had always resided in Johannesburg.  
• Inner-city suburbs: Berea, Hillbrow, Jeppestown.  
• Peripheral informal settlement: Sol Plaatjies. | IV; VI |
| 3. Evaluating a local level developmental approach to HIV in informal settlements | • Evaluation of an intervention.  
• Document review.  
• Site visits/observations.  
• Semi-structured interviews with project staff and local government officials.  
• Focus group discussions with participants.  
• Participatory photography project. | • Sol Plaatjies informal settlement and Ivory Park.  
• Community volunteers and participants.  
• Members of the intervention team.  
• Local government officials. | V |
| 4. Exploring the tactics of urban migrants                             | • Reflexive, based on my experience.  
• Participatory photography project.  
• Participatory film project. | • Hostel and informal settlement residents who participated in photography and film projects  
• Hostels and informal settlements in the Benrose area of south-eastern Johannesburg. | II |
Study 1: assessing non-citizen access to ART in Johannesburg inner-city (Paper I)

Qualitative and quantitative methods were employed. Four sites were purposively selected from within migrant-dense areas of Johannesburg inner-city that provide ART; two governmental and two non-governmental (NGO). The governmental sites are involved in the provision of public sector ART rollout. The NGO sites are linked to faith based organisations and provide ART through funding that aims to support the public sector rollout. Study sites were identified through conversations with key informants, including: individuals who have previously conducted research with non-national groups in Johannesburg; ART clinicians working in public and NGO sites; and, individuals working in the provision of NGO services to non-national groups. The study methodology was divided into four components and involved (1) a desk-based literature and policy review; (2) semi-structured key informant interviews with health care providers who work within ART services at each of the four sites (n = 34); (3) a focus group discussion (FGD) with eight refugee ART counsellors; and (4) a cross-sectional, comparative study of a random sample non-citizen ART clients and a control group of South African ART clients (n = 449). The author conducted the interviews with healthcare providers and the FGD, and co-ordinated the survey fieldwork in mid-2007.

The survey

The cross-sectional survey involved purposive selection of sites and random selection of clients. This enabled a random sample of ART clients representing a purposive sample of sites to be reached. Clients attending monthly appointments at the clinics to collect medication were invited to participate in the study. In order to ensure some randomness to the sample, the last person in the queue was invited to participate in the study and the person in front of them kept their place. However, at one NGO site where there were often fewer than 50 clients in the queue, every person was sampled. The inclusion criteria for the survey were that participants had been receiving ART for a minimum of 3 months, were currently healthy, aged 18 years and above, and gave consent to participate.

Fieldworkers recruited for the survey had previously undertaken research work with both citizen and non-citizen groups. Three of the four fieldworkers were themselves migrants and they provided the mix of languages required by the study population, including Shona, Ndebele, French and South African languages for citizen participants. Fieldworkers were
given appropriate training in the study aims, the informed consent process, the use of the research tools, as well as sensitisation in working with non-citizens, and individuals who are receiving ART. Participant information sheets were produced for all participants. Ethics approval for the study was obtained from the University of the Witwatersrand medical ethics committee (protocol number M070612). In addition, permission from each site was obtained to undertake the study. Interviews were conducted in a neutral location within the site that was agreeable to both the fieldworker and the participant. The clinic staff assisted in providing space for this.

**Interviews with healthcare providers**

Thirty four healthcare providers were interviewed across the four sites. This included: clinicians, nurses, counsellors, clerks, and receptionists. One FGD was conducted with eight refugee counsellors who work across public sector ART sites in the inner city. Whilst the counsellors did not work at the NGO sites, they were involved with assisting non-citizens to access ART at these sites when they were referred from the public sector sites. Respondents were identified with the assistance of the clinic manager at each site. Participants were individuals involved in the provision of ART, aged 18 years and over, who were willing to provide informed consent and be interviewed. Additional consent was obtained for the recording of interviews. Interviews and the FGD were conducted in English by the author.

**Analysis**

The ART client survey questionnaires were entered into MS Excel and imported into SPSS 10.1. Analysis was undertaken using SPSS and significance testing was undertaken using a 95% confidence interval. Data was analysed using chi-squared tests at the bivariate level. Descriptive statistics were used to analyse categorical data, and continuous data was analysed through measures of central tendency. Qualitative data from the interviews with healthcare providers and the FGD were recorded, transcribed and analysed for thematic content (Miles & Huberman, 1994).
Study 2: Migration, housing, HIV and access to healthcare: comparing urban formal and informal (Paper IV)

This study formed part of the RENEWAL (Regional Network on AIDS, Livelihoods and Food Security) study that set out to explore the linkages between HIV, migration and urban food security. The Johannesburg study is one of three - the other sites being Windhoek (Namibia) and Addis Abba (Ethiopia) - and was guided by a multidisciplinary technical advisory research group. Ethics approval for the study was obtained from the University of the Witwatersrand Medical Research Ethics Committee (protocol number M071125).

A cross-sectional household survey was undertaken in 2008 with migrant and non-migrant groups residing in Johannesburg (n = 487). The survey questionnaire was designed to gather information on all members of the household and the survey obtained information on 1,533 individuals. The survey tool collected a range of data including: migration histories; household composition; access to legal, social and health services; livelihood choices; social networks and linkages; food security, and interlinked health and development indicators. Respondents were either the head of the household, or another adult household member able to provide information on all members of the household. Respondents were stratified into one of three migration categories: (1) internal South African migrants; (2) cross-border migrants (including refugees and asylum seekers); or (3) had always resided in Johannesburg. This enables comparisons to be made between different migrant groups and with those who have always resided in Johannesburg. Data was collected by a team of fieldworkers who were trained in the research tool and informed consent process. Fieldworkers possessed the range of South African and regional languages required. The author was one of two research coordinators and was involved in the design of the study, development and piloting of research tools, training and coordination of the fieldwork team, cleaning and analysis of the data.

In order to explore intra-urban inequalities and the interlinked deprivations encompassing urban poverty, the survey sample was divided between one purposively selected peripheral urban informal settlement and an inner-city area made up of three purposively selected suburbs in the dense inner-city. The informal settlement was selected as an example of a peripheral urban area, and the three central-city suburbs were purposively selected from the...

25 For further information about RENEWAL, please see http://www.ifpri.org/renewal/
inner-city as areas where cross-border migrants are known to reside (see Landau, 2004). A cluster-based random sampling technique was applied within each area (for a detailed overview of the sampling strategy see Vearey, Nunez, & Palmary, 2009). A total of 195 households (40% of the total population surveyed) were interviewed in the informal settlement and 292 households (60% of the total population surveyed) in urban formal areas of the inner-city. This enables comparisons to be made between those residing informally and those residing in the inner-city.

**Analysis**

Analyses were conducted at an individual respondent and household level. In addition to descriptive analysis, statistical comparisons of means between groups were made with nonparametric ANOVA analysis (Wilcoxon/Kruskall-Wallis test, Chisquare - α error = 0.05). To assess the relationships between categorical variables, a Chi-square analysis (Pearson’s method) was used. Significance testing was undertaken using a 95% confidence interval. Multivariate analysis was undertaken using multiple correspondence analysis. Analyses were performed using JMP software package version 5.01 (SAS institute INC, Cary, NC, USA).

**Study 3: Evaluating a developmental approach to HIV in an informal setting (Paper V)**

This study involved the process evaluation of an intervention – *Joburg Connections* – that was run in two sites in Johannesburg. Primary data was collected through focus groups and semi-structured interviews, and secondary analysis of existing project documentation was undertaken. Five key data collection methods were employed: (1) document review; (2) site visits and observation to obtain a contextual understanding of the sites where *Joburg Connections* was piloted; (3) semi-structured interviews with key informants – participants, local government officials, and project staff (n = 15); (3) four focus groups with participants (total n = 42); and (5) a participatory photo project conducted with 20 participants in one informal settlement. The author was involved in the design of the research, data collection and analysis. An additional field researcher was involved who conducted interviews and assisted in the data analysis.
Study 4: Exploring the tactics of urban migrants (Paper II)

This study is based on material, observations, and reflections from several years of working with a particular population of rural migrants, who are found to reside in what I term a ‘hidden space’ of inner-city Johannesburg. The study makes use of participatory photography and film projects that I coordinated in 2006 and 2007 with residents of this ‘hidden space’. The processes involved in the projects themselves, as well as the photographs and film produced, contribute to the study. The ways in which residents of such ‘hidden spaces’ engaged in these projects, particularly the awareness and debate raised through the photography and film projects themselves, have provided a unique insight into how residents view themselves, and how they wish for others (outsiders) to view them. The population presented is found to ‘create its own space’ within the city, often utilising strategies of invisibility to navigate the complexities of Johannesburg and evade the state. In this study, the city becomes a subject of study (Tonkiss, 2005) and residents become “practitioners of the city” (de Certeau, 1984). This idea of ‘urban practice’ assists in analysing the tactics and strategies utilised by this urban population.
Results (1): synthesising the four studies

This section presents the key findings from the four studies by the four thesis themes. The synthesis is included in Table 9 below, and it is indicated where more detail on the key findings can be found within the original papers. The table also includes a summary of the implications of these findings for a revised approach to urban health. These key findings will be used to inform the review of existing urban health frameworks, and the subsequent development of a revised approach to urban health. In addition, Appendix 2 lists the outputs that have been generated from the four studies.

Table 9: Summary of key findings by each thesis theme and implications for a revised approach to urban health

<table>
<thead>
<tr>
<th>Theme: Rights to the social determinants of urban health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key findings</strong></td>
</tr>
<tr>
<td>• Place is found to be a key determinant of an individual’s ability to claim their right to the SDUH (Paper IV).</td>
</tr>
<tr>
<td>• Internal migrants who enter the city through peripheral informal settlements face more challenges in accessing housing and basic services than cross-border migrants who enter through the central-city (Paper IV).</td>
</tr>
<tr>
<td>• Cross-border migrants experience challenges in claiming their right to access basic healthcare, including ART (Paper I; III).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implications for a revised approach to urban health</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Urban health varies across the city and within groups generally classified as ‘urban poor’. Careful understanding of the SDUH of different spatial groups is needed so that local government can devise spatially targeted strategies.</td>
</tr>
<tr>
<td>• Local government needs to mobilise action by other spheres of government, such as engaging with Provincial health authorities in order to address the challenges cross-border migrants face in accessing ART. It is not sufficient for local government to say that it is ‘not in their mandate’; their developmental responsibilities require that they also enable, facilitate and connect action within other spheres of government.</td>
</tr>
</tbody>
</table>

26 ‘Place’ is used to explain the spatial relationship of where people enter and settle within the city - either on the periphery, or within the central-city itself. This is found to correlate with the type of housing settlement – either ‘formal’ or ‘informal’ housing – which reflects differential access to basic services (such as water, sanitation, electricity and refuse collection). See Paper IV for more detail.
Theme: Urban livelihoods

Key findings

- Internal and cross-border migrants move to Johannesburg for economic reasons (Paper I, II, III, IV, V).

- The livelihood strategies of both internal and cross-border migrants are linked to their household of origin, which is predominantly in a rural area. These linkages to ‘another place’ are particularly important in times of sickness.

- Internal and cross-border migrants experience a range of shocks (including illness episodes, loss of income, sudden lack of food) and stresses (including the pressure to remit, hunger, the fear of HIV) (Paper I; IV).

- Cross-border migrants residing in the central city have more secure livelihood strategies than internal migrants residing in the peripheral informal settlement (Paper IV).

- Cross-border migrants were more likely to have linkages to an urban place than internal migrants, who predominantly originated from rural areas (Paper IV).

- Access to ART enables migrants to either maintain, or regain, survivalist livelihood activities. In turn, this enables them to continue to support their dependents (Paper I).

- Overall, migrants residing in the central-city appear to be better able to access the benefit of urban living - they are more likely to be earning an income, have better food security (Paper IV).

- Place is a key determinant of the ability of urban migrants to benefit from the city (Paper IV).

Implications for a revised approach to urban health

- Internal and cross-border migrants do not migrate in order to access healthcare. Local government must commission research understand and respond to the needs of urban migrant groups.

- Urban local governments must engage with their rural counterparts in order to ensure that the interlinked livelihood strategies of urban migrants are recognised, supported and facilitated. This should be through the IDP process. This is especially important for the return of sick migrants to rural areas; access to ART in the city can make a big difference in preventing the return of sick migrants to rural areas.

- Local government must ensure that support is provided to urban migrant groups that experience shocks and stresses. This includes ensuring that access to identity documents and grants is facilitated. In addition, local government must identify local NGOs and support them in providing assistance to urban migrant groups.

- Local governments must advocate with provincial health authorities who are responsible for the provision of ART for the early access and initiation of ART of migrant groups, especially in peripheral locations where transport costs are prohibitive.

- Local government must plan spatially-targeted responses to address the diverse livelihood support and food security needs of urban migrants residing in different areas of the city. One response does not fit the needs of the diverse urban groups present in the city.
Theme: Policy and governance

Key findings

• Whilst protective policy may exist, this is not always translated into protective practice (Paper I, III).

• The developmental mandate of local government is not being adequately achieved (Paper I, V).

• HIV is not viewed as a developmental issue by local government and vertical HIV health-driven responses prevail (Paper V).

• Current informal settlement development activities (including transit camps) present challenges to residents, particularly those living with HIV. There is an urgent need for effective in situ upgrading to be delivered to informal settlements.

• Urban migration trends need to be better understood and engaged with at the local level, particularly in terms of engaging with urban growth prospects and the developmental opportunities of migration.

• The NSP will not achieve its targets without a shift in local government responses to HIV; integrated, developmental responses are urgently required (Paper I, III, IV, V).

• It is incorrect to assume that all urban residents desire intervention from the state; this is not always the case. Some urban migrant groups may develop tactics to evade state intervention - this has implications for urban public health programming (Paper II).

Implications for a revised approach to urban health

• Local government must devise and implement policy monitoring and evaluation at various levels; city-wide and at the local-level. This will include working with other spheres of government to ensure that national and provincial policies and frameworks are being effectively implemented at the local level.

• A new approach is required to assist local government in achieving its developmental mandate. This involves local government recognising that HIV is more than a health issue.

• Local government must adopt an intersectoral approach - informed by the concept of healthy urban governance and public health advocacy - in order to achieve its developmental mandate. Sectors other than health need to be held to account.

• Good quality data is required to inform the responses of local government.

• Local government must engage with HIV as being more than a health issue and work with other spheres of government to plan appropriate responses that will support the goals of the NSP.

• Local government must engage with the urban context in order to determine the range of needs of diverse urban groups. This includes engaging with urban residents, service providers, NGOs, researchers and local business.
### Theme: Urban methodologies

#### Key findings

- Urban methodologies include both research and programming methodologies (Paper I, II, III, IV, V).

- The challenge of ensuring representation in the urban context is highlighted, particularly in terms of accessing ‘hidden’ populations - including undocumented cross-border migrants and migrants living with HIV. Discussions surrounding representation include for both research and programming purposes, including involvement of these groups in urban planning processes (such as the IDP) (Paper I, II, IV). This links to the challenges in accessing such populations, and reflects the complexity of the urban context. Access challenges include safety, security, language, culture.

- Sampling of urban groups for research purposes proves problematic (Paper IV).

- The importance of a participatory approach to both research and programming is emphasised. This may involve participatory methodologies such as photography and film projects, which have clearly demonstrated a powerful tool for engaging and learning from urban groups. These methods provided an alternative view of the urban experiences of migrant and non-migrant groups (Paper II, V).

- There is a need for process and intervention research to determine what works in the context of developing country urban contexts. These processes must be linked to scale-up plans.

### Implications for a revised approach to urban health

- There is a need for innovation in approach, and to learn from pilot interventions. Local government officials need to be flexible and facilitate a learning environment.

- Local government must engage in process to strengthen its developmental mandate - including the IDP process. This involves implementing a process for change that will strengthen the capacity of local government to realise its developmental mandate.

- Local government must ensure that processes are participatory and involve the multiple stakeholders present in the urban context. This includes citizens, researchers, service providers, NGOs, CBOs and local businesses. Local government needs to assess the urban context in order to identify and engage with these multiple stakeholders.

- The specific needs of urban residents must be reflected in local government planning processes, especially within the IDP process. This includes people living with HIV, internal and cross-border migrant groups, and residents of informal settlements.

- Research is required to inform local government about the needs of urban poor groups, in order for local government to determine how and where to intervene.

- A monitoring, evaluation, re-planning cycle must complement any revised approach to urban health. This includes developing relevant indicators of success that will reflect the process-oriented approach of local government action.
Results (2): a review of existing urban health frameworks

Urban health is not a new concept and “cities have historically been associated with the evolution of ideas of public health and practice” (McMichael, 2000: 1117). The health of urban populations has long been of interest to urban public health practitioners and researchers, as will be presented below. Interest in the health of urban populations began in 1840’s England, and witnessed researchers focussing on the relationship between features of urban living conditions, health and disease (for example Chadwick, 1842). Alongside this, social theorists began to explore the impact of broader social and economic factors on the health of individuals (Szreter, 1992, 1997, 2004; Szreter & Woolcock, 2004; see Vlahov, Galea, Gibble, & Freudenberg, 2005).

Drawing on the history of an industrialising Britain, Szreter highlights the “four D’s” of disruption, deprivation, disease and death associated with industrialisation and urbanisation (Szreter, 1997). Without effective political action to plan appropriate public health responses at the local level, the “four D’s” will undermine the potential economic and developmental benefits associated with urbanisation (Szreter, 1997, 2004; Szreter & Woolcock, 2004). However, 150 years since the public health and sanitary revolution of industrial Europe, many developing countries still face serious sanitation and health problems (Konteh, 2009). It is widely recognised that (1) improvements in social and environmental factors (such as food supplies, housing, safer water) and (2) deliberate public health interventions (such as sanitation systems, refuse disposal and vaccinations) relate to reductions in the mortality of urban populations in Europe from the 1850s (McMichael, 2000; Szreter, 2004). Improvements in the urban environment of cities in Europe and North America, from the mid nineteenth- to the early twentieth century saw an improvement in health of populations. Key here was the major sanitary reforms that included: paved streets; sewers; and, disinfection of water. In addition, improved health can be attributed to pasteurisation; improvements in nutrition; the surveillance, quarantine and isolation of the sick; changes in the virulence of infections; and, a more immunised populations (see Szreter, 1997, 2004; Vlahov, Gibble, Freudenberg et al., 2004). Szreter clearly highlights the

27 For example - Rosseau: role of place and institutions in shaping health and well being; Durkhiem: role of norms/function of society with growth of urban living and industrial conditions in cities in the 19th Century; Tonnies: rural-urban transition, increasing unpredictability of urban life that effects mental and physical health; fiction of Charles Dickens; Engels: sociological analysis (see Vlahov, Galea, Gibble et al., 2005).
importance of political organisation and will, particularly at the local government level, in effectively planning and delivering appropriate interventions to address health within urbanising cities; this includes political mobilisation of urban poor groups and ensuring that they have an effective political voice (Szreter, 1992, 1997, 2004; Szreter & Woolcock, 2004). McMichael highlights that, “the failure of many large cities in low-income countries to implement similar changes has left them with problems of environmental blight, inadequate housing, poverty and disease” (2000: 1118). It is recognised that the effective political mobilisation of urban poor groups, and the central role of local government in planning and implementing appropriate responses, are critical in addressing urban health (Szreter, 1992, 1997, 2004; Szreter & Woolcock, 2004). This suggests that within low-income urban contexts, (1) the urban poor have an ineffective political voice, and (2) the capacity of local government to respond effectively to the urban health needs of its population is currently limited. Importantly, this involves local government displaying – and enacting - the political will to initiate programmes to improve urban health and equity (Szreter, 1992, 1997, 2004; Szreter & Woolcock, 2004).

The last ten years display a renewed interest in urban health, coupled with a recognition of the need to understand the impacts of urban living conditions - factors that move beyond the individual - to the health of urban populations (Freudenberg, Galea, & Vlahov, 2005; Galea, Freudenberg, & Vlahov, 2005; Vlahov, Freudenberg, Proietti et al., 2007; Vlahov, Galea, Gibble et al., 2005; WHO, 2008a). Of central importance to the more recent urban health work, has been the understanding that the health of urban residents is more than the risk factors of individuals, and more than their health care needs (Vlahov, Galea, Gibble et al., 2005). The central argument of recent urban health research, is that it is both the social and physical environment of cities, combined with health and social service systems, that form the primary determinants of the health of urban populations (Vlahov & Galea, 2002; Vlahov, Galea, Gibble et al., 2005). More recently (as part of the WHO Commission on the Social Determinants of Health, and the associated WHO Knowledge Network on Globalisation), urban health work has engaged with the impact of globalisation on the health of urban populations, shifting focus away from local determinants, to those at a global level (Huynen, 2008).

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28 As a result, various frameworks have been generated that aim to assist in understanding the impact of city living on health, these are presented below.
It is interesting to note that over time, urban health research has moved from a focus on the local (such as the work of John Snow and Chadwick), to the level of the city, and now to a recognition of the impact of national and global processes on the health of individuals (Huynen, Martens, & Hilderink, 2005). More recently, the WHO Knowledge Network on Urban Settings and the WHO Commission on the Social Determinants of Health have further strengthened the importance of engaging with multiple health determinants at multiple levels in order to improve urban health (WHO, 2008b, 2008a). However, the critical role of local government in actively addressing urban health is shown to be essential to improving, and sustaining, urban public health (Szreter, 1992, 1997, 2004; Szreter & Woolcock, 2004).

**Current approaches to urban health**

Before moving to the evaluation of existing urban health frameworks, it is important to review current approaches to urban health. Lessons from these approaches assist in informing the development of a revised approach to urban health.

**WHO Healthy Cities**

The WHO Healthy Cities initiative originated from the recognition – in the 1970s – that public health needs to be ‘re-invented’ (Ashton, 2008). This was based on the realisation that the techno-centric national health systems that prevailed post-Second World War were experiencing rapidly escalating costs, and were negatively impacting health equity (Ashton, 2008). Ashton highlights three key documents that, he argues, set the scene for the Healthy Cities initiative:

1. The Lalonde Report (Lalonde, 1974)
2. The WHO Alma Ata Declaration on PHC (WHO, 1978)

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29 It is important to reflect on frameworks that have been designed to explore the relationship between globalisation and health. These frameworks provide useful insight into the larger contextual factors that impact health. These frameworks are recognised as providing useful insight into the macro-contextual factors that influence the health of urban populations (including the process of urbanisation) but are not included for critique within this thesis (Huynen, Martens, & Hilderink, 2005; Labonte & Schrecker, 2007c, 2007a, 2007b).

30 Both the CSDH and the KNUS have produced frameworks that aim to assist in understanding the relationship between urban living and health. These are presented below.
In 1986, a group of key public health practitioners and researchers came together\textsuperscript{31} to plan the Healthy Cities Initiative, the key objectives of this initiative are outlined in Table 10. The WHO Healthy Cities movement was seen as building on the Health of Towns Association of 1840’s England, and the movement recognised the importance of decentralisation in urban health (Harpham, 2009). Now on it’s fifth round of project cities, the use of Healthy Cities as an ‘organising framework’ made Health for All tangible in practice (Ashton, 2008).

Table 10: Objectives of Healthy City Project

<p>| | |</p>
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<tbody>
<tr>
<td>1</td>
<td>Political mobilisation and community participation in preparing and implementing a municipal health plan.</td>
</tr>
<tr>
<td>2</td>
<td>Increased awareness of health issues in urban development efforts by municipal and national authorities, including non-health ministries and agencies.</td>
</tr>
<tr>
<td>3</td>
<td>Creation of increased capacity of municipal government to manage urban problems and formation of partnerships with communities and community-based organisations (CBOs) in improved living conditions in poor communities</td>
</tr>
<tr>
<td>4</td>
<td>Creation of a network of cities that provides information exchange and technology transfers.</td>
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</tbody>
</table>

(WHO, 1995)

The objectives of the Healthy City Project (as outlined in Table 10 above) are useful guiding principles for a response to urban health. However, there have been various challenges to the successful implementation of the Healthy City Project, particularly within the global South (Harpham, Burton, & Blue, 2001; van Naerssen & Barten, 2002). These challenges are linked to limited municipal health plans, limited political commitment, and the recognition that the process was often donor driven (Harpham, Burton, & Blue, 2001; van Naerssen & Barten, 2002). It has been suggested that the work of the CSDH may lead to a resurrection of Healthy Cities Projects within the global South (Harpham, 2009).

**Rockefeller Foundation/CSUD Global Urban Summit (July 2007)\textsuperscript{32}**

The Rockefeller Summit was held in July 2007 in recognition that

\textsuperscript{31} This included: Ilona Kickbusch, John Ashton, Trevor Hancock, Len Duhl, Keith Barnard and Eric Giroult.

\textsuperscript{32} [http://csud.ei.columbia.edu/?id=projects_urbansummit](http://csud.ei.columbia.edu/?id=projects_urbansummit)
“...for the first time in history we are living on an urban planet – a world in which the majority of the population lives in urban places – and the recognition that the complex challenges which accompany rapid urbanization can stymie the opportunities cities offer”

(Sclar & Volavka-Close, 2007: 1)

The Summit engaged with the importance of health equity through recognising the importance of a focus on ‘urban’ in terms of population health and health service delivery. The importance of moving away from the classic urban – rural debate was urged; given a fluid migrant population, urban population health must consider interlinked systems with rural areas, notably through processes of circular migration (Sclar & Volavka-Close, 2007). In addition, it was acknowledged that data on urban advantage obscures the realities of urban poor groups, particularly those residing in urban informal settlements and the need for disaggregated data on urban health was emphasised (Sclar & Volavka-Close, 2007). Health was recognised as a more equitable indicator of development and human well-being than economic output (Sclar & Volavka-Close, 2007).

**Urban health penalty, urban health advantage, and urban sprawl**

Previously, research into urban health has focussed at the level of the individual, and on access to healthcare - excluding the role of the urban environment itself in determining health (Freudenberg, Galea, & Vlahov, 2005). A renewed interest in understanding the influence of the urban environment on health has been coupled with three key approaches to urban health (Vlahov, Galea, Gibble et al., 2005): (1) *Urban health penalty* (Freudenberg, Galea, & Vlahov, 2005); (2) *Urban sprawl* (Freudenberg, Galea, & Vlahov, 2005); and, (3) *Urban health advantage* (Vlahov, Galea, Gibble et al., 2005). A description and critique of these approaches are included in Table 11. As will be highlighted in the table, it is argued that these approaches are unable to capture the diverse urbanisation experiences of different urban migrant groups, and do not provide guidance for appropriate responses.
Table 11: A critique of three central approaches to urban health – their application in developing country contexts

<table>
<thead>
<tr>
<th>Approach</th>
<th>Description</th>
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</thead>
</table>
| Urban health penalty   | The *urban health penalty* approach arose during the 1800s in Europe, through concerns for the health of poor urban populations raised by the social justice movement. This approach argues that city-centres concentrate poor people, exposing poor urban populations to unhealthy physical and social conditions.  
  **Advantages of this approach**  
  - Considers the poor environmental and social conditions that negatively impact health, and are found to prevail in many developing country central-city contexts.  
  - Engages with and describes inequalities in the SDUH and health outcomes, comparing ‘poor’ urban groups with wealthier urban residents.  
  - Emphasises the need to improve environmental and social conditions in inner-city areas.  
  **Limitations of this approach**  
  - Creates a focus that leads to urban health becoming conflated with the conditions experienced by urban poor groups only; wealthier urban groups are excluded from analysis.  
  - Does not engage with the benefits that cities may offer.  
  - The inequalities within urban poor groups residing in central-city areas are not explained.  
  - The unmanaged growth of urban areas is not considered.  
  - Focuses on environmental and social conditions; does not engage adequately with the role of urban policy and governance in creating (un)healthy conditions.  
  - Changes in the distribution of poverty on the periphery of urban areas are not considered.  
  - Suggestions for intervention are lacking; this is a descriptive approach to urban health. |
| Urban sprawl           | The *urban sprawl* approach to urban health considers the negative health and environmental effects of urban growth into peripheral areas. This approach focuses on the ‘diffusion’ of urban populations beyond inner-city areas, and considers the negative health effects of urban growth in peripheral areas. This approach engages with the challenges of unplanned urban growth and the desire for ‘sustainable development’.  
  **Advantages of this approach**  
  - Moves beyond the central-city.  
  - Considers key challenges around urban planning (relating to urban growth).  
  **Limitations of this approach**  
  - Tends to focus on the periphery and does not engage with inner-city populations.  
  - Focuses on environmental and social conditions; does not engage with the rights of residents to access healthy services.  
  - Much of the focus is on the growth of ‘suburbia’ and not with the expansion of informal settlements on the periphery of cities in developing countries.  
  - Suggestions for intervention are lacking; this is a descriptive approach to urban health that is limited to certain contexts. |
**Approach** | **Description**  
---|---  
Urban health advantage | The *urban health advantage* considers the benefits of cities to health. This approach considers that the urban poor “do better” than the rural poor. Cities are argued to have better access to healthcare and education opportunities than rural areas. This approach argues that cities provide more opportunities for political engagement and social movements to address health.  

*Advantages of this approach*  
- Engages with the benefits of the urban context.  
- Provides opportunity to engage with the services that are provided by city authorities.  

*Limitations of this approach*  
- Assumes that all urban residents are able to benefit from the opportunities and benefits offered in cities.  
- Does not engage with the challenges faced by poor urban residents.  
- The ‘urban advantage’ is limited to the services that cities are mandated to provide, this approach does not consider how equitably these services are provided, or the effectiveness of pro-poor policy.  
- The rights of urban residents are not considered; this approach does not critique the ability of residents to claim their rights to access basic services and healthcare.  
- A focus on the advantages that cities offer overlooks the growing health inequalities typical of developing country urban contexts.  
- Suggestions for intervention are lacking; this is a descriptive approach to urban health.  

(This critique expands on earlier work by Freudenberg, Galea, & Vlahov, 2005; Vlahov, Galea, Gibble et al., 2005)
Urban health models

Alongside the three approaches to urban health critiqued above, various models of urban health have been developed, that aim to assist in understating the impact of city living on urban health, several of which draw on the concept of social determinants of health (Braveman, 2007; Commission on the Social Determinants of Health, 2007; Diderichsen, Evans, & Whitehead, 2001; Freudenberg, Galea, & Vlahov, 2005; Galea, Freudenberg, & Vlahov, 2005; Solar & Irwin, 2007; Starfield, 2007; Vlahov, Galea, Gibble et al., 2005; WHO, 2008b, 2008a). From the review of existing urban health frameworks, I have decided to focus on three models that build on the social determinants of health framework. The three frameworks are (1) the ‘urban living conditions model’ (Galea, Freudenberg, & Vlahov, 2005); (2) The WHO Commission on the Social Determinants of Health (CSDH) conceptual framework for action on the social determinants of health (WHO, 2008b); and (3) the conceptual framework of the associated WHO Knowledge Network on Urban Settings (WHO, 2008a). These frameworks are described in detail below.

(1) The ‘urban living conditions model’ (Galea, Freudenberg, & Vlahov, 2005)

Whilst recognised as being important, the three central approaches of urban sprawl, urban penalty and urban advantage have been critiqued by Freudenberg, Galea and Vlahov, who suggest an alternative model for urban health – that integrates urban penalty and urban sprawl, and emphasises that urban living conditions are the primary determinant of health (2005). This framework is presented in Figure 6 below.
The framework was designed in response to the need for a comprehensive model “that can incorporate and integrate the multiple levels of factors that affect health in cities and that considers feature of cities that may either promote or harm health” (Galea, Freudenberg, & Vlahov, 2005: 1019). The central premise to this framework is that “multiple levels of influence shape population health” (Galea, Freudenberg, & Vlahov, 2005: 1019). This framework provides a novel perspective for urban health; it moves away from the trend of simply describing the health-related characteristics of urban populations, to providing
opportunity for interventions to improve health (Galea, Freudenberg, & Vlahov, 2005). However, these opportunities are not identified.

This framework considers urban populations being defined through size, density diversity and complexity; health is a “function of living conditions shaped by municipal determinants and national and global trends” (Galea, Freudenberg, & Vlahov, 2005: 1019). It is argued that the social and physical environments defining the urban context are shaped by municipal factors (such as government and civil society) and that national and global trends shape the context within which these local factors operate (Galea, Freudenberg, & Vlahov, 2005). Inclusion of these different levels of determinants (global, national, local) enables public health programmes to be targeted appropriately. The framework proposes mechanisms through which a range of variables (physical, social, economic and political) may influence the living conditions that, they argue, are the primary determinant of the health of urban populations (Galea, Freudenberg, & Vlahov, 2005).

(2) WHO Commission on the Social Determinants of Health (WHO, 2008b)

A conceptual framework has been developed by the CSDH that supported the Commission in identifying the levels at which it has suggested action can be taken to improve the SDH through policy (WHO, 2008b). This model – highlighted in Figure 7 - draws significantly from the work undertaken by Diderichsen and colleagues that developed a model of the social production of disease (Diderichsen, Evans, & Whitehead, 2001), and has been adapted from the work of Solar and Irwin (see Solar & Irwin, 2007 for an earlier version of this model). The model is of use to the PhD research as it focuses on the importance on the socio-economic and political context in influencing the SDH (WHO, 2008b).

The key components of the CSDH model include (1) the socio-political context; (2) structural determinants and socioeconomic position; and (3) intermediary determinants (Solar & Irwin, 2007). The framework is centred around Diderichsen et al.’s 2001 model that places social position at the centre, with social contexts creating the social stratification that results in differential exposures to health damaging conditions, differential vulnerabilities to illness, and differential consequences of ill health (Solar & Irwin, 2007). These differentials ultimately result in the spatial manifestation of intra-urban inequalities in health outcomes. The CSDH conceptual framework considers that it is the socioeconomic and political
context that constitutes the social determinants of health inequities; according to the model, the structural determinants that shape social hierarchies according to these key stratifiers are the root cause of inequities in health (Commission on the Social Determinants of Health, 2007; Solar & Irwin, 2007).

![Diagram](image)

**Figure 7: WHO Commission on the Social Determinants of Health (WHO, 2008b)**

It is important to recognise that

“By their nature many of the social determinants considered by the Commission are relatively distant, spatially and temporally, from individuals and health experience. This is challenging, both conceptually and empirically, when trying to attribute causality and demonstrate effectiveness of action on health equity”.

(WHO, 2008b: 42)

This framework is presented in the final report of the CSDH. The Commission suggests that interventions can be aimed at taking action on ‘the circumstances of daily life’ and ‘structural drivers’ (WHO, 2008b). These are described in Table 12 below.
### Table 12: Suggestions made by the CSDH of where to take action on the social determinants of health

<table>
<thead>
<tr>
<th>Circumstances of daily life</th>
<th>Structural drivers</th>
</tr>
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<tbody>
<tr>
<td>• Differential exposures to disease-causing influences in early life, the social and physical environments, and work, associated with social stratification. Depending on the nature of these influences, different groups will have different experiences of material conditions, psychosocial support, and behavioural options, which make them more or less vulnerable to poor health;</td>
<td>• The nature and degree of social stratification in society - the magnitude of inequity along the dimensions listed;</td>
</tr>
<tr>
<td>• Health-care responses to health promotion, disease prevention, and treatment of illness.</td>
<td>• Biases, norms, and values within society;</td>
</tr>
<tr>
<td></td>
<td>• Global and national economic and social policy;</td>
</tr>
<tr>
<td></td>
<td>• Processes of governance at the global, national, and local level.</td>
</tr>
</tbody>
</table>

(UN, 2008b: 42)

Whilst this model does not specifically focus on the urban context, by including a range of levels it does usefully point to the need for multilevel interventions – and can be applied to an urban context.

**3. The Knowledge Network on Urban Settings (KNUS)**

The WHO KNUS conceptual framework is presented in Figure 8 below. This conceptual framework builds on work of Galea et al (2005; described above) and is described as “a web of interlinking determinants” (WHO, 2008a: 8). Key to this research is that the KNUS set out to engage with the complexity of the urban context, as described by members of the KNUS:

“It is argued that the complexity of cities requires a similar level of complex intervention, which is one of the many features of intersectoral approaches.”

(Kjellstrom, Mercado, Sami et al., 2007: i3)
The central premise to this framework is that the urban context is defined by a range of physical and social factors, which are themselves defined by processes present at multiple levels (Ompad, Galea, Caiaffa, & Vlahov, 2007; WHO, 2008a). Through the final report of the WHO KNUS, recommendations for intervention focus on the role of governance. The KNUS recommends that “governance interventions in the urban setting must consider global, national and municipal determinants... and should strive to influence both urban living and working conditions as well as intermediary factors that include social processes and health knowledge. Interventions can also work upwards to influence the key global, national, municipal and local drivers” (WHO, 2008a: 8). As with the preceding frameworks, the KNUS framework views the urban environment (physically, socially, economically, politically) as affecting all urban residents (WHO, 2008a). Importantly, the KNUS views that the health sector has a central role in “advocating for whole of government approaches to health, urban policy and planning, the promotion of healthy settings...and strengthening local government responses to emerging health needs” (WHO, 2008a: 9).
Summary: review of approaches to urban health and existing frameworks

This review has shown how an exploration of the linkages between urban living conditions with health and disease have predominated approaches to urban health since the 1800s. The work of social theorists in the 1800s has also informed how we approach urban health today; this has included the role of place and institutions, the norms and functions of society, and rural to urban transitions in impacting the health of urban populations. Today, the recognition that urban health is more than urban living conditions, more than individual risk factors, and more than healthcare needs alone, has reinforced the idea (first considered in Europe in the 1800s) that it is the social and physical conditions provided by cities, along with access to appropriate health and social services that form the primary determinants of health. In addition, the role of global processes in impacting city-level determinants of health is recognised. Important lessons are gained from a review of the WHO Healthy Cities Initiative; the components of the Initiative are considered to be very useful in guiding the key components of any revised approach to urban health. I believe that the objectives of the WHO Healthy Cities Initiative can be incorporated into a revised approach that facilitates the process for achieving these objectives.

The three key approaches to urban health – the urban health penalty, urban sprawl, and urban health advantage – have been critiqued (for example, see Freudenberg, Galea, & Vlahov, 2005; Vlahov, Galea, Gibble et al., 2005), and are recognised in this review as being unable to effectively capture the diverse urbanisation experiences of migrants, or their health outcomes (see Table 11). The critique included in this thesis draws on the background sections that show that migration and informal settlements – within a context of high HIV prevalence - are central to developing country cities, and that these three approaches are unable to engage with these factors. Through this research and review, each of the three approaches is found to be restrictive, too descriptive, and do not engage with migration, informal settlements and HIV, highlighting the complexity of developing country urban contexts. Importantly, these approaches do not enable effective suggestions for intervention to be developed. It is argued that exploration of urban health in developing country cities requires an understanding of the diverse urbanisation experiences of urban migrant groups; some of whom experience an urban health penalty, others access an urban health advantage (compared to their rural counterparts) and many of whom find that their urban experience is
affected by their geographical ‘place’ within the city – engaging with the urban sprawl approach. A revised urban health framework which aims to guide local government responses to urban health, must engage and build upon these three approaches, and find innovative ways to link them together.

The first model presented – the ‘urban living conditions model’ (Galea, Freudenberg, & Vlahov, 2005) - integrates the urban penalty and urban sprawl approaches to urban health, emphasising urban living conditions as a primary determinant of urban health. I consider the model to be useful for three key reasons. Firstly, it recognises the multiple levels of influence on the health of urban populations, by considering global, national and municipal characteristics in determining health outcomes (for example, by including immigration, urbanisation, government policies, and the physical environment). Secondly, the model moves beyond simply describing the urban context, to offer some suggestion of where to intervene to improve urban health. And finally, the social and physical environments are recognised as being shaped by government and civil society. Despite the inclusion of these important factors, the model focuses predominantly on description; whilst indicating a point where intervention should take place, the model fails to suggest who should intervene and in what. The recognition of the role of global and national trends (such as urbanisation, migration into cities, the role of national governments, and the influence of globalisation) on the health of urban populations is key, however, I would argue that inclusion of all these levels (global, national, local) within a single model is problematic. By presenting all three levels (all of which are very important) within the same model prevents any level being considered in great detail, therefore lacking the depth of analysis required for local government (for example). The importance of developing spatially targeted responses is not included in this model. Immigration is presented as a national and international trend, but inadequately captures the importance of migration in developing country cities. In particular, this does not engage with the important role that internal migration plays developing country urban contexts. Housing is mentioned as an ‘urban characteristic’, categorised as the ‘physical environment’; informal settlements are not mentioned explicitly. Importantly, the different roles of different levels of government in designing and implementing housing policy are not reflected. Whilst high HIV prevalence is not found in all cities, HIV is becoming increasingly urban and requires attention when considering action to improve the health of urban populations; HIV does not feature explicitly within this framework. Given that a framework is a generalised model, it is understandable that specific
diseases and health conditions are not explicitly contained in the framework. However, I argue that in a context of high HIV prevalence, not only the determinants but also the impacts of HIV must be considered. I would argue that the multiple health and development impacts associated with high HIV prevalence need to be specifically addressed, including access to HIV-related services, basic services, and housing.

The second model presented was the WHO CSDH conceptual framework (WHO, 2008b), which identifies different levels where it is suggested that policy-related action can be taken to improve the SDH of urban populations. The model draws on previous work relating to the social production of disease, and the socio-political context in influencing health outcomes. Both are considered important to any framework that is attempting to improve the health of urban populations. The model considers that it is the socio-economic and political context that influences the social position of urban residents, which ultimately affects their exposures to risks and differential health outcomes. I find the CSDH framework useful in understanding and explaining the inequities that lead to inequalities in health. The Commission suggests policy-related action to address (1) “circumstances of daily life” (including exposure to risks and healthcare responses), and (2) “structural drivers” (including social position, inequalities in health, and governance issues) (WHO, 2008b: 42). The report that accompanies the framework provides useful suggestions for interventions to address these factors; the three key recommendations of the Commission being (1) improve daily living conditions; (2) tackle the inequitable distribution of power, money and resources; and (3) measure and understand the problem and assess the impact of action. Neither migration nor housing type (or informal settlements) are included in this framework. HIV is not specifically identified.

The final framework presented is associated with the CSDH; this framework was developed by the KNUS (WHO, 2008a). This framework builds on the model developed by Galea et al. (2005) with the addition of what the KNUS describes as a set of “intermediate determinants” of health which are found to include: empowerment and capacity to participate; social support networks; exclusion and inclusion of vulnerable groups; health-related knowledge and health seeking behaviour (WHO, 2008a). The framework is described as “a web of interlinking determinants”, usefully reflecting and engaging with the complexity of the urban context and indicating that urban health involves global, national and municipal determinants, as well as the intermediate determinants listed above. The
report of the KNUS describes a range of suggested interventions, relating to urban
governance at the global, national and municipal levels (WHO, 2008a). Importantly, the
KNUS usefully describes the health sector as playing an important role in advocating other
government departments to engage in improving the health of urban populations (WHO,
2008a). Whilst this framework is considered to effectively describe the complexity of the
urban context, in particular highlighting the “interlinking determinants” that ultimately
impact health, the framework does not go far enough to guide local government responses.
Migration is not included in this framework. Housing quality is included, which could
enable informal settlements to be considered. HIV is absent from the framework.

Table 13 summarises the review through the four thesis themes. None of the frameworks
reviewed are utilised by South African government, at either the national or local levels. The
frameworks do not engage explicitly or adequately with the interlinked urban health
challenges of migration and informal settlements in a context of high HIV prevalence. None
of the frameworks were found to engage adequately with the complexity of developing
country urban contexts, defined as the six key challenges that I outlined in the background to
this thesis. These are: (1) urban inequalities; (2) migration; (3) informal settlements; (4) high
HIV prevalence; (5) “weak rights to the city” (Balbo & Marconi, 2005: 13); and, (6)
survivalist livelihoods (see Table 2). Importantly, none of the frameworks provide adequate
suggestions for intervention to improve the health of urban populations, including the
‘where’, ‘who’ and ‘how’.
Table 13: A summary of the review of existing urban health frameworks through the thesis themes

<table>
<thead>
<tr>
<th>Thesis theme</th>
<th>Summary of findings from a review of existing frameworks</th>
</tr>
</thead>
</table>
| Rights to the SDUH  | • None of the frameworks explicitly consider the rights to accessing the SDUH.  
• Whilst policies at the global/national/local level are mentioned, whether these policies are effectively implemented is not considered.  
• The role of ‘pro-poor’ policy is not explicitly mentioned.                                                                                           |
| Urban livelihoods   | • Reference is made to employment status; the importance of a survivalist, informal livelihood for many urban poor is not included.  
• The informal economy is excluded from the frameworks.                                                                                                     |
| Policy and governance | • Policies at the global/national/local levels are included in the frameworks; what this means is not clear.  
• The implementation of policy is not considered.  
• Policies that address the underlying structural determinants of poverty and intra-urban health differentials are not explicitly mentioned.  
• Urban governance is referred to in the descriptions that accompany the frameworks, but is not explicitly included in the frameworks. |
| Urban methods       | • Suggestions for how to intervene and where to intervene are lacking.  
• The challenges of engaging with diverse urban populations are omitted.  
• Suggestions for how to engage and involve diverse urban populations are lacking.APONTHESE
Results (3): a revised framework for urban health?

In my review of existing urban health frameworks, I have struggled with what I consider to be a central limitation of all the urban health frameworks reviewed: that they fail to engage with the specific complexities of a given urban context (such as Johannesburg, for example). Importantly, the existing urban health frameworks do not adequately engage with the importance of effective governance at a local level, including the critical role of local government in planning for – and implementing – interventions to address urban public health (as emphasised by Szreter, 1992, 1997, 2004; Szreter & Woolcock, 2004; van Naerssen & Barten, 2002). In particular, this relates to the role of good governance (including local government activities) in improving health equity in urban contexts. A central limitation here is the role of local government in implementing effective urban development policy that engages with: urban governance, community participation, and decentralisation (see van Naerssen & Barten, 2002).

Whilst the existing frameworks are themselves complex, and engage with the multiple levels and determinants that ultimately impact health outcomes, frameworks are – by definition - generalised and therefore unable to engage with the specific complexities present within a particular urban context. Rakodi usefully summarises my frustrations by explaining that

“Inevitably, any diagram, or indeed any framework, is an oversimplification of a complex reality and should be treated merely as a guide or lens through which to view the world. Its value lies in its ability to capture key components and their interrelationships as a starting point for identifying critical analytical questions and potential leverage points where intervention might be appropriate – not in whether it portrays the whole of reality, everywhere and at all times, but whether it provides insightful analysis and appropriate action.”

(Rakodi, 2002: 8)

Accepting that frameworks can be the starting point for identifying leverage points (Rakodi, 2002), responding to urban health challenges requires going further than a framework approach. At the start of this research, I had anticipated generating a revised urban health
framework that would capture the complexity of the urban context and provide suggestions for effective intervention to improve the health of urban populations. I have realised that a revised framework will not allow me to achieve this aim, and would lead to another ‘static’ representation of a complex urban context. In order to achieve the overall aim of my research, I require a conceptual tool which will facilitate a process for change at the local level, and will enable local government to respond appropriately to improve the health of urban populations. As a result, I am suggesting a move away from a framework for urban health, to a more fluid “concept map” (Huynen, Martens, & Hilderink, 2005; Novak & Cañas, 2008).

“Concept maps are graphical tools for organizing and representing knowledge. They include concepts, usually enclosed in circles or boxes of some type, and relationships between concepts indicated by a connecting line linking two concepts. Words on the line, referred to as linking words or linking phrases, specify the relationship between the two concepts.”

(Novak & Cañas, 2008: 1)

From my review of existing frameworks and the findings from the four studies, it is evident that local government lacks guidance on how to effectively address the challenges that negatively impact the health of urban populations in a developmental way. “Concept mapping has been shown to help…..researchers create new knowledge, administrators to better structure and manage organizations, writers to write, and evaluators assess learning” (Novak & Cañas, 2008: 31). I suggest that concept mapping can therefore be used to help local government respond to urban health. Concept mapping is a tool that provides opportunities for local government officials themselves to participate in creating a city-specific concept map, based on several key guiding questions that I outline in Table 14 below. These guiding questions have been identified through a review of existing approaches to urban health (including the WHO Healthy Cities Initiative), the synthesis of the findings from the four studies (see the discussion section and the original papers for more details). The key questions are designed to encourage local government to act in a developmental way through three central processes: (1) intersectoral action; (2) healthy urban governance; and, (3) public health advocacy. These three processes have been identified through (1) a review of previous approaches to urban health, and (2) through the synthesis of the four studies. I have selected these processes as being the actions that will
enable local government to achieve its developmental mandate, I will go onto discuss these central processes in the discussion section.

The concept mapping method is designed around a participatory process to strengthen the developmental mandate of local government; this requires for the IDP process to be effectively implemented (Harrison, 2006). It is suggested that the concept mapping process will support and inform the IDP process, ensuring that local government achieves its developmental mandate, and that urban health is approached in a developmental, interdisciplinary and participatory way. I think that a strategic person would need to be appointed by local governments to drive this process. This individual would require research skills, both in conducting and commissioning research and in engaging with and interpreting research findings. The concept mapping process does rely on local government assessing its urban context; without such knowledge, the concept mapping would be based on assumed knowledge relating to the needs and locations of urban poor groups. Linked to this, it is anticipated that the concept mapping process will enable local government to reflect on its own interventions and learn from good practice. Therefore, as local government assesses its urban context, it must also evaluate and learn from current local government interventions. This individual would work with the IDP Manager and HIV coordinator to drive the concept mapping process, which would then feed into the IDP process itself. Figure 9 outlines what the start of a participatory concept mapping process may look like.
Ntombizini Mchunu
Table 14: Overview of questions to guide concept mapping for urban health, including examples

<table>
<thead>
<tr>
<th>Guiding questions</th>
<th>Purpose of the question</th>
<th>Examples from the studies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(1) Assessing the urban context</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the problem?</td>
<td>To assess the urban context in order to identify central urban health challenges.</td>
<td>Migration and informal settlements in a context of high HIV prevalence.</td>
</tr>
<tr>
<td>Who are the vulnerable groups?</td>
<td>To assess the urban context. To determine which urban groups require targeted interventions.</td>
<td>Internal and cross-border migrants. Residents of informal settlements. People living with HIV.</td>
</tr>
<tr>
<td>What are the determinants of vulnerability?</td>
<td>To apply a broad social determinants of urban health framework to ascertain the determinants of vulnerability.</td>
<td>Access to basic services. Access to housing. Access to healthcare, including ART services.</td>
</tr>
<tr>
<td>What are the needs of these groups?</td>
<td>To engage with representatives of these groups to determine their needs, in a participatory way.</td>
<td>Food security, access to basic services, access to documentation, strengthening livelihoods.</td>
</tr>
<tr>
<td>Who are the stakeholders?</td>
<td>To identify the multiple stakeholders involved in urban health.</td>
<td>Citizens, service providers, NGOs, CBOs, researchers, local businesses, local development committees, local government officials, political leaders.</td>
</tr>
<tr>
<td>Guiding questions</td>
<td>Purpose of the question</td>
<td>Examples from the studies</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(2) Mobilising change that is beyond the mandate of local government</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What cannot be changed at the local government level?</strong></td>
<td>To ascertain which determinants of vulnerability and which community needs are outside the mandate of local government.</td>
<td>ART clinic opening hours are inadequate; ART clinics are run by Provincial Departments of Health. ART is not accessed currently by all who require treatment. This exacerbates vulnerability.</td>
</tr>
<tr>
<td><strong>Who is responsible for this change?</strong></td>
<td>To identify which actors within which sphere of government are responsible.</td>
<td>Provincial Department of Health and facility managers.</td>
</tr>
<tr>
<td><strong>Who is responsible for mobilising action?</strong></td>
<td>To identify within local government who is responsible for mobilising action.</td>
<td>Head of local government health must meet with provincial department of health and facility managers. The individual appointed to oversee the concept mapping process.</td>
</tr>
<tr>
<td><strong>Who is responsible for mobilising resources?</strong></td>
<td>To identify who is responsible for mobilising resources to take action and for monitoring change effectiveness.</td>
<td>Provincial Department of Health is responsible; the Head of the Local Government Health Department must advocate for these resources to be mobilised.</td>
</tr>
<tr>
<td>Guiding questions</td>
<td>Purpose of the question</td>
<td>Examples from the studies</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(3) Mobilising change within the mandate of local government</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What can be changed at the local government level?</strong></td>
<td>To ascertain which determinants of vulnerability and which community needs are within the mandate of local government.</td>
<td>Refuse collection within urban informal settlements is inadequate.</td>
</tr>
<tr>
<td><strong>Who in local government is responsible for this change?</strong></td>
<td>To determine (1) which local government department and (2) which individual(s) within the department are responsible.</td>
<td>Environmental Health and Pikitup.</td>
</tr>
<tr>
<td><strong>How can this change take place?</strong></td>
<td>To identify what action can be taken to address the determinants of vulnerability and community needs.</td>
<td>Weekly refuse collection that services all sections of the informal settlement.</td>
</tr>
<tr>
<td><strong>Who is responsible for mobilising action?</strong></td>
<td>To identify within local government who is responsible for mobilising action.</td>
<td>The individual appointed to oversee the concept mapping process.</td>
</tr>
<tr>
<td><strong>Who is responsible for mobilising resources and monitoring change?</strong></td>
<td>To identify within local government who is responsible for mobilising resources in order to take action and monitoring change effectiveness.</td>
<td>Specific department (e.g. Environmental Health) with support of all local government departments.</td>
</tr>
</tbody>
</table>
Figure 9: Towards a concept map to address urban health

This concept map was created using open source software: Cmap Tools v5.03 [http://cmap.ihmc.us]
Discussion

“Although cities are not static, and in fact cities’ dynamism is one of their defining features, considering health in cities is fundamentally the study of how a particular type of place may affect health”.

(Galea & Vlahov, 2005: 344)

This research has (1) highlighted the complexity of developing country urban contexts, with a focus on migration and informal settlements in a context of high HIV prevalence; (2) suggested that a ‘framework for urban health’ is an inflexible approach to engaging with city-specific complexity; and, (3) confirmed that local government requires guidance in how to respond to urban health in a developmental way, including the interlinked challenges of informal settlements and migration in a context of high HIV prevalence. I concur with Rakodi; that the existing frameworks act “as a starting point for identifying critical analytical questions and potential leverage points where intervention might be appropriate” (2002: 8). The following quote highlights the challenge – and necessity – of identifying how and where to intervene in order to improve urban health, recognising the central importance of processes which influence health, research and practice.

“…identifying which characteristics of the urban context, and under which circumstances, are modifiable, is an important theoretical, empirical, public health question. In many ways the choice of an appropriate urban health framework may dictate, at least implicitly, the choice of both the question asked and the methods used in addressing the question. For example, a comprehensive framework that includes national-level policies that shape municipal financing may suggest that inquiry into and intervention on national policies may be of primary importance to urban health. In contrast, a framework that considers primarily physical characteristics of cities will address how features of the built environment at the local level can affect residents’ health. Thus far, relatively little has been written about the processes through which the urban context may affect health and about further elucidation of these processes. A comprehensive appreciation of the processes that influence urban health can and should guide research and practice.”

(Galea & Vlahov, 2005: 358)
To this end, the research presented has highlighted that the complexity of the urban context requires the application of a new tool to firstly understand urban health challenges and secondly to identify how and where to intervene in order to improve the health of urban populations. This is why I argue that the ‘concept map’ approach provides the opportunity to generate a context- and city-specific developmental response to urban health. The ‘concept map’ approach - that I have described in the previous section – is suggested as a tool for local government and partners to apply to the challenge of urban health, in a participatory way, in order to enact its developmental mandate. I suggest that concept mapping facilitates a process-oriented approach to urban health interventions. The mapping exercise brings together a range of stakeholders, who make use of their own knowledge to identify urban health challenges, appropriate stakeholders, build partnerships, design interventions, and take action. It is suggested that the concept mapping exercise be incorporated into the IDP process.

**Developmental local government**

The research has shown that the developmental mandate of local government is not yet realised (Papers I, II, IV and V). A developmental local government should work with citizens to develop sustainable interventions to address their social, economic and material needs (The Republic of South Africa, 1998a). This research suggests that local government must prioritise the needs of poor urban groups (including residents of informal settlements). To achieve this, local government must find ways to address the downstream determinants that result in poor health outcomes, as well as the resulting impacts of poor health. In addition, local government must find ways to plan ahead, through using data and modelling. Local government must think beyond its mandated roles in order to mobilise change within different spheres of government; this requires local government to enact its roles as an ‘enabler/regulator’, ‘coordinator/facilitator’ and connector (see MRC, INCA, & dplg, 2007). I suggest that the concept mapping process can enable local government to identify where other spheres of government (and other stakeholders) are required to take action. To this end, the IDP should include recommendations for provincial and national governments.

It is argued that the developmental mandate of local government can be achieved through the application of three central concepts to the ‘concept mapping’ process: (1) intersectoral
action; (2) healthy urban governance; and, (3) public health advocacy. I have incorporated these three concepts within the questions that guide the concept mapping process; I will discuss these concepts in more detail below.

**Intersectoral action**

“Considering the complexity and magnitude of health, poverty, and environmental issues in cities, it is clear that improvements in health and health equity demand not only changes in the physical and social environment of cities, but also an integrated approach that takes into account the wider socioeconomic and contextual factors affecting health. Integrated or multilevel approaches should address not only the immediate, but also the underlying and particularly the fundamental causes at societal level of related health issues.”

(Barten, Mitlin, Mulholland, Hardoy, & Stern, 2007: i164)

The findings presented support the quote above, indicating that complex urban challenges require intersectoral responses that are able to adequately engage with the multiple determinants of urban health (Papers I, II, IV and V). The theory of integrated responses to public health is not new; the Alma Ata declaration of 1978, and the resultant Health for All movement, attempted to redress the need to strengthen health equity by addressing underlying social conditions, through intersectoral programmes. Alma Ata called for the primary health care (PHC) approach of intersectoral responses to be implemented (the other components of PHC are community participation and access to a range of health services) (WHO, 1978). There is evidence to suggest that partnerships and effective relationships between community and local policy makers are necessary components of such an integrated approach (Gillies, 1998; Sanders & Chopra, 2006; Satterthwaite, 2002). However, the ideal of intersectoral responses to health challenges remains unmet and predominantly fragmented, centralised, and sectoral responses prevail (Harpham & Molyneux, 2001; Harpham & Tanner, 1995; Harpham, Werna, & Blue, 1998; Mitlin & Satterthwaite, 2004b; Sanders & Chopra, 2006; Waelkens & Greindl, 2001). These findings are supported by this research. This has led to a renewed call for integrated approaches to health (Sanders & Chopra, 2006), including the WHO’s renewed call for co-ordinated health, environment and development policies in order to improve quality of life (Pruss-Ustun & Corvalan, 2006). This links into the calls for integrated approaches from the CSDH and the KNUS (Barten,
Mitlin, Mulholland et al., 2007; WHO, 2008b), and includes working towards integrated, intersectoral research in order to develop intersectoral recommendations for action.

“(...) it is essential to adopt a long-term multisectoral approach to address the social determinants of health in urban settings. For comprehensive approaches to address the social determinants of health effectively and at multiple levels, they need explicitly to tackle issues of participation, governance, and the politics of power, decision making, and empowerment.”

(Barten, Mitlin, Mulholland et al., 2007: i164)

In addition, the importance of an intersectoral approach to managing migration at the local level is recognised but the “lack of co-ordination among government departments further exaggerates the partial and often ill-informed responses to human mobility” (Landau & Singh, 2008: 180).

“(...)effectively responding to human mobility is not something that any single governmental body or sphere can address on its own. It requires co-ordination and planning that transcends the boundaries of metropolitan areas and encompasses a wider area connected by commuter flows, economic linkages and shared facilities.”

(Landau & Singh, 2008: 180)

Given the developmental mandate of local government, it is essential that the IDP process is implemented effectively. The IDP process (if conducted correctly) will facilitate the participatory creation of an integrated plan for development and action, to guide local government. This requires the participation of both governmental and non-governmental stakeholders in the planning phases, including representatives of urban residents. I suggest that the ‘concept map’ approach to devising appropriate developmental responses to the interlinked challenges of migration and informal settlements in a context of HIV, is an opportunity to re-engage with intersectoral action through the identification of other stakeholders responsible for action, and a way for strengthening the IDP process. The concept map approach can assist in promoting equity in the allocation of resources and ultimately the health outcomes of poor urban groups. Designed as a ‘process for change’, such a concept map can assist local government themselves in identifying who they need to engage with and at what level, in order to motivate for change. The suggested ‘concept map’
approach to responding to urban health, can assist local government in developing intersectoral responses, through the participation of various government and non-urban stakeholders in the planning, implementation and monitoring phase.

**Healthy urban governance**

“….controversies over the interpretation of “good governance” blur the consensus shared by all—that improving governance is a good thing”

(Garau, Sclar, & Carolini, 2005: 35)

This research has highlighted the challenges experienced by local government in delivering appropriate responses to the needs of urban poor groups. I concur that “Good urban governance means involving organizations of the urban poor as equal partners in urban political and economic life, including budgeting decisions, financing practices, and the participatory upgrading, planning, and design of basic public services” (Garau, Sclar, & Carolini, 2005: 36). Good governance requires an effective participatory approach

“….that actively seeks the inclusion of the people, especially the poor, in the processes and systems of government. It emphasizes the need to introduce mechanisms to encourage the involvement of those who do not find it easy to participate in state structures and processes.”

(Barten, Mitlin, Mulholland et al., 2008: 2)

Participation is not an easily achievable feature of governance; it requires “the empowerment of deprived social groups and requires political processes which allow people to have access to decision-making structures and get involved” (van Naerssen & Barten, 2002: 20). I suggest that the ‘concept mapping’ process can be applied – and tested - in a participatory way through involving representatives of urban poor groups, as a way to strengthen the IDP process. Effective participatory governance is considered a critical component of a successful local government response to urban health (van Naerssen & Barten, 2002).
Linked to this, the KNUS “refers to ‘healthy urban governance’ as the systems, institutions and processes that promote a higher level and fairer distribution of health in urban settings, and as a critical pathway for improving population health in cities (WHO, 2008a: 13). The KNUS goes on to suggest eight elements for good governance; these are outlined in Table 15 below. It is essential to recognise that “only when the urban poor are recognized as active agents of development and full citizens do we see the essence of good urban governance” (Garau, Sclar, & Carolini, 2005: 38).

“The political and legal organization of the policy-making process has been identified as a major determinant of urban and global health, as a result of the role it plays in creating possibilities for participation, empowerment, and its influence on the content of public policies and the distribution of scarce resources.”

(Barten, Mitlin, Mulholland et al., 2007: i164)
Table 15: The KNUS suggests eight elements for building good governance

<p>| | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Assessing the urban context</strong>, as in evaluating the current equity issues in urban health and health impacts, the prominence of urban health equity in the government’s policy agenda, and the timing and urgency of implementation of the underlying urban health policies or strategies.</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Identifying stakeholders</strong>, as in clarifying the people, groups and organizations that have interest in and control of urban health impacts.</td>
<td></td>
</tr>
<tr>
<td>3. <strong>Developing the capacity of stakeholders to take action and build social capital and cohesion</strong>, because action on policy change requires that sufficient knowledge, skills and resources are in place.</td>
<td></td>
</tr>
<tr>
<td>4. <strong>Assessing institutions and creating opportunities to build alliances and ensure intersectoral collaboration</strong>, since it is institutions that determine the frameworks in which policy reforms take place.</td>
<td></td>
</tr>
<tr>
<td>5. <strong>Mobilizing resources necessary for social change</strong>. This may require better redistribution of resources.</td>
<td></td>
</tr>
<tr>
<td>6. <strong>Implementation including strengthening the demand side of governance</strong>: assessing and ensuring people’s participation from the organizational and legal perspective, taking into account the issue of access to information and data that can ensure social accountability.</td>
<td></td>
</tr>
<tr>
<td>7. <strong>Advocating for scaling up and change of policy</strong> to relevant stakeholders at different levels.</td>
<td></td>
</tr>
<tr>
<td>8. <strong>Monitoring and evaluation of process and impacts</strong>, including opportunities for setting up systems for monitoring at an early stage.</td>
<td></td>
</tr>
</tbody>
</table>

(WHO, 2008a: 41)

The suggested ‘concept map’ approach to urban health can facilitate the eight steps for building healthy urban governance identified by the KNUS (Table 15). By including these steps as central components of the concept mapping exercise, the importance of strengthening good governance will be incorporated into urban health planning.

**Engaging with the social determinants of health**

“…in order for comprehensive approaches to address the social determinants of health effectively, they must explicitly tackle issues of governance and the politics of power, participation, equity, decision-making, and empowerment, in different urban contexts.”

(Barten, Mitlin, Mulholland et al., 2008: 2)
Public health: advocacy

I believe that there is a need for “public health to return to its social activism origins in an effort to promote social justice” (Grove & Zwi, 2006: 1940). This requires both advocacy efforts and political engagement from the health system itself, and healthcare providers in particular, to ensure that the right to good public health is upheld for all (Allotey, Pickles, & Johnston, 2007; McNeill, 2003). I argue that local government officials – who are responsible for the good urban health of their constituents – must return to a public health approach to health and fight to improve the health of poor urban populations. Appropriate action from local government, combined with well guided advocacy efforts to mobilise action within other spheres of government, can improve the health of city residents. The importance of “political champions” who respond to the needs of the urban poor is essential:

“The paradox is that, over the same period as the new public health has been mainstreamed, it has been bureaucratized and turned from a value-driven crusade into a technomanagerial process. The notion of hitting the target and missing the point seems appropriate here. The spirit of full engagement cannot be achieved by centralized top-down target-driven initiatives backed up by performance management. That leads to a narrowing of understanding and a reductionism of effort. Full engagement requires local political champions and responsiveness to community concerns which transcends the planning cycle.”

(Ashton, 2008: e3)

The ‘concept mapping’ approach to planning responses to address the health of developing country urban populations offers an advocacy approach. Through the participatory planning and creation of the concept map, it is envisaged that local government officials will feel empowered to engage with and respond to the needs of urban populations. Central here, will be ensuring the participation of urban citizens (including people living with HIV, informal settlement residents, and cross-border migrants) in the concept mapping process. A true public health approach must engage with promoting the health of poor urban groups. Central here is encouraging local government to advocate for change within other spheres of government, to enact upon challenges that fall outside the mandate of local government.
In summary, my research has indicated the need for a revised, participatory approach to urban health that will assist local government in understanding and responding to the interlinked challenges of migration and informal settlements in a context of high HIV prevalence. It is suggested that the ‘concept mapping’ approach will - through the application of an intersectoral approach, healthy urban governance, and public health advocacy - enable local government to respond progressively in a more developmental way.
Study limitations

A ‘single city’ study

The key limitation of this research is around issues of representation and applicability to other urban contexts; my research has focused on a single case study - Johannesburg. Whilst Johannesburg reflects the dynamics of developing country cities, each city is unique:

“Cities are not static, and the very density and diversity that characterize most cities make generalizations about defining cities difficult.”

(Galea & Vlahov, 2005: 343)

The suggestions made – including the revised approach to urban health – should be developed for local city authorities in different developing country contexts. The specific context of a given city has been identified as being critical to the effectiveness of any approach to urban health. Therefore, the focus on a single city within this study provides guidance for a context-specific approach – that could be applied elsewhere.

A focus on the local level

My research has focused on the local level yet recognizes that suggestions for action to improve the health of urban populations must be situated within the processes of globalisation; global processes impact regional, national and local levels (Huynen, Martens, & Hilderink, 2005; Labonte & Schrecker, 2007c, 2007a, 2007b).

“...the shrinking nature of the world and its growing interdependence can no longer be denied or ignored. It is a chastening observation and means that public health practitioners do really have to lift their gaze from their particular silo and see how all the forces that impact on health are increasingly global ones but with far-reaching local impacts. Local action is still required but, to be effective, it must form part of a concerted approach which includes all other levels of government, both national and transnational”.

(Hunter & Evans, 2006: 1096)
The conclusions of the CSDH are important here; that it is necessary to tackle the inequitable distribution of power, money, and resource that ultimately result in inequalities (WHO, 2008b).

A key finding of this research is that existing urban health frameworks do engage with multiple levels. It is argued that this results in a framework which is too general and unable to provide specific guidance for action. This research focuses only on the local level because I argue that different spheres of government require their own context-specific suggestions for action. It is critical that local government engage with other spheres of government, to advocate for action in areas that are outside its mandate.

**A focus on the urban**

This research has focussed on the urban context when looking to improve the health of urban populations. However, the urban and rural are strongly connected; this was clearly highlighted across the four studies: urban migrants maintain strong ties to the rural homes, through remittances of cash, food, goods and care. In addition, the research highlighted the number of migrants who originate from other urban areas. This research has highlighted the importance of the household of origin (in either a rural or urban area) in mitigating the sickness of urban migrants; an area which requires further, in-depth research. It is clear that urban development efforts must engage beyond the city boundary, as emphasised by Bocquier:

“The development of a particular urban agglomeration cannot be isolated. Economic opportunities and potentials are to be found in the relation of this agglomerations with the hinterlands and other agglomerations, in the same country or abroad.”

(2008: iv)

Whilst this research focuses on the urban, it recognises that responses to urban health must engage with the rural context, through exploring and understanding the linked livelihoods of urban migrants. Therefore, urban local governments must engage with their rural counterparts.
Urban poor groups

This research has focussed on urban migrants (internal and cross-border) and residents of informal settlements as examples of urban poor groups. It is essential to recognise that different urban poor groups could be identified, such as youth or women which would provide an age or gender lens to urban health challenges. I chose to focus on migrants and residents of informal settlements as I argue that these groups are not explicitly included in existing urban health models, and that the challenges of migration and informal settlements in a context of high HIV prevalence are central challenges facing local urban governments in developing countries. I suggest that the concept mapping approach could be used to explore the specific vulnerabilities and needs of other urban poor groups, such as youth, in order to devise appropriate urban health responses.

The importance of good quality research data

The concept mapping approach that has been presented, requires good quality data to enable local governments to assess their urban context. This requires both the planning and implementation of good research, but also the capacity of local government to engage with the research findings. The lack of quality data and lack of capacity within local government have been identified as central barriers (see the Background section). However, I suggest that an individual be appointed to oversee the concept mapping – including the commissioning of research and engagement with findings. The inclusion of an individual with this skill base would strengthen a concept mapping exercise and in turn, the IDP process. Collectively, this would assist local government in realising its developmental mandate.
Conclusion

This thesis has made use of four studies to learn more about the relationships between migration and informal settlements in a context of high HIV prevalence, and the role of local government in responding to these interlinked challenges. The need for improved policies and governance in urban areas has been called for as it is essential that city authorities are able to effectively respond to the health needs of an increasing urban poor population (Konteh, 2009). As highlighted in this thesis, urban populations are heterogeneous and city-residents live diverse urban experiences within different places in the city. It is therefore essential that local urban governments are able to engage with this diversity in order to inform spatially-targeted, multi-level and multi-sectoral urban health responses. Existing urban health frameworks do not deal adequately with the specific complexities of developing country urban environments. In particular, the frameworks have failed to adequately account for guiding local government in responding to the interlinked challenges identified in this thesis; internal and cross-border migration, informal settlements and high HIV prevalence. An alternative approach to assist local government and other stakeholders in responding to urban health challenges is urgently required. It is suggested that such an approach would enable local government, and other actors, to engage with the complexities of the urban context in a participatory way and guide the creation of city-specific ‘urban health plans’ that work towards identifying and addressing the specific urban health needs associated with different areas within a city. It is suggested that the resultant ‘urban health plan’ will assist local government in responding in a developmental way to the interlinked challenges of migration and informal settlements in a context of high HIV prevalence.

The complexity of developing country urban contexts

“It is clear that the linkages and pathways to fairer health opportunities must be navigated through complex social and political processes at multiple levels, involving multiple actors. This complexity necessitates innovative mechanisms for [financing] interventions that may need to be linked across cities, sectors, and societies. Healthy urban governance has been described as a critical pathway for managing these driving forces, securing the financial and human resources needed to navigate the
process of change, and expanding the policy space for more balanced urban development”.

(Kjellstrom, Mercado, Sami et al., 2007: i4 - i5)

Developing country urban contexts are complex; as highlighted by this research. Whilst this research has identified migration, informal settlements, and HIV as central challenges facing local government, these challenges cannot be divorced from the other realities of developing country urban contexts, such as increasing inequalities and weak rights to the city. It is evident that the experiences of many urban residents in Southern Africa are shaped by migration, informal settlements and high HIV prevalence. This research indicates that flexible, responsive approaches are required to engage with the complexity of developing country urban contexts. Local governments must engage with the realities of urban growth and migration, and plan for the needs of increasing urban populations. This requires good data (generated through sound methodologies) that assist in predicting population growth, and in evaluating the needs of urban populations. Through the four studies included in this research, it is clear that urban populations are heterogeneous and city-residents live diverse urban experiences. It is essential that both future research and urban interventions are able to engage with this diversity. This requires local government to engage with representatives of the urban context in participatory urban planning initiatives (including the IDP); the ‘concept mapping’ approach to urban health can assist with this process.

“In the end, only participatory processes led from the bottom up can lead to sustainable health plans and healthy urban settings.”

(van Naerssen & Barten, 2002: 20)

**Policy recommendations**

A new urban development policy that engages with urban governance, community participation and decentralisation is required (van Naerssen & Barten, 2002). This would involve reviewing all policies that relate to health and housing, in order to determine whether they address the needs of all urban residents, and are equity promoting. Importantly, their effective implementation must be monitored, and action taken by local government to address challenges. Central here is addressing the challenges that poor urban
migrant groups experience in their ability to claim their rights to healthcare (including ART) and housing. It is essential that action is taken to improve the environmental conditions of urban informal settlements that negatively affect the health outcomes of those residing there. Local government is required to engage with actions that are beyond the mandate of local government; through an intersectoral approach that encompasses healthy urban governance and public health advocacy, local government should mobilise actors within other spheres of government and civil society to take action as appropriate. Importantly, this identifies the need to implement a ‘social determinants of urban health’ approach within all policy and programming initiatives.

In addition to the critical role of local government in addressing these issues, the wider international community can contribute to the development and implementation of appropriate policy initiatives to improve urban health in Johannesburg, and beyond. Importantly, this involves international donor agencies and international organisations including – and funding - programmes and research that strive to improve urban health equity.

**A new approach to urban health? The need for action and future research**

Based on the findings of the PhD research, a new approach to urban health has been suggested; ‘concept mapping’. It is proposed that this approach can assist local government to engage with the complexities of the urban context in a participatory way. Intersectoral action, ‘healthy urban governance’ and a return to public health advocacy are considered critical to the effectiveness of such an approach. In addition, the participation of a range of urban citizens in the mapping process is essential, including people living with HIV, residents of informal settlements, and cross-border migrants. It is anticipated that the resultant ‘concept map’ will assist local government in understanding and responding to the interlinked challenges of migration and informal settlements in a context of HIV.

Future research should implement a pilot project to evaluate the effectiveness of the application of ‘concept mapping’ to assisting local level urban health policy makers and
planners in developing an ‘urban health plan’ to respond to the interlinked challenges of migration and informal settlements in a context of high HIV prevalence.
References


van Naerssen, T., & Barten, F. (2002). Healthy Cities as a Political Process. In T. van Naerssen, & F. Barten (Eds.), *Healthy Cities in Developing Countries. Lessons to be learned.* Saarbrucken: NICCOS.


Appendix 1: Ethics clearance certificates
UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Vearcy

CLEARANCE CERTIFICATE

PROJECT

PROTOCOL NUMBER M070612

Investigating Non-Citizen Access to Anti-retro viral Therapy in Inner-City Johannesburg
South Africa

INVESTIGATOR

Ms J Vearcy

DEPARTMENT

Forced Migration Studies

DATE CONSIDERED

07.06.29

DECISION OF THE COMMITTEE*

APPROVED UNCONDITIONALLY

Initially issued to Dr I Palmary: Change needed by Postgrad Committee

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 08.05.30 CHAIRPERSON

(Professor P E Cleaton Jones)

*Guidelines for written ‘informed consent’ attached where applicable

cc: Supervisor:

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and ONE COPY returned to the Secretary at Room 10005, 10th Floor,
Senate House, University.
I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned
research and I/we guarantee to ensure compliance with these conditions. Should any departure to be
contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the
Committee. I agree to a completion of a yearly progress report.

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES
UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Vearey

CLEARANCE CERTIFICATE

PROJECT

Migration, AIDS and Urban Food Security in Johannesburg South Africa

PROTOCOL NUMBER M071125

INVESTIGATOR

Ms J Vearey

DEPARTMENT

Forced Migration Studies

DATE CONSIDERED

07.11.30

DECISION OF THE COMMITTEE*

Approved unconditionally
Initially issued to Dr I Palmary: Change needed by Post Grad Committee

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE

08.05.30

CHAIRPERSON

(Professor P E Cleaton Jones)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor: Dr I Palmary

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DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and ONE COPY returned to the Secretary at Room 10005, 10th Floor, Senate House, University.
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. I agree to a completion of a yearly progress report.

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES
Appendix 2: Outputs generated during the PhD
Table 16: Outputs generated four each of the four studies

<table>
<thead>
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<th>Study</th>
<th>Outputs</th>
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<td>1. Assessing non-citizen access to ART in Johannesburg inner-city</td>
<td><strong>Presentations</strong></td>
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<td>• (2009) Key findings of research studies on migrants' access to health in South Africa: challenging common assumptions MIDSA: <em>Promoting Health and Development, Migration Health in Southern Africa, Dar es Salaam, 10th June 2009.</em></td>
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<td></td>
<td>• (2008) Foreign migrants and the South African health care system: <em>Ensuring the right to health is upheld for all</em> Panel discussion, Wits Medical School, 23rd June 2008.</td>
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<td></td>
<td>• (2008) Integrative asylum policy within South Africa: investigating access to antiretroviral treatment services for refugees and asylum seekers within a complex urban environment. <em>Reproductive Health in Emergencies Conference, Kampala, Uganda, 18th - 20th June 2008.</em></td>
</tr>
<tr>
<td>Study</td>
<td>Outputs</td>
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</table>

**Research posters**


**Other**


• (2008) Challenges to the successful implementation of policy to protect the right of access to health for all in South Africa. Report to Dr Patrick Maduna Chief of Services: Gauteng Department of Health 3 June 2008. With Marlise Richter.

<table>
<thead>
<tr>
<th>Study</th>
<th>Outputs</th>
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<td><strong>2. Migration, housing, HIV and access to healthcare: comparing urban formal and informal</strong></td>
<td><strong>Presentations</strong></td>
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<td><strong>Research posters</strong></td>
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<tr>
<td></td>
<td><strong>Other</strong></td>
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<tr>
<td><strong>3. Evaluating a local level developmental approach to HIV in informal settlements</strong></td>
<td><strong>Presentations</strong></td>
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**Research posters**


Appendix 3: Original papers