Mapping vulnerability to Covid-19

Supplementary material to the March 2020 Map of the Month

25 March 2020

Gauteng City-Region Observatory (GCRO)

Contributing authors (in alphabetical order):
Julia de Kadt, Graeme Gotz, Christian Hamann, Gillian Maree, and Alexandra Parker

If you have any queries on these maps please contact:

Melinda Swift, GCRO Operations and Partnership Manager, cell: +27 82 563 8992,

email: melinda.swift@gcro.ac.za

GCRO | Gauteng City-Region Observatory

Summary statement

GCRO | Gauteng City-Region Observatory

The GCRO, as an urban observatory, helps build the knowledge base for the Gauteng City-region. We collect data and provide policy analysis and support for key issues in the city-region.

In light of the COVID-19 outbreak the GCRO has developed a set of maps that may help disaster response planning. These maps focus on the spatial distribution of some salient risks and vulnerabilities in communities at a ward level. The maps explore two key themes: 1) the multiple risk factors in achieving basic hygiene and social distancing; and 2) the multiple risk factors in the context of major shutdowns and potential outbreaks.

In general the maps illustrate that the COVID-19 epidemic will intersect with a number of other health and socio-economic challenges, that in some communities will amplify the risk of its spread, and which in turn will be exacerbated by both the disease itself, and any major shutdown likely to be introduced to contain it.

Data for the these maps is drawn from the GCRO Quality of Life V (2017/18) Survey. The survey measures the quality of life, socio-economic circumstances, attitudes to service delivery, psycho-social attitudes, value-base and other characteristics of the GCR.

This document contains the full supplementary material and maps in support of the GCRO March 2020 Map of the Month

Contents

GCRO | Gauteng City-Region Observatory

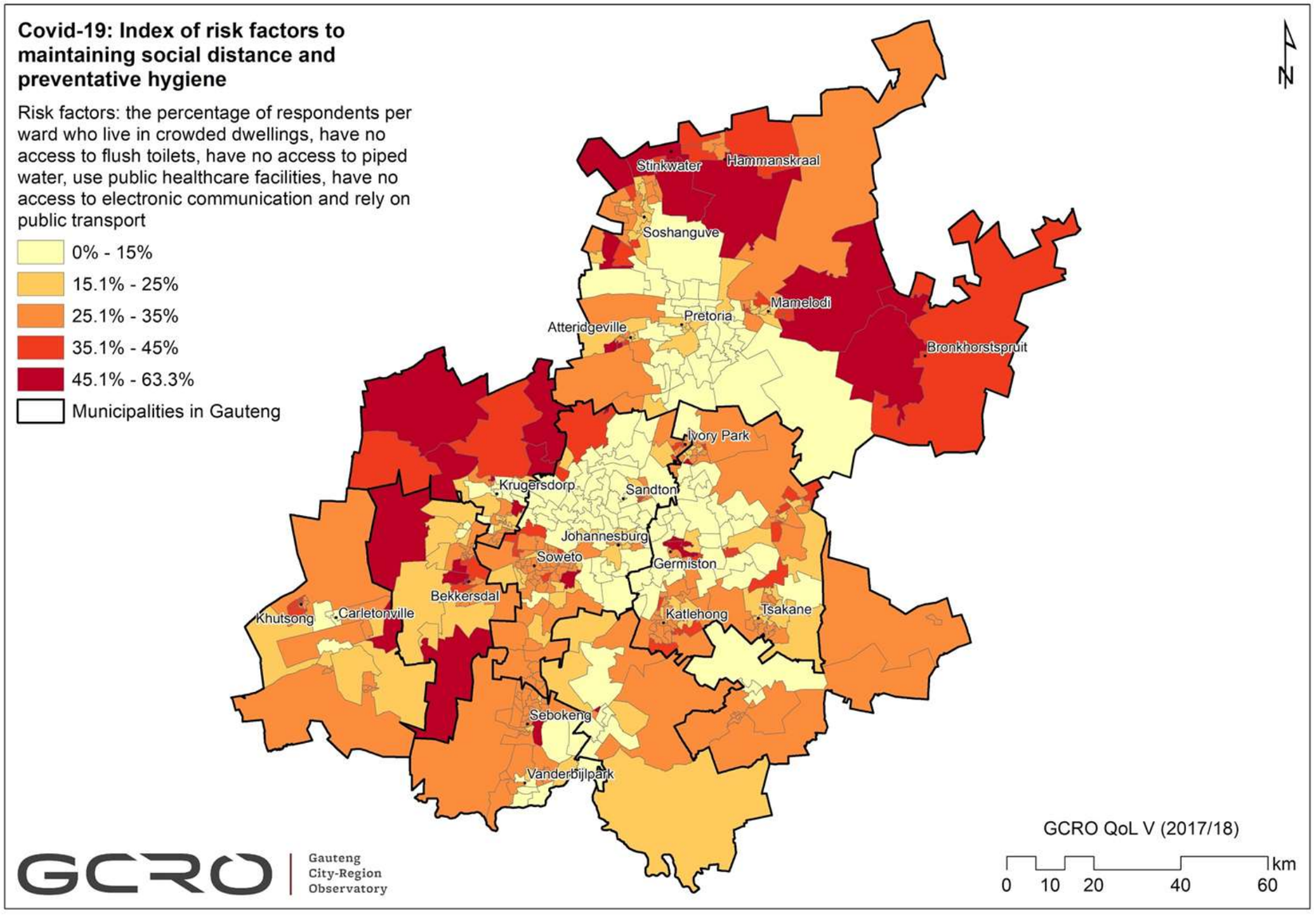
Maps in this document:

Additional maps:

Part 1:
Index of risk factors to maintaining social distancing and preventative hygiene per ward

Index of risk factors to maintaining social distancing and preventative hygiene per ward

GCRO | Gauteng City-Region Observatory

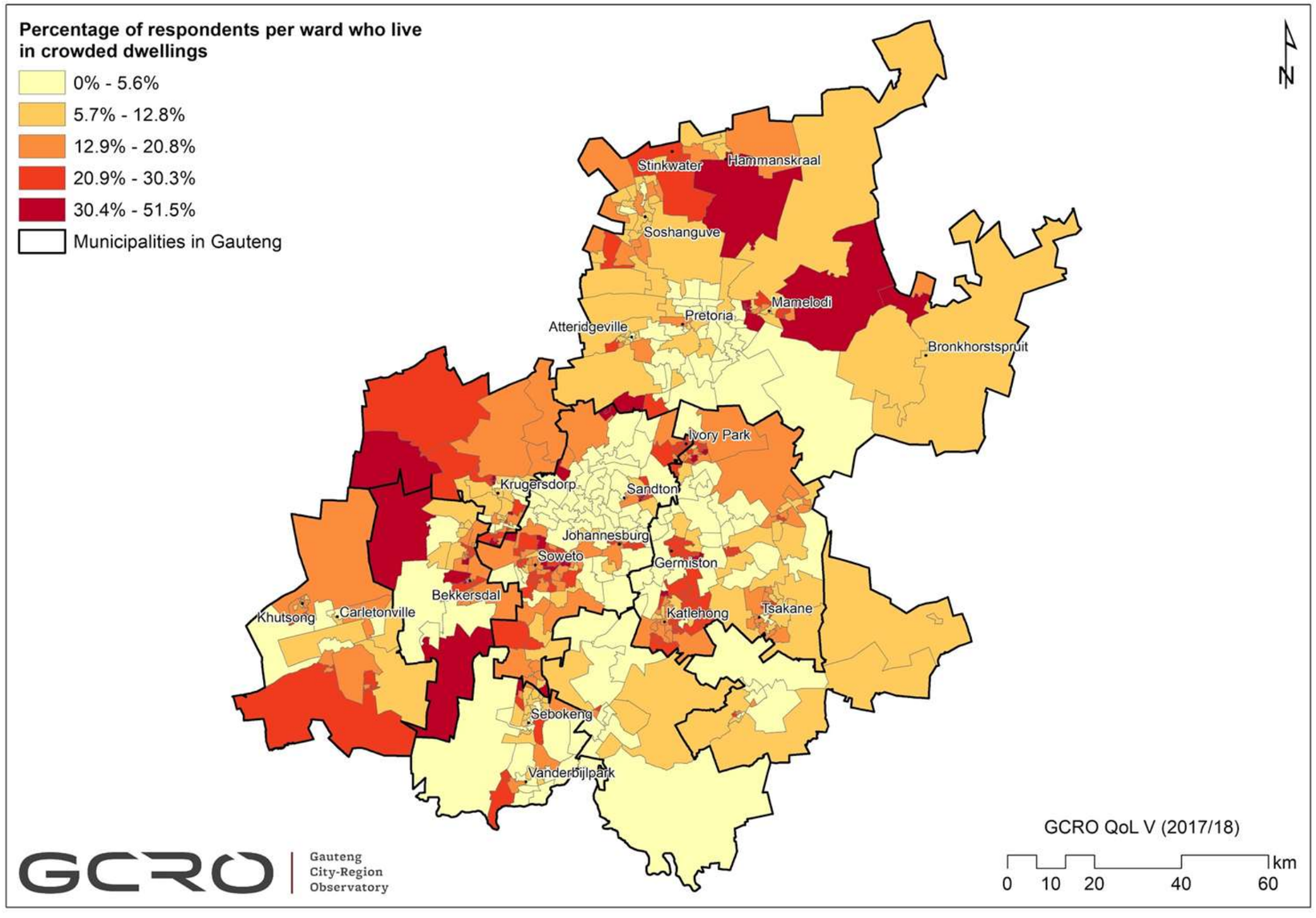


This map combines variables related to preventative measures such as maintaining high levels of personal hygiene and practising social distancing. We have compiled six risk factors which may be considered impediments to maintaining basic preventative hygiene and social distancing. These risk factors include crowded living conditions; no access to running water, shared or inadequate toilet facilities; accessing public health care facilities; limited access to communication tools; and reliance on public transit. The percentage of respondents affected by each of these factors has been calculated, and then combined and averaged, for each ward.

Data source: GCRO QoL V (2017/18)

1.1 Household crowding

Percentage of respondents per ward who live in dwellings with 3 or more people per functional room, OR where more than one household is sharing a single room dwelling.

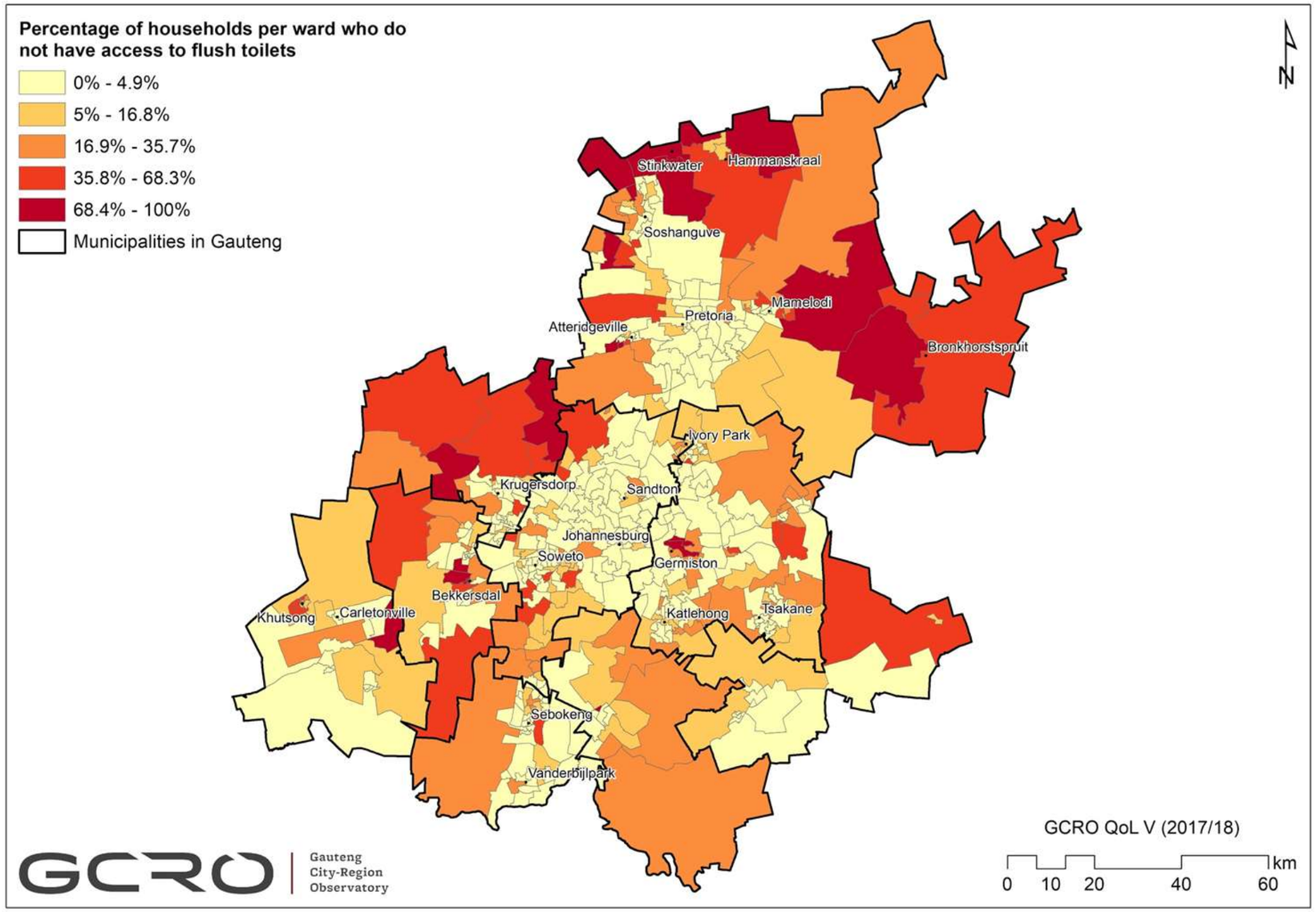


Household crowding is also a known risk factor for a range of health challenges, particularly respiratory illness (Ref: https://www.ncbi.nlm.nih.gov/books/NBK535289/). Maintaining adequate sanitation is also challenging under these circumstances. Multiple people living in a small dwelling or single room poses challenges in isolating sick people, or simply maintaining social distance, as it is hard for people to remain at home in crowded dwellings. Additionally, requirements for social distancing and closure of public spaces are likely to place substantial strain on individuals living in these conditions. Spending additional time in these dwellings may increase vulnerability to other medical conditions, and is likely to induce substantial psychological strain.

Data source: GCRO QoL V (2017/18)

1.2 Sanitation shared

Percentage of respondents per ward whose households do not have access to a flush toilet that is either connected to the sewerage system or septic tank.

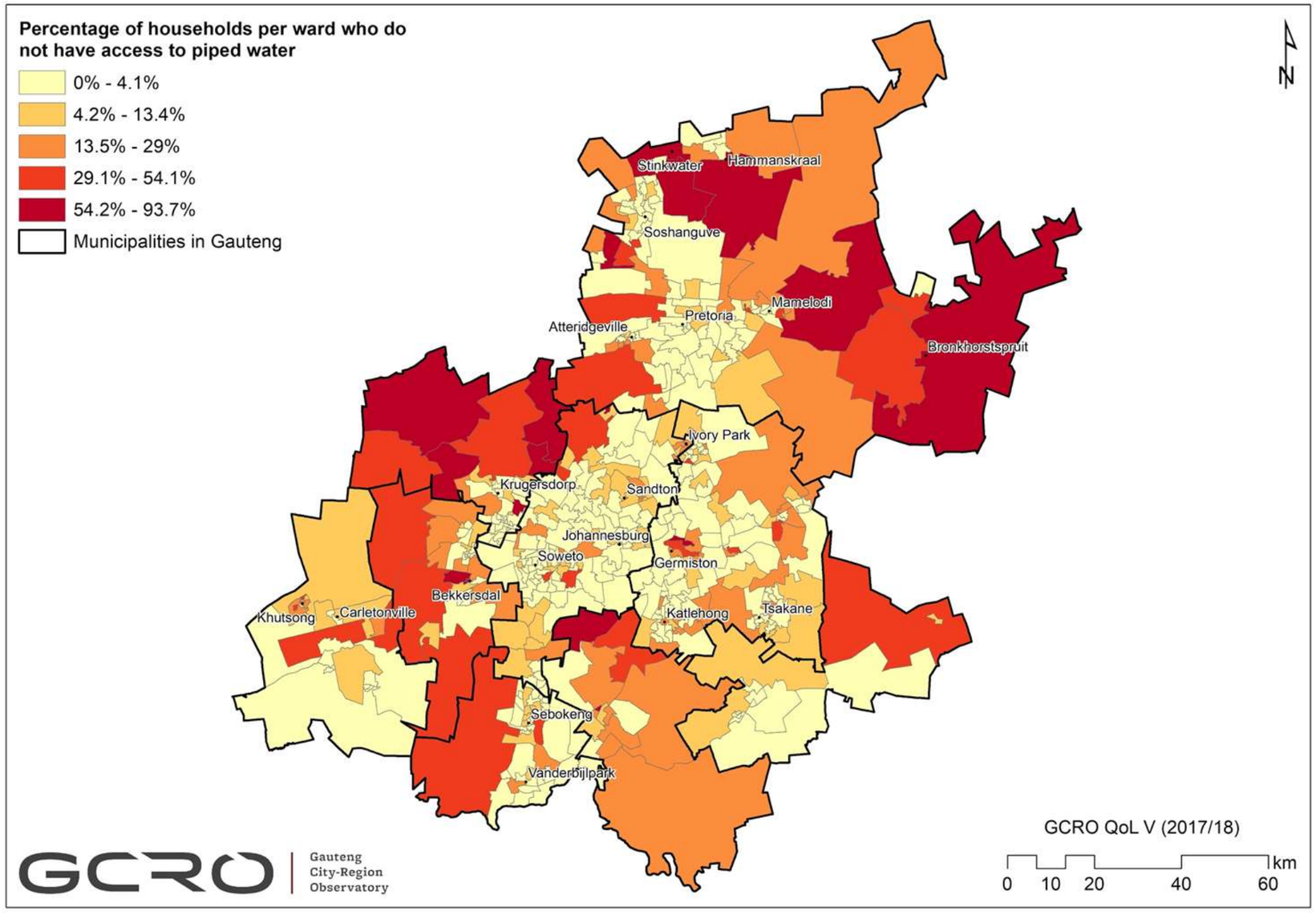


Sharing of toilet facilities across households limits the effective implementation of social distancing, by forcing interactions between households. This is likely to be a particular challenge in less formal settlements and other areas where large numbers of households share public ablution facilities.
Maintaining high levels of hygiene in shared toilet facilities is also extremely challenging, and there is a significant risk that without preventative measures, shared ablutions may contribute to transmission of COVID-19.
Households using non-flush toilets, even if not shared, face additional challenges in maintaining appropriate levels of preventative hygiene.

Data source: GCRO QoL V (2017/18)

1.3 No access to clean running water on site

Percentage of respondents per ward whose households do not have piped water in their dwelling or in their yard.

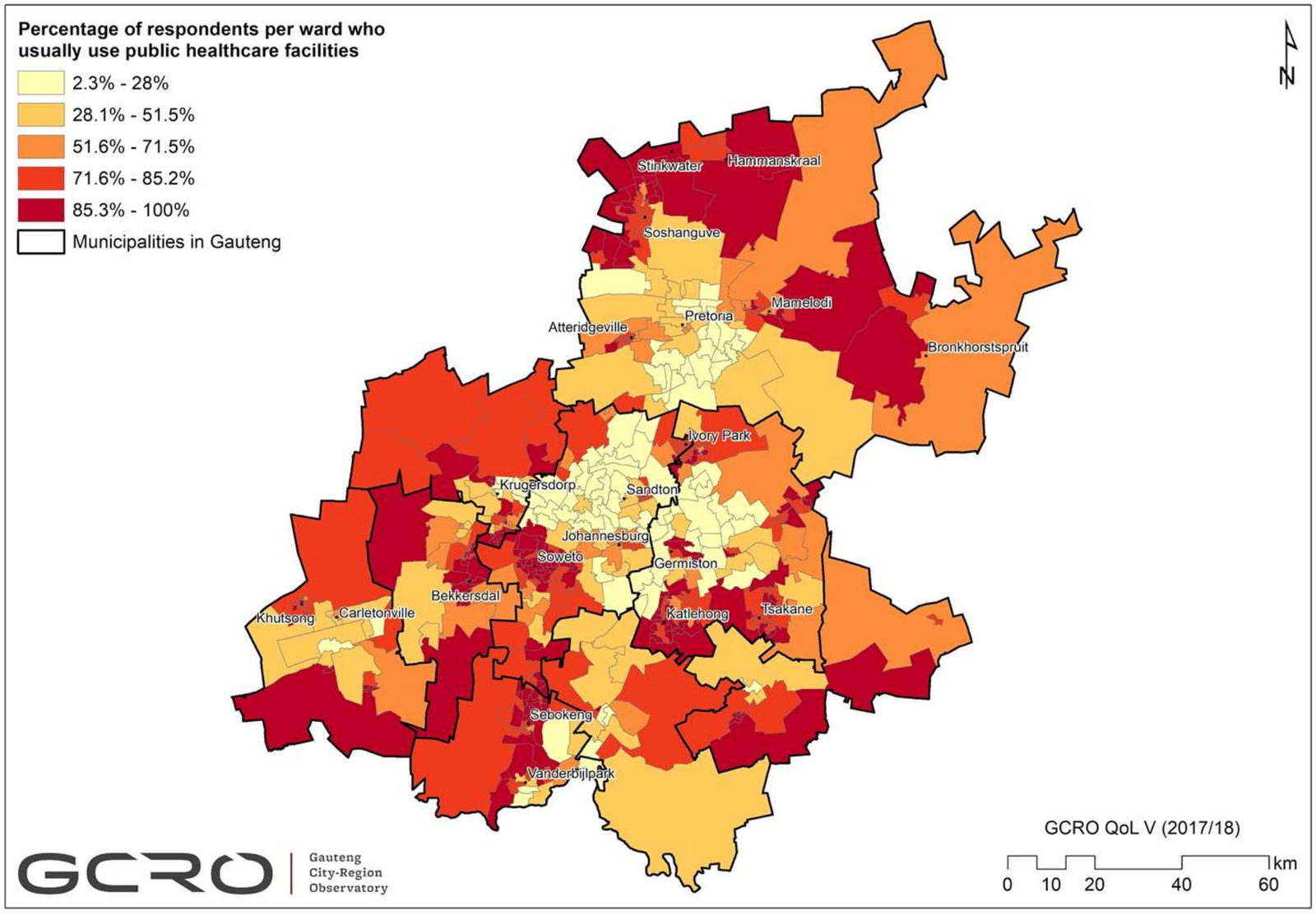


Reliance on shared water sources limits effective implementation of social distancing, by forcing interactions between households. Maintaining appropriate preventative hygiene, such as regular hand washing, is likely to be more challenging in households without piped water. Households reliant on non-piped water are also likely to be at increased risk of contracting other water-borne illnesses, weakening immune systems, and increasing general likelihood of needing other medical care.

Data source: GCRO QoL V (2017/18)

1.4 Reliance on public health facilities

Percentage of respondents per ward who normally use public health services.

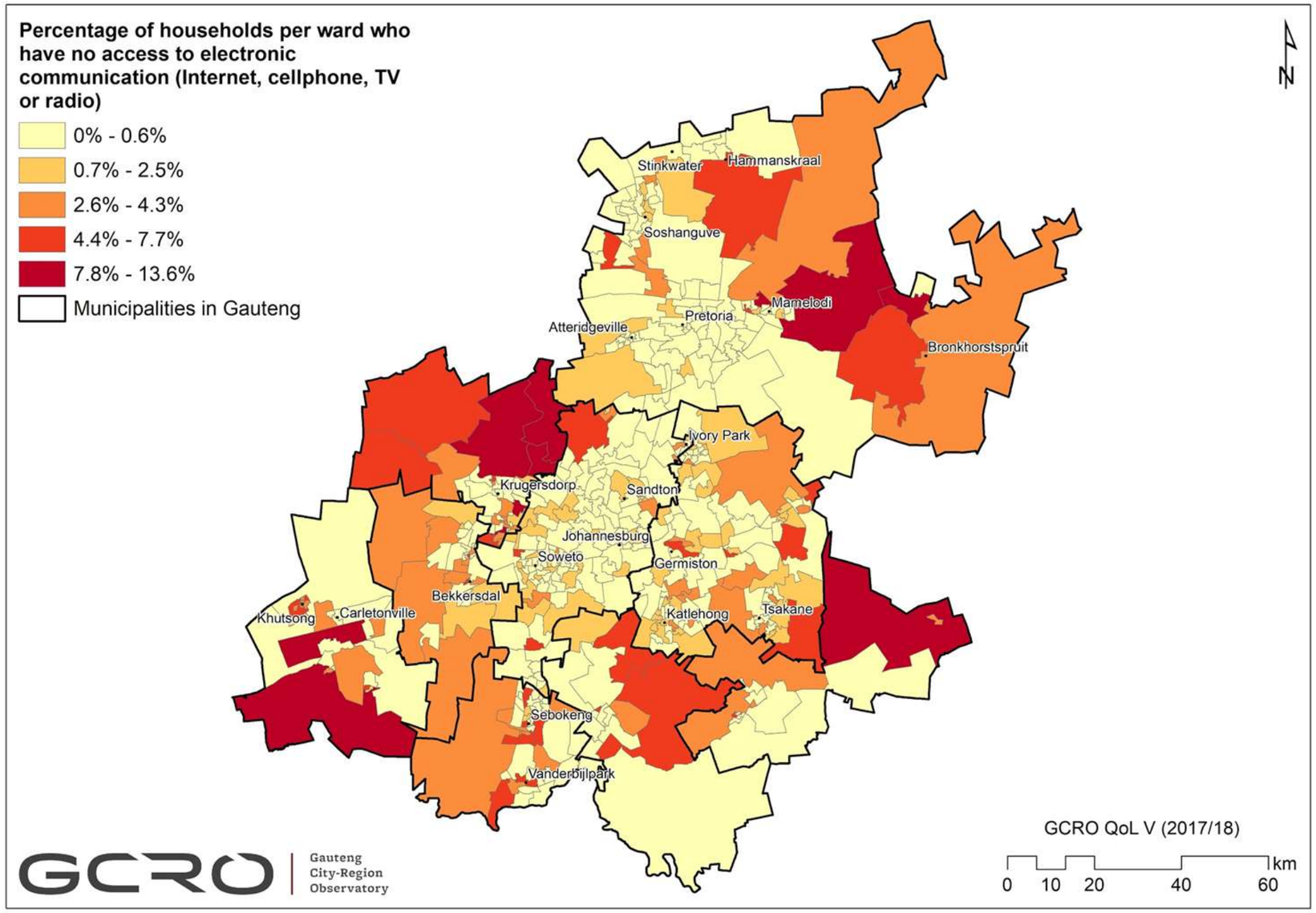


Public health facilities are usually far more crowded than private facilities, often requiring long waits in queues in crowded waiting areas. Resource constraints and supply chain challenges mean that protective equipment is more likely to be in short supply than in the private sector, a challenge likely to be exacerbated by the fact that a far larger proportion of the population will attend public health facilities in the event that they do get sick. These factors may mean that the challenges of maintaining appropriate social distancing and preventative hygiene will be relatively greater in public health facilities than private ones.

Data source: GCRO QoL V (2017/18)

1.5 Lack of access to electronic communication

The percentage of respondents per ward who do not access the internet at all, AND who also do not have a TV, satellite TV, radio, or cellphone in their households that is in good working order.

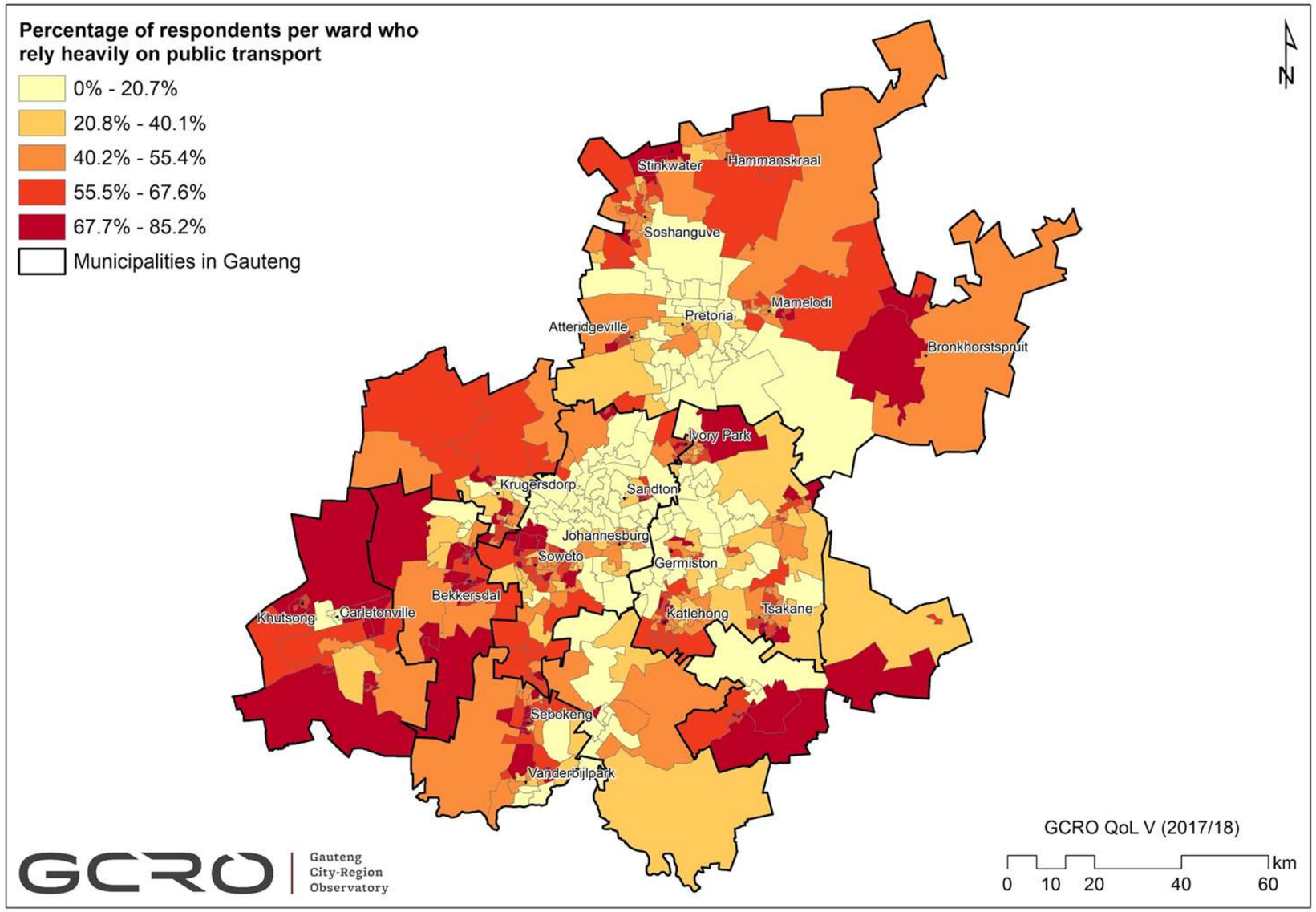


Access to information is critical in ensuring that households understand the reasons for social distancing and preventative hygiene, and that they understand how to appropriately implement the measures outlined by the government. Connectivity, whether by internet, phone, TV or radio means that information can reach a household without any direct human contact. Additionally, having easy access to information and entertainment in the home is likely to make it easier for households to practice social isolation. Finally, having no access to the internet or a phone will make it difficult for households to seek medical assistance without leaving the home.

Data source: GCRO QoL V (2017/18)

1.6 Reliance on public transport

The percentage of respondents per ward who did not have a car in good working order in the household, AND whose mode of transport for the longest part of their most frequent trips was a lift club, minibus taxi, train, or bus.



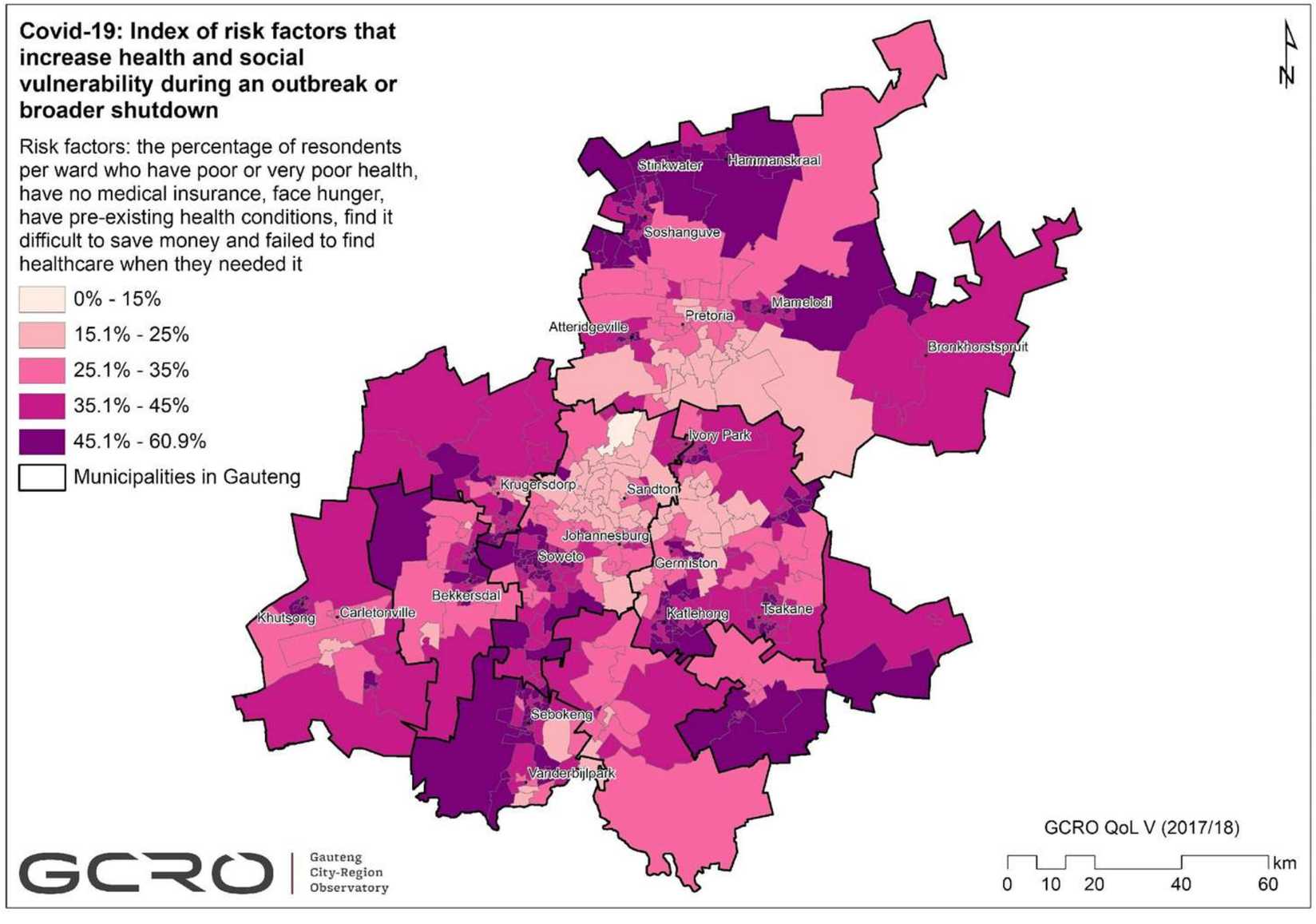
Reliance on public transport involves exposure to many other people, both in queues waiting for the transport, and on the trip itself, making it difficult to maintain social distancing. Minibus taxis, which are the most widely used form of public transportation in Gauteng, are likely to pose particular challenges, because passengers are all seated in extremely close proximity, there is high passenger turnover, there is limited air circulation/ventilation, and there is a high level of exchange of money in the vehicle.

Data source: GCRO QoL V (2017/18)

Part 2:
Index of risk factors that increase health and social vulnerability during an outbreak or broader shutdown

Index of risk factors that increase health and social vulnerability during an outbreak or broader shutdown

GCRO | Gauteng City-Region Observatory

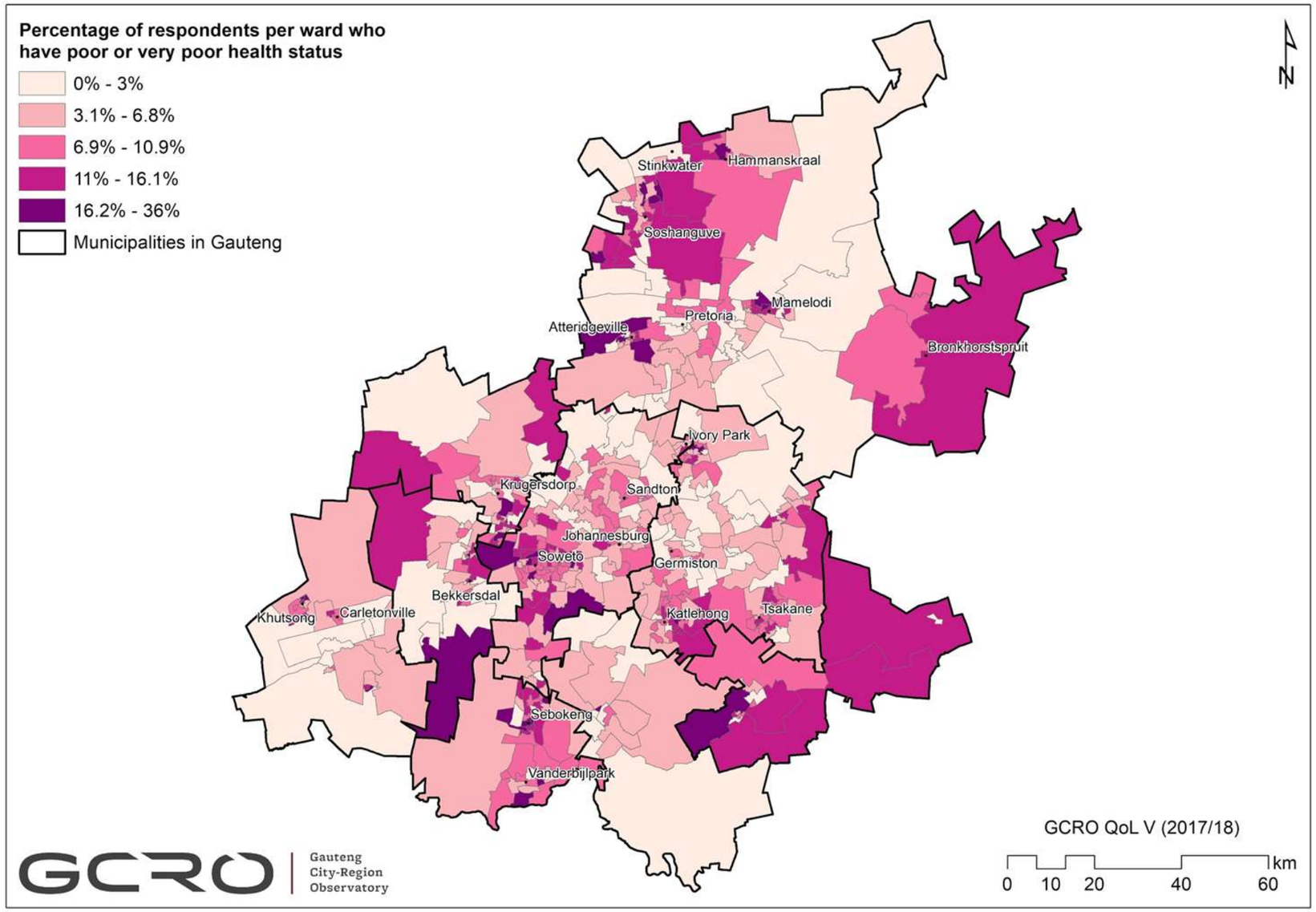


This map considers the vulnerability of people to the impact of a major shutdown or outbreak of the virus. For example, those who are unemployed or in precarious employment (represented by those who do not have medical insurance and find it difficult to save money), adults and children who suffer hunger, and those who may need to access healthcare for chronic or existing conditions may be more affected by efforts to contain the spread of the virus - particularly the closing of schools; limiting non-emergency health care; and the closing of non-essential businesses. Should an outbreak occur, those with existing conditions, poor nutrition and a history of poor health in general are likely to be more vulnerable. The percentage of respondents affected by each of these factors has been calculated, and then combined and averaged, for each ward.

Data source: GCRO QoL V (2017/18)

2.1 Pre-existing poor health status

The percentage of respondents per ward who considered their health in the four weeks prior to the interview to be poor or very poor.



Respondents with poor health status are spatially concentrated in certain areas, such as townships and informal settlements. This may reflect a higher prevalence of some diseases, such as TB, HIV/AIDS and hypertension, in poorer communities. It may also reflect how certain areas are more affected by environmental health factors such as poor water quality or air pollution.

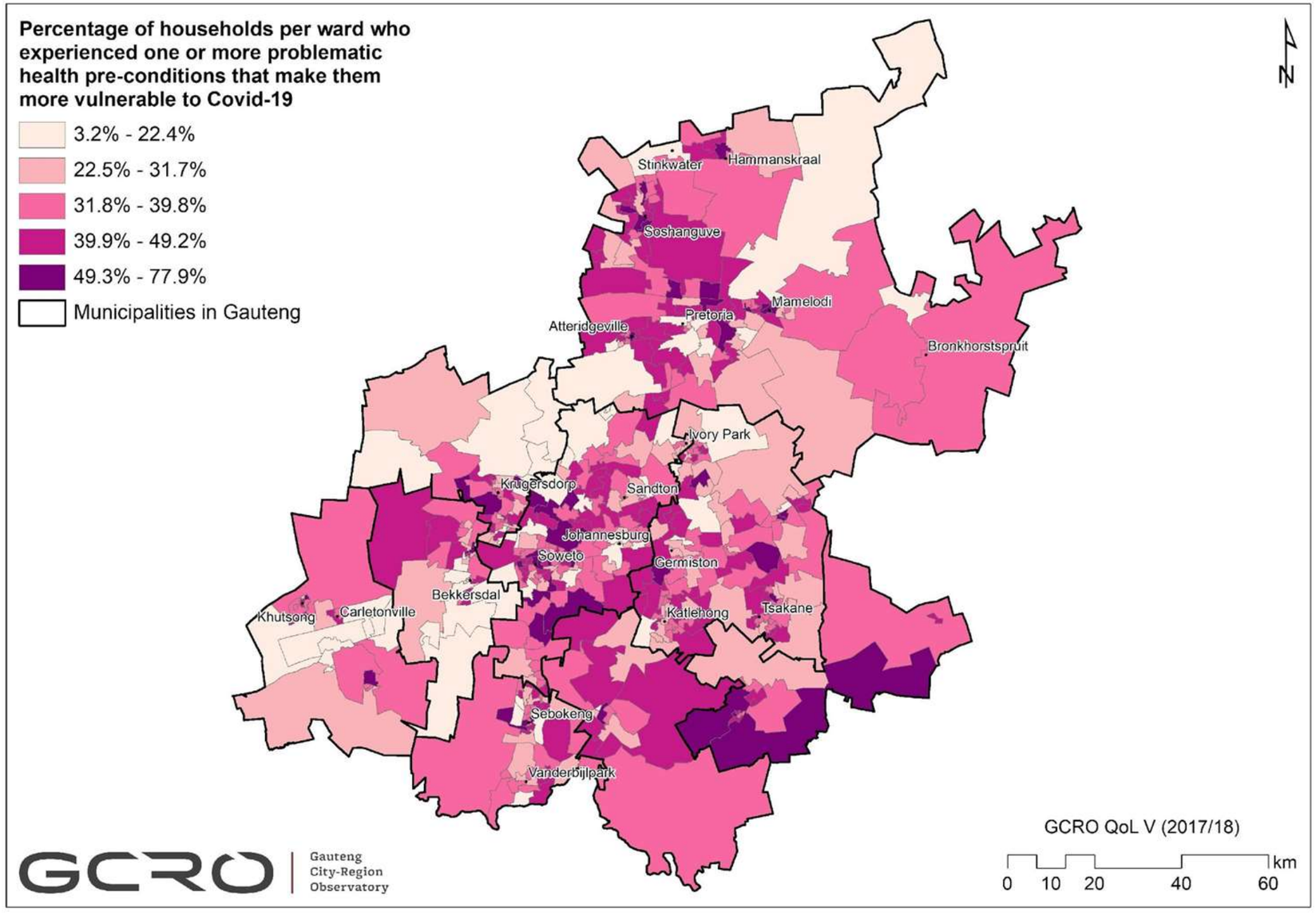
Pre-existing poor health status will likely increase susceptibility to COVID-19 infection, placing both these individuals and other household members at greater risk. If they do become sick, they will be more susceptible to serious illness and death.

Data source: GCRO QoL V (2017/18)

2.2 Pre-existing relevant health conditions

The percentage of respondents per ward who said that a member of their household had been affected by one or more of the following in the past year: cancer, diabetes, emphysema/bronchitis, asthma, pneumonia, heart disease, hypertension, or tuberculosis (TB).

Note: It is very important to note that this is self-reported health data from a sample survey, rather than any official record of the condition in the District Health Information System. We have limited this analysis to conditions expected to increase COVID-19 morbidity and mortality. We have excluded HIV/AIDS from this analysis as we do not have data on whether individuals reporting this condition are on treatment. There is currently no evidence that individuals on effective treatment are at increased risk, although those with untreated HIV/AIDS are thought to be.

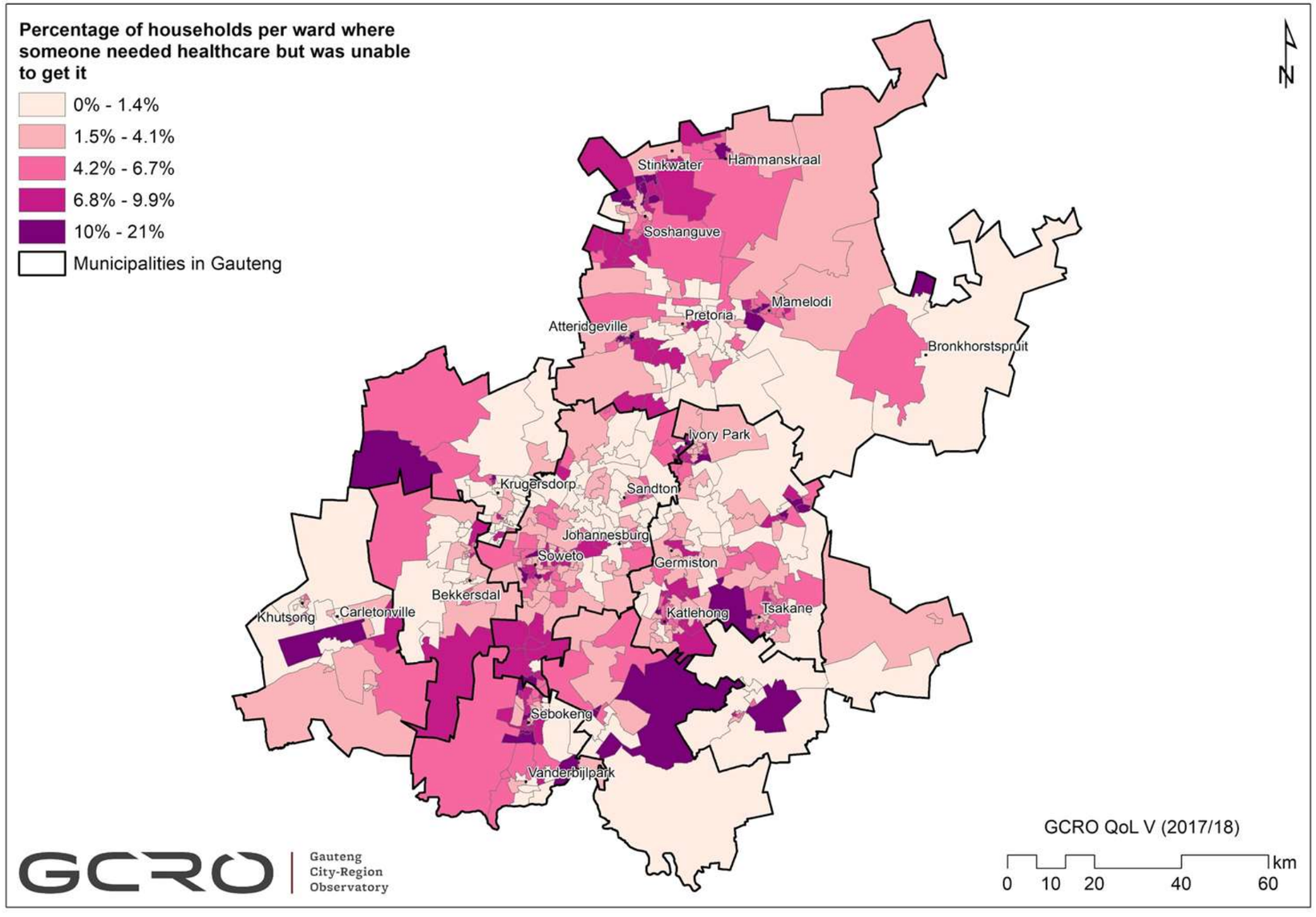


Individuals with pre-existing medical conditions (and by extension their households) are particularly vulnerable during a pandemic or a shutdown. Due to the significance of environmental and social factors in contributing to conditions such as diabetes, hypertension, heart disease and asthma, there is substantial spatial clustering of these households. Vulnerability is increased due to ongoing medical needs requiring regular visits to health facilities. If health facilities become overwhelmed, chronic services are likely to suffer. Additionally, many conditions weaken immunity. There is clear evidence that these conditions significantly increase risk of serious illness or death in individuals infected with COVID-19 (ref: https://www.nejm.org/doi/10.1056/NEJMoa2002032).

Data source: GCRO QoL V (2017/18)

2.3 Difficulty accessing health care

The percentage of respondents per ward who indicated that in the past year there was someone in their household who needed healthcare but was unable to access it. We have excluded those who said that the reason for this was that the sick person did not have time to seek care, did not think it was worth seeking care (e.g. thought they would get better on their own), or gave another unspecified reason.

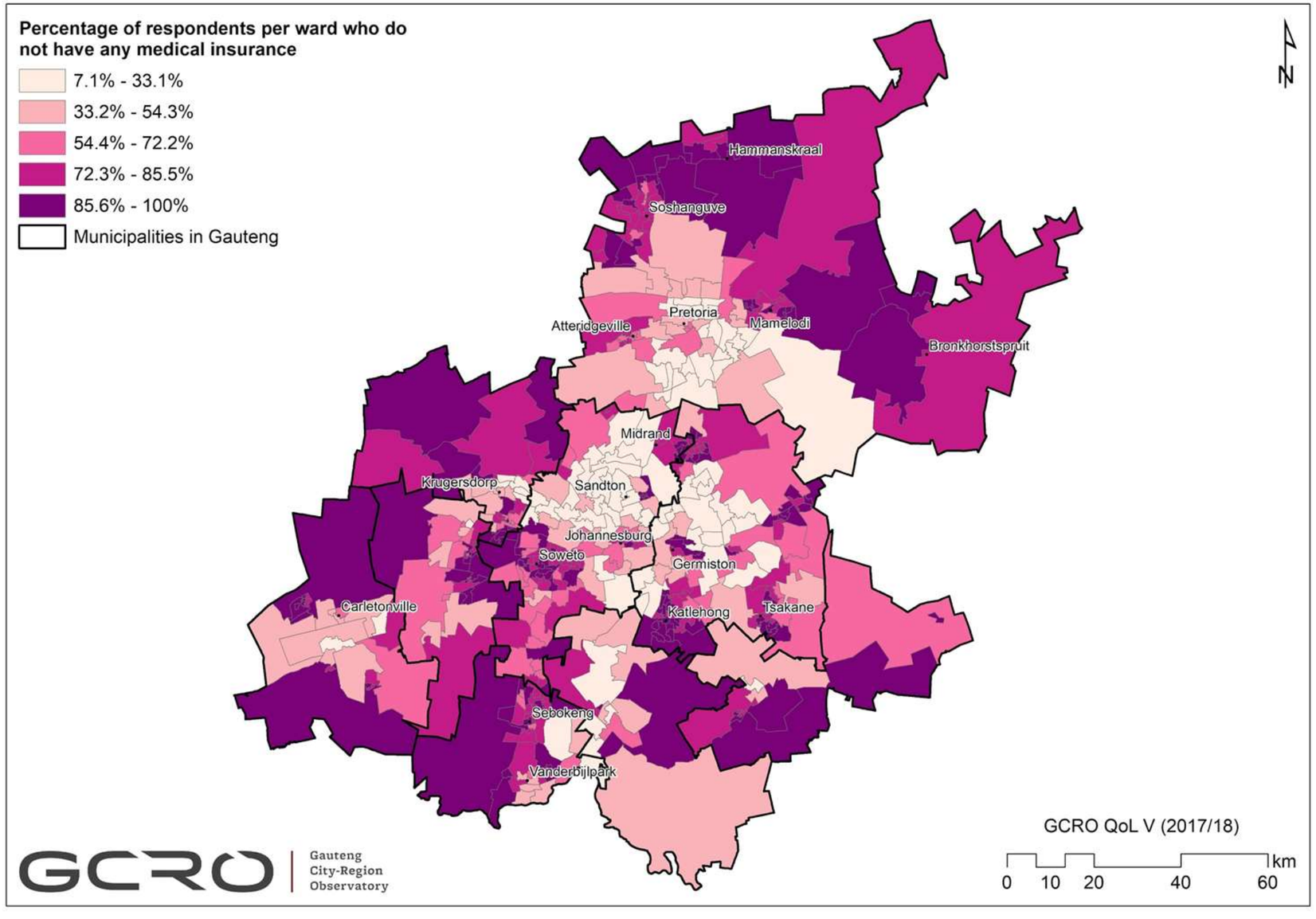


An inability to access healthcare in the past - for example due to distant health services, overcrowding, costs, or refusal of services - will likely mean that individuals are more vulnerable during a shutdown or an outbreak. Vulnerability is likely to be enhanced by undiagnosed or untreated pre-existing conditions. If they develop COVID-19 symptoms, they may also be particularly constrained in their ability to seek care - particularly if they have been refused care in the past. An inability to access health care is also often indicative of a level of social alienation, and alienation from other vital government services. Consequently, these individuals and households may be particularly unlikely to receive critical services from other spheres of government during shutdown or illness.

Data source: GCRO QoL V (2017/18)

2.4 No access to medical aid

The percentage of respondents per ward who are not covered by any form of medical aid or insurance.

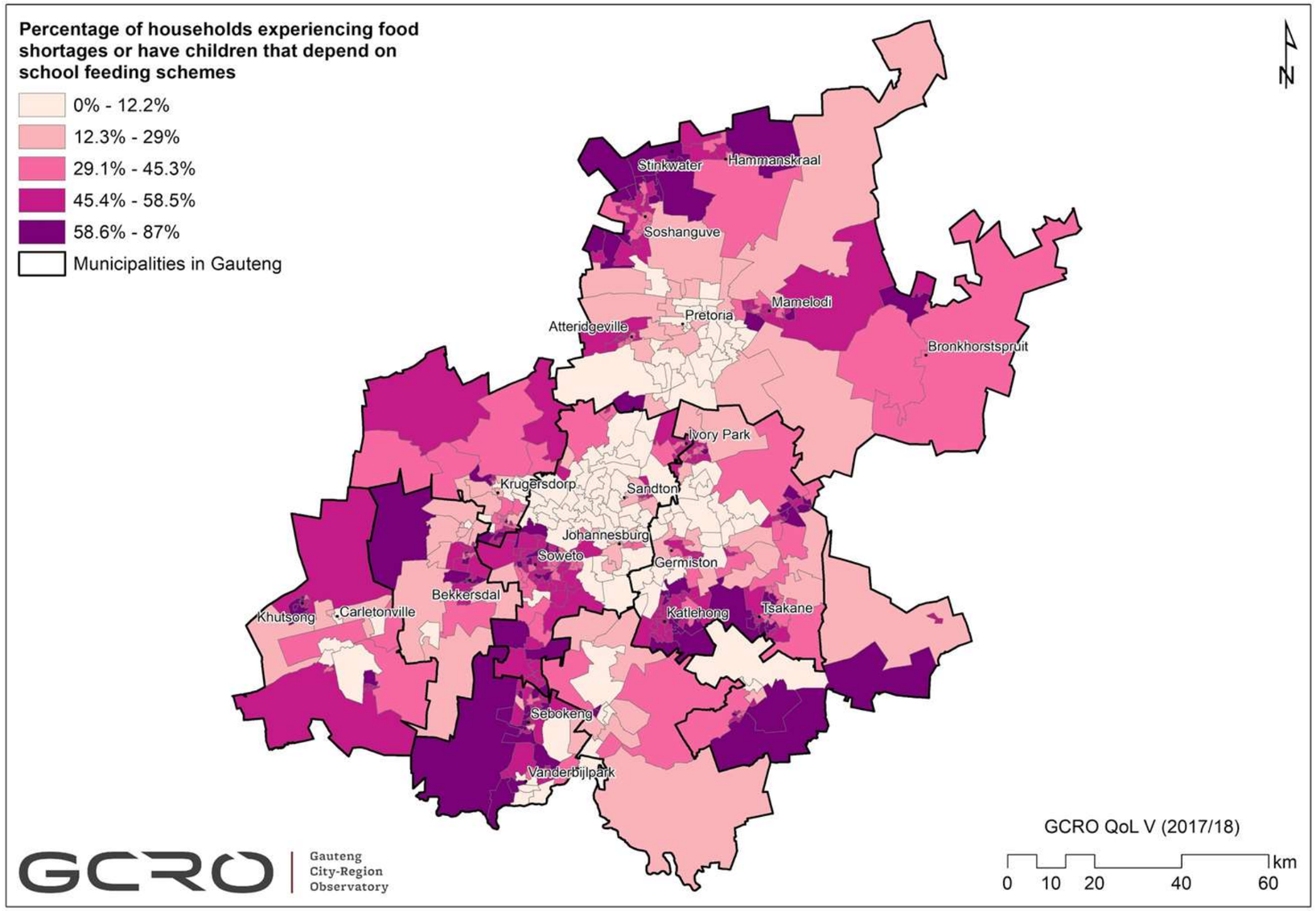


Medical aid acts as a proxy for relatively secure employment, and adequate economic resources to provide a cushion to shocks such as unexpected medical expenses, a shutdown or a pandemic. Households with access to medical aid are also likely to have easier access to medication and medical care. Households without medical aid are less likely to have a cushion against shocks, and are also more likely to experience difficulties accessing appropriate medication and care related to both COVID-19 and other health conditions, both immediately and in the longer term.

Data source: GCRO QoL V (2017/18)

2.5. Hunger

The percentage of respondents per ward who live in a household where an adult or child had to skip a meal in the past year, because there was not enough money to buy food, as well as those living in households where children benefit from a school feeding scheme.

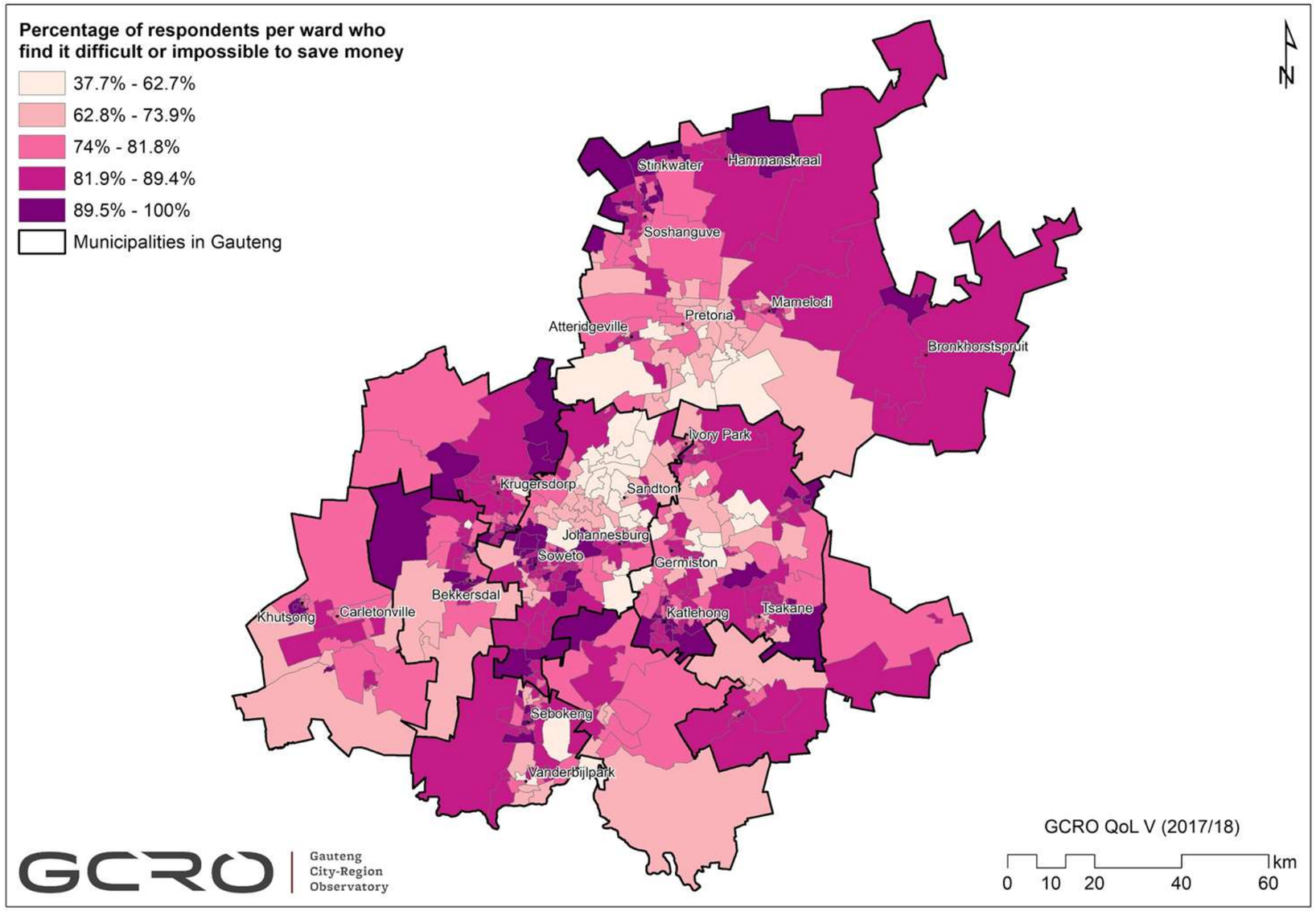


This variable serves as a proxy for a level of poverty severe enough that meeting basic needs is not always possible, even without the additional difficulties of a shutdown or pandemic. The closing of schools may mean that children miss out on meals, placing an additional resource burden on households already struggling to meet basic needs. An inability to meet basic nutritional needs is likely to substantially increase vulnerability to severe infection, as well as mortality.

Data source: GCRO QoL V (2017/18)

2.6 Difficulty in saving money

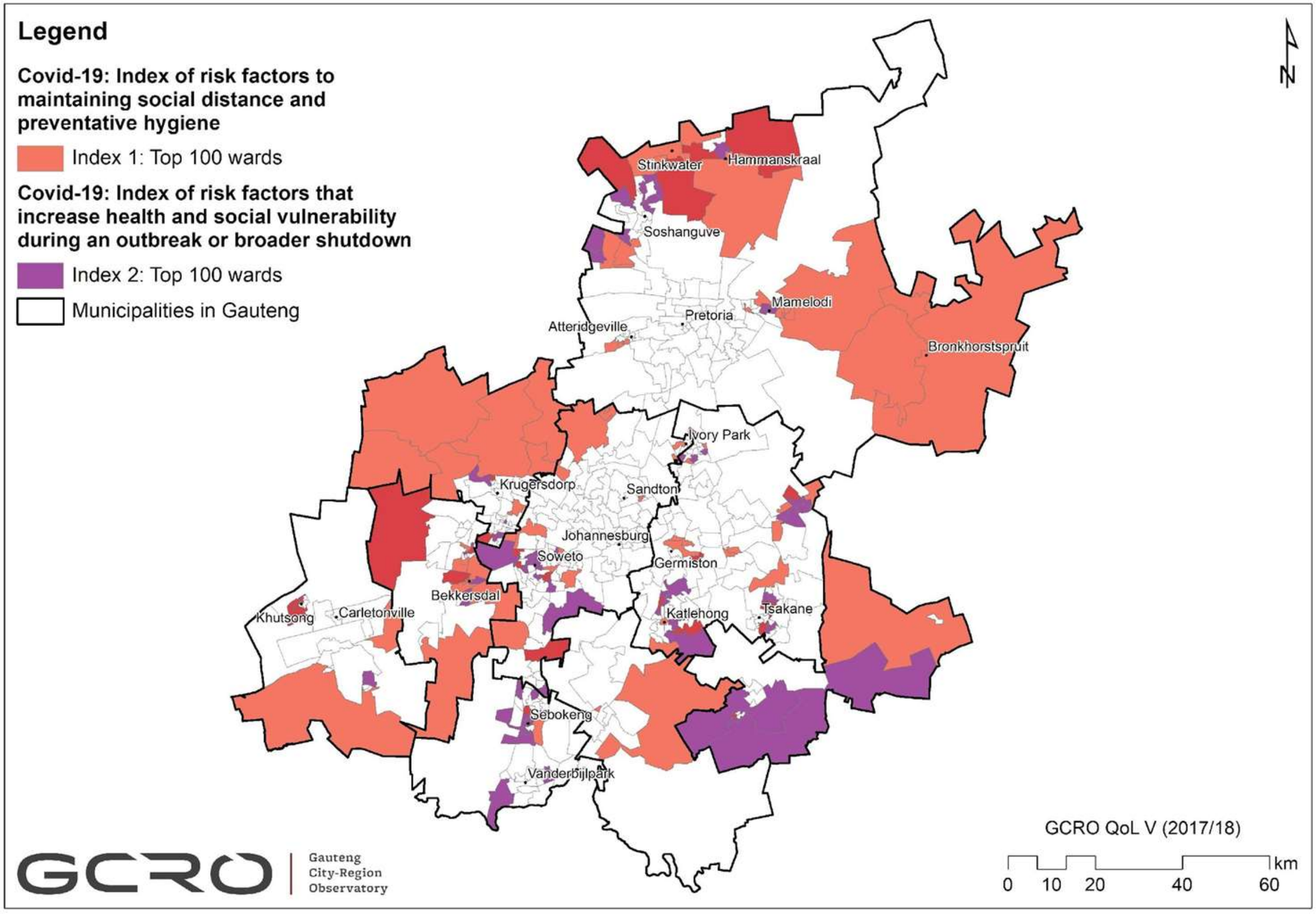
The percentage of respondents per ward who say that it is difficult or impossible to save money



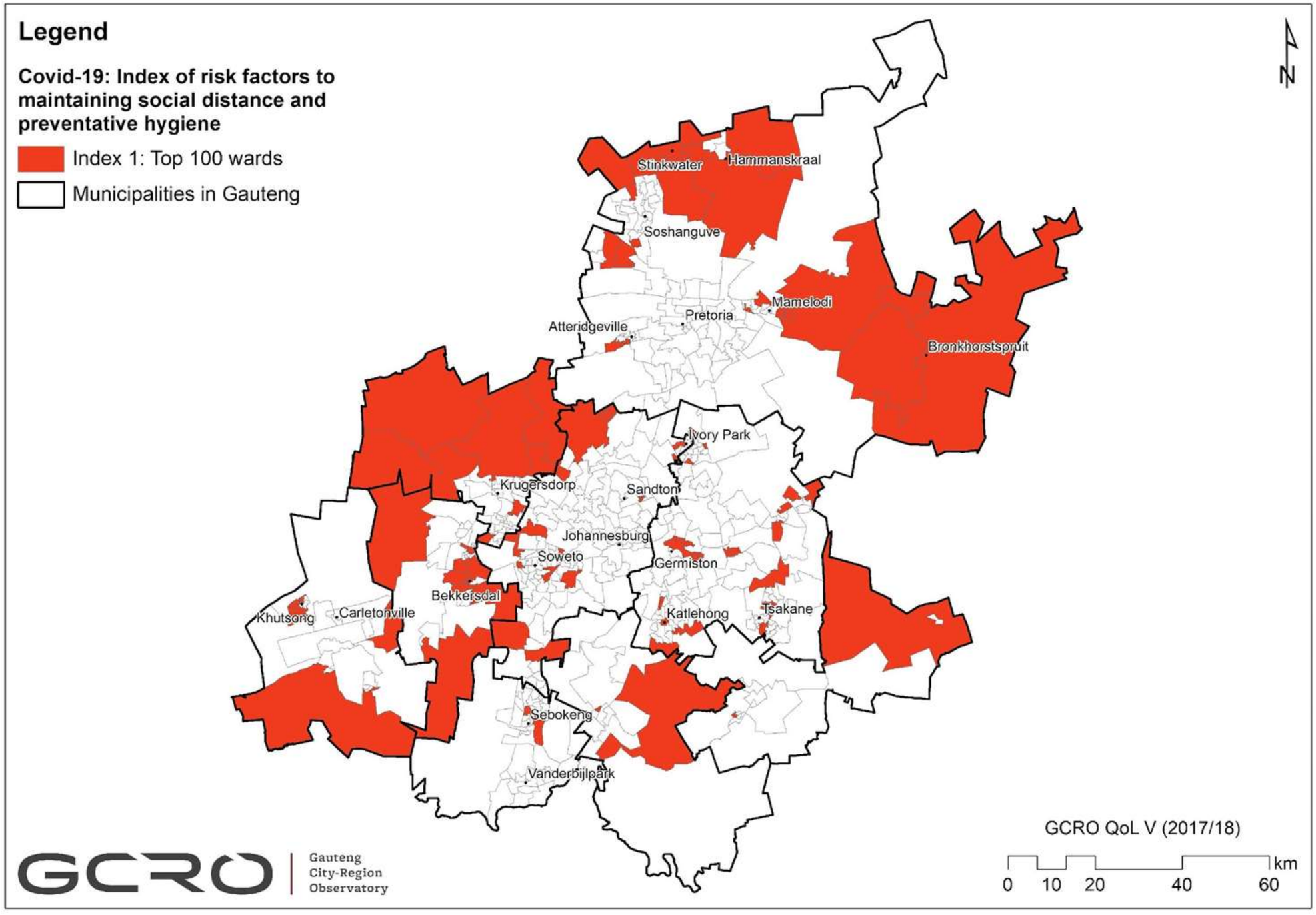
Difficulty in saving money is indicative of a limited financial cushion to protect against economic or medical shocks. The economic effects of a shutdown are likely to be severe, with many businesses closing or needing to reduce staffing. Temporary workers and service sector workers may be particularly vulnerable. Under these conditions, households without savings are likely to struggle to meet basic needs. Additionally, where household budgets are already tight, capacity to manage unanticipated medical expenses is likely to be very constrained.

Part 3:
Additional material

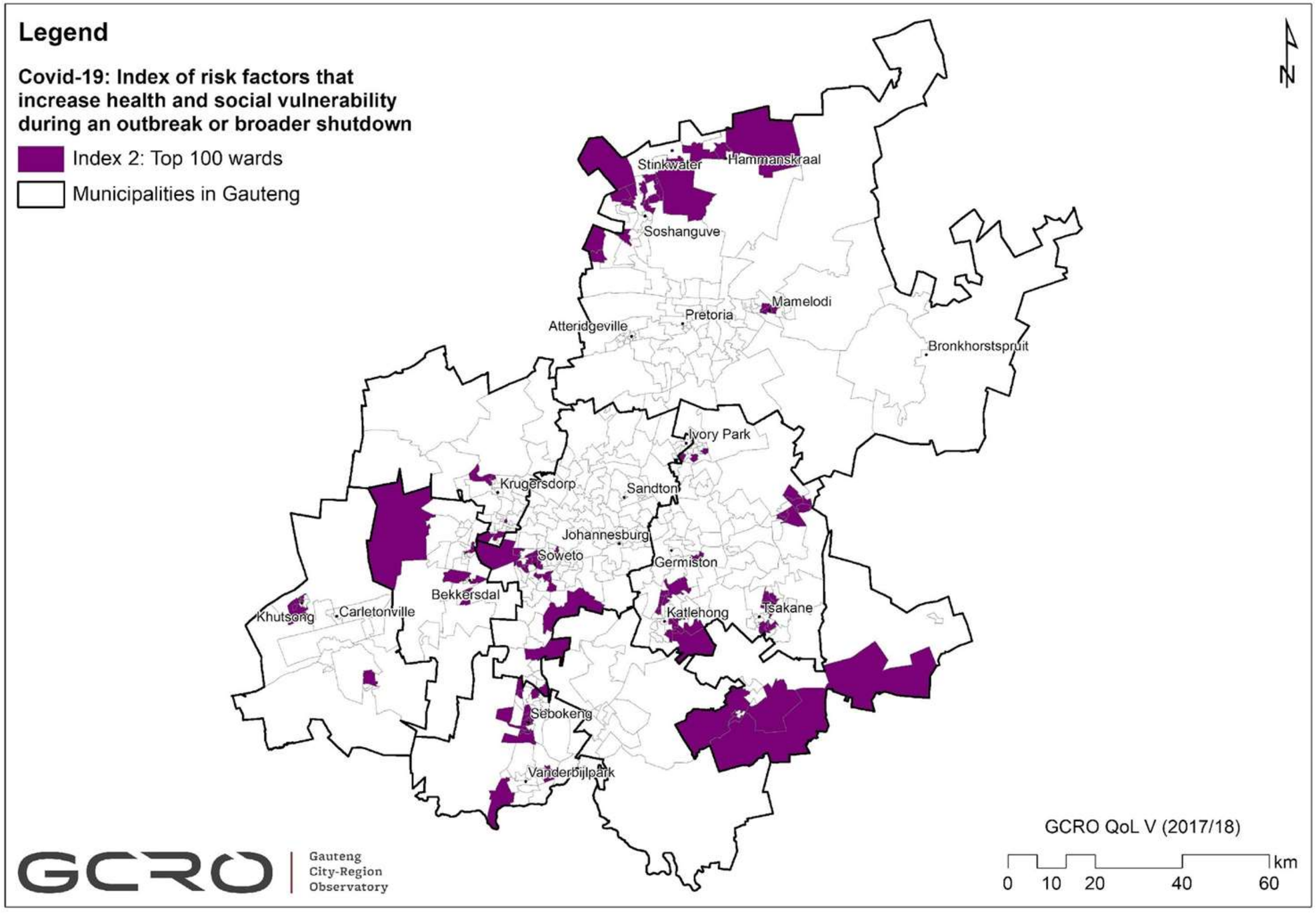
Top 100 wards – Index 1 and Index 2



Top 100 wards – Index 1

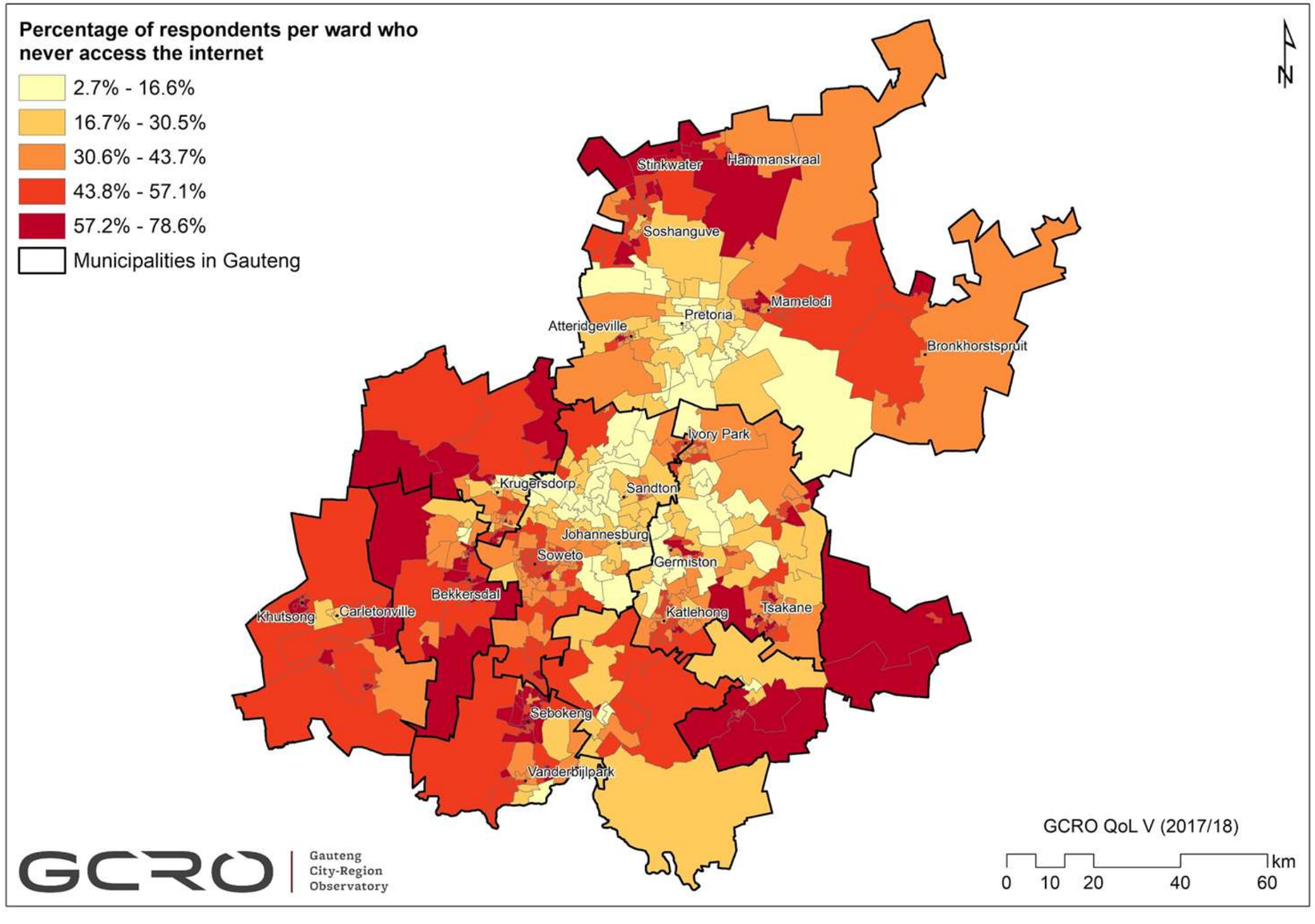


Top 100 wards – Index 2



1.5 a Lack of access to electronic communication

Internet

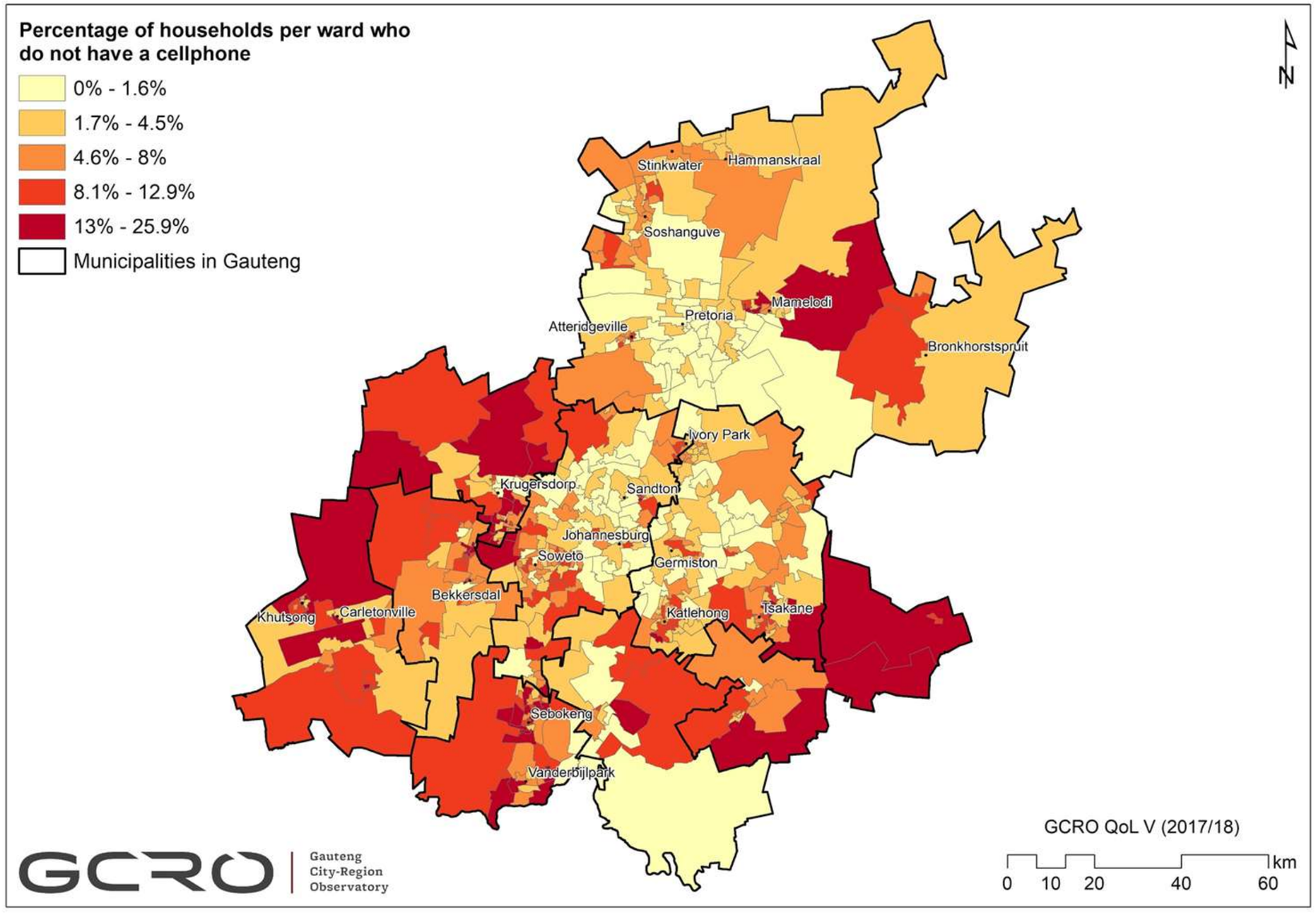


Access to information is critical in ensuring that households understand the reasons for social distancing and preventative hygiene, and that they understand how to appropriately implement the measures outlined by the government. Connectivity, whether by internet, phone, TV or radio means that information can reach a household without any direct human contact. Additionally, having easy access to information and entertainment in the home is likely to make it easier for households to practice social isolation. Finally, having no access to the internet or a phone will make it difficult for households to seek medical assistance without leaving the home.

Data source: GCRO QoL V (2017/18)

1.5 b Lack of access to electronic communication

Cellphone

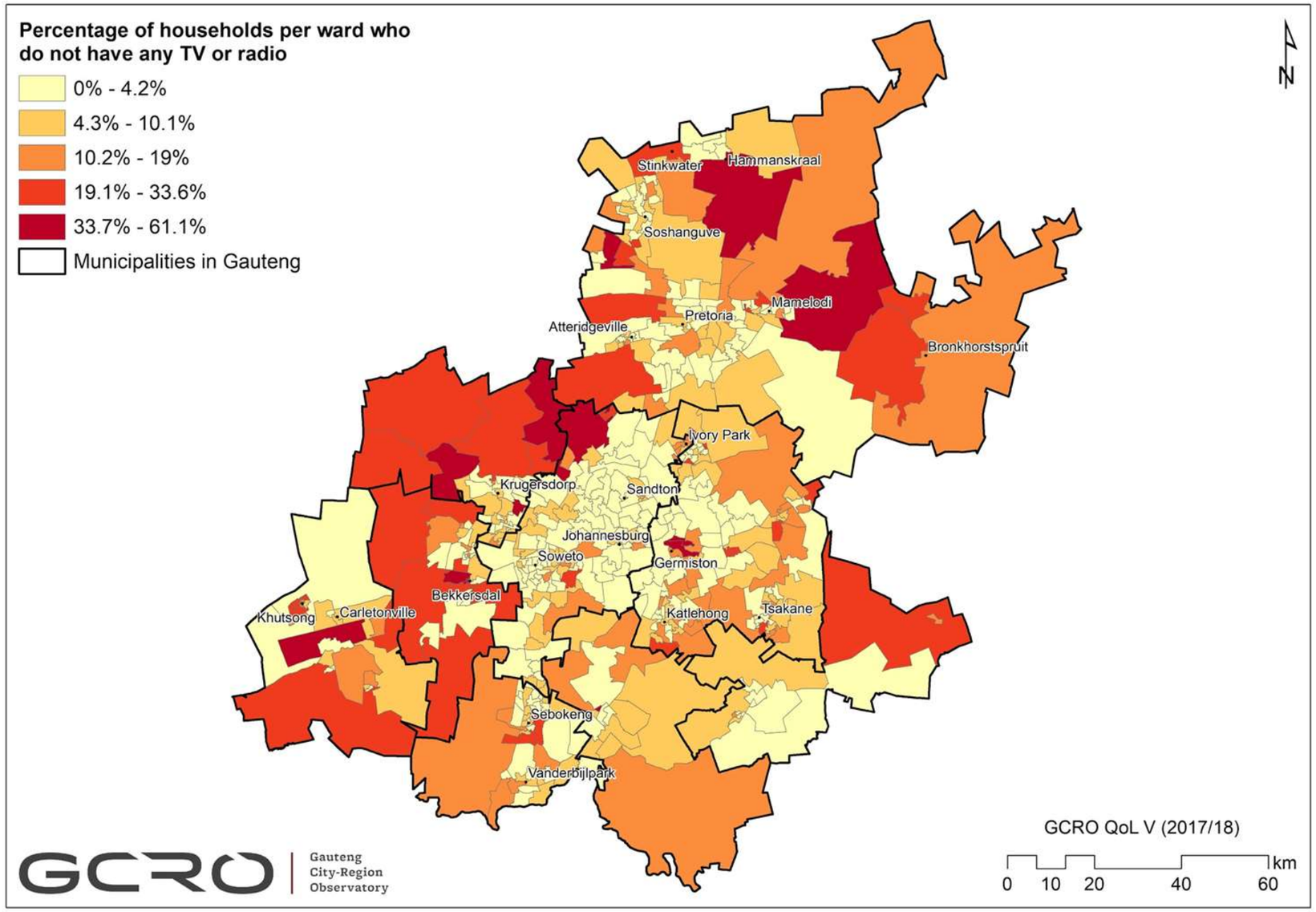


Access to information is critical in ensuring that households understand the reasons for social distancing and preventative hygiene, and that they understand how to appropriately implement the measures outlined by the government. Connectivity, whether by internet, phone, TV or radio means that information can reach a household without any direct human contact. Additionally, having easy access to information and entertainment in the home is likely to make it easier for households to practice social isolation. Finally, having no access to the internet or a phone will make it difficult for households to seek medical assistance without leaving the home.

Data source: GCRO QoL V (2017/18)

1.5 c Lack of access to electronic communication

Television or radio

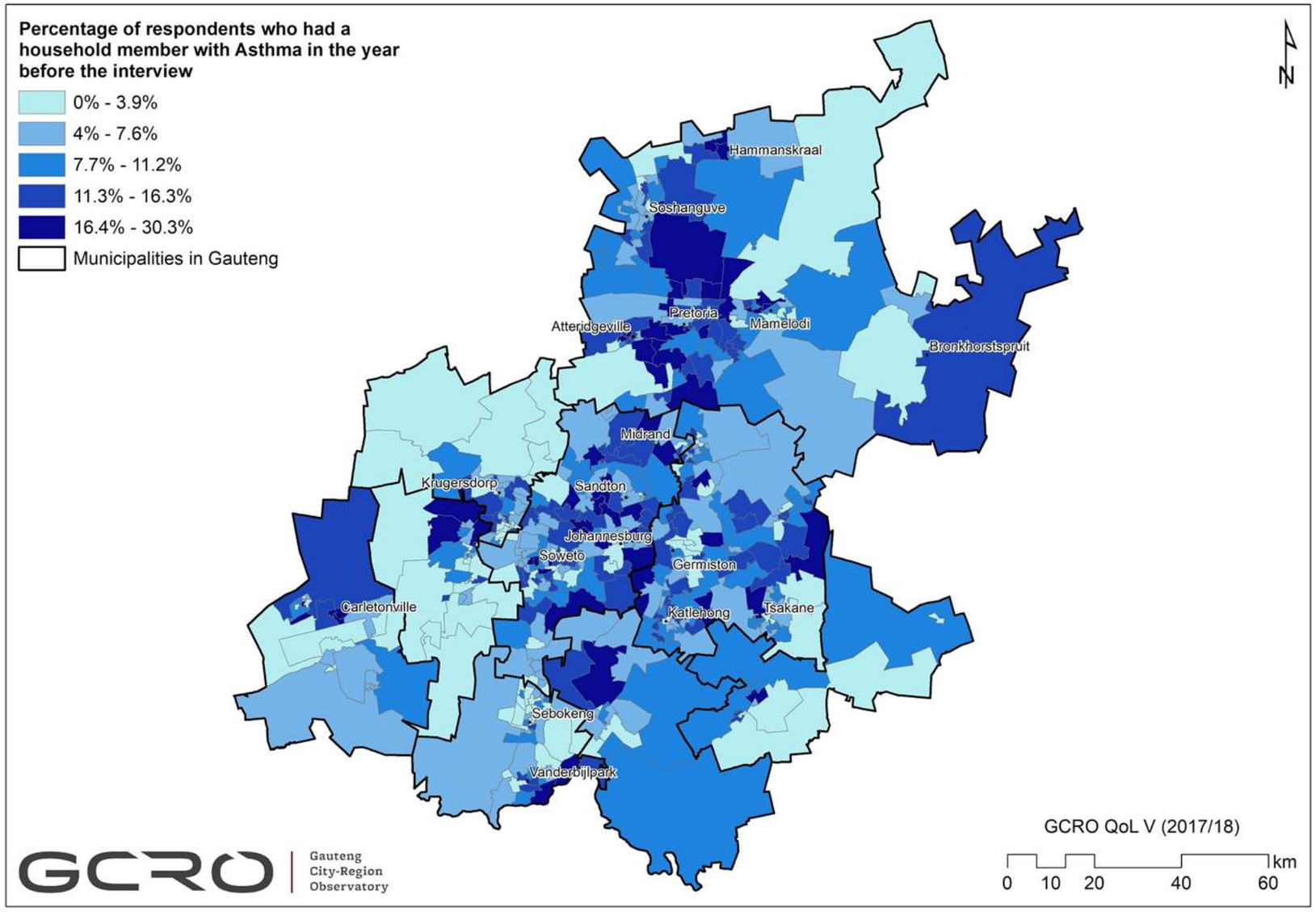


Access to information is critical in ensuring that households understand the reasons for social distancing and preventative hygiene, and that they understand how to appropriately implement the measures outlined by the government. Connectivity, whether by internet, phone, TV or radio means that information can reach a household without any direct human contact. Additionally, having easy access to information and entertainment in the home is likely to make it easier for households to practice social isolation. Finally, having no access to the internet or a phone will make it difficult for households to seek medical assistance without leaving the home.

Data source: GCRO QoL V (2017/18)

2.2 a Pre-existing health conditions

Asthma

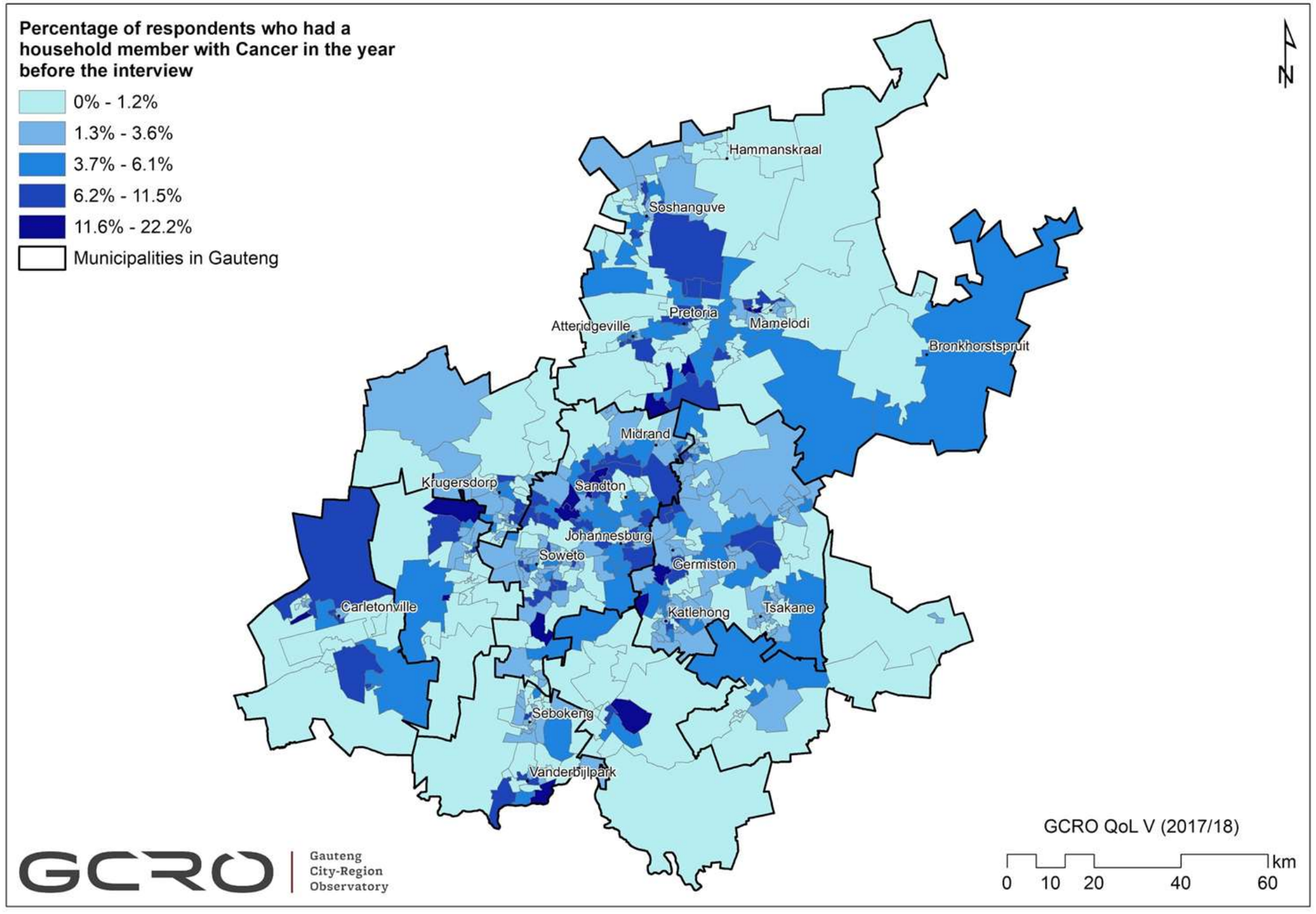


Please note that this is self-reported household-level data. It is not derived from medical records.

Data source: GCRO QoL V (2017/18)

2.2 b Pre-existing health conditions

Cancer

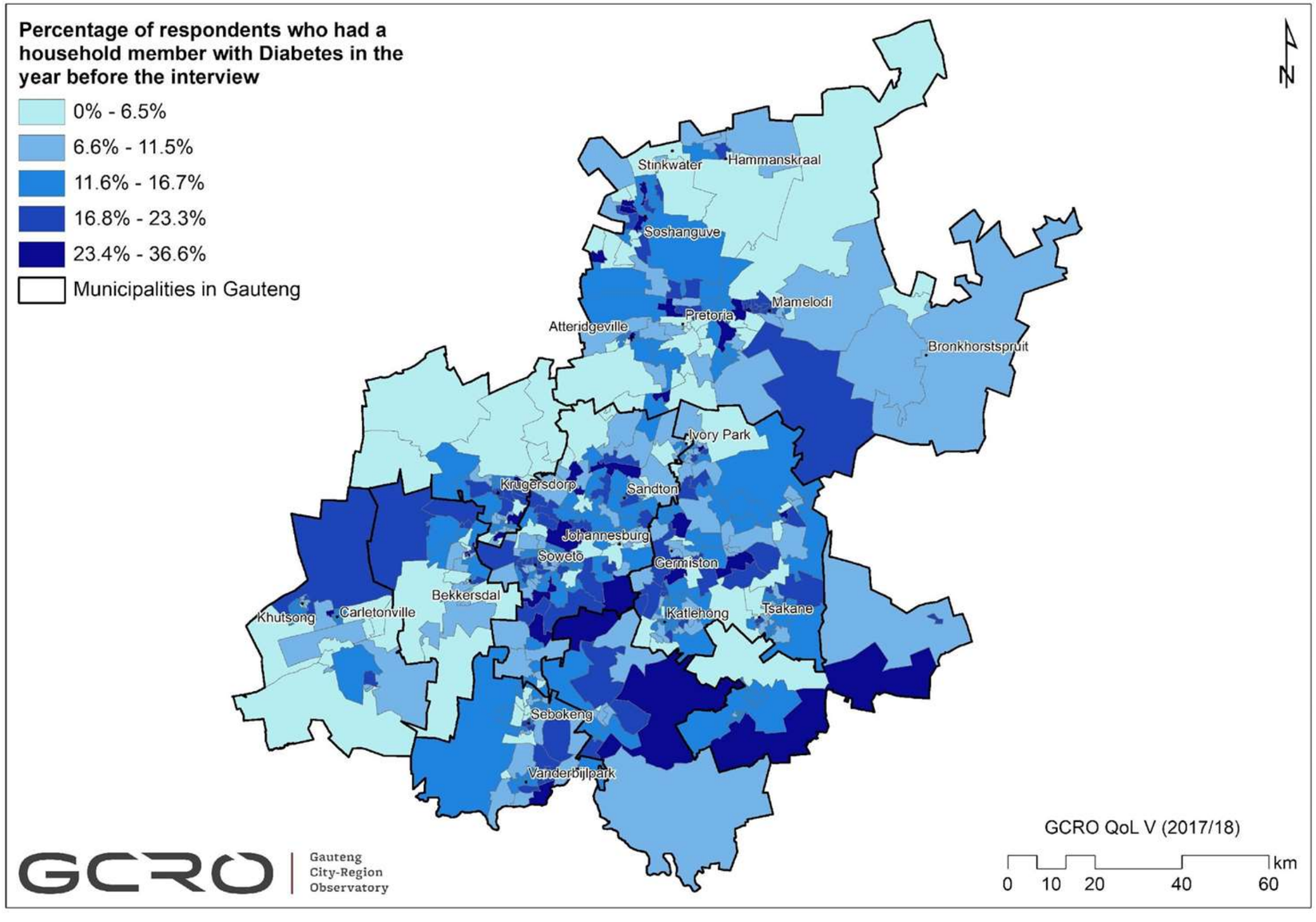


Please note that this is self-reported household-level data. It is not derived from medical records.

Data source: GCRO QoL V (2017/18)

2.2 c Pre-existing health conditions

Diabetes

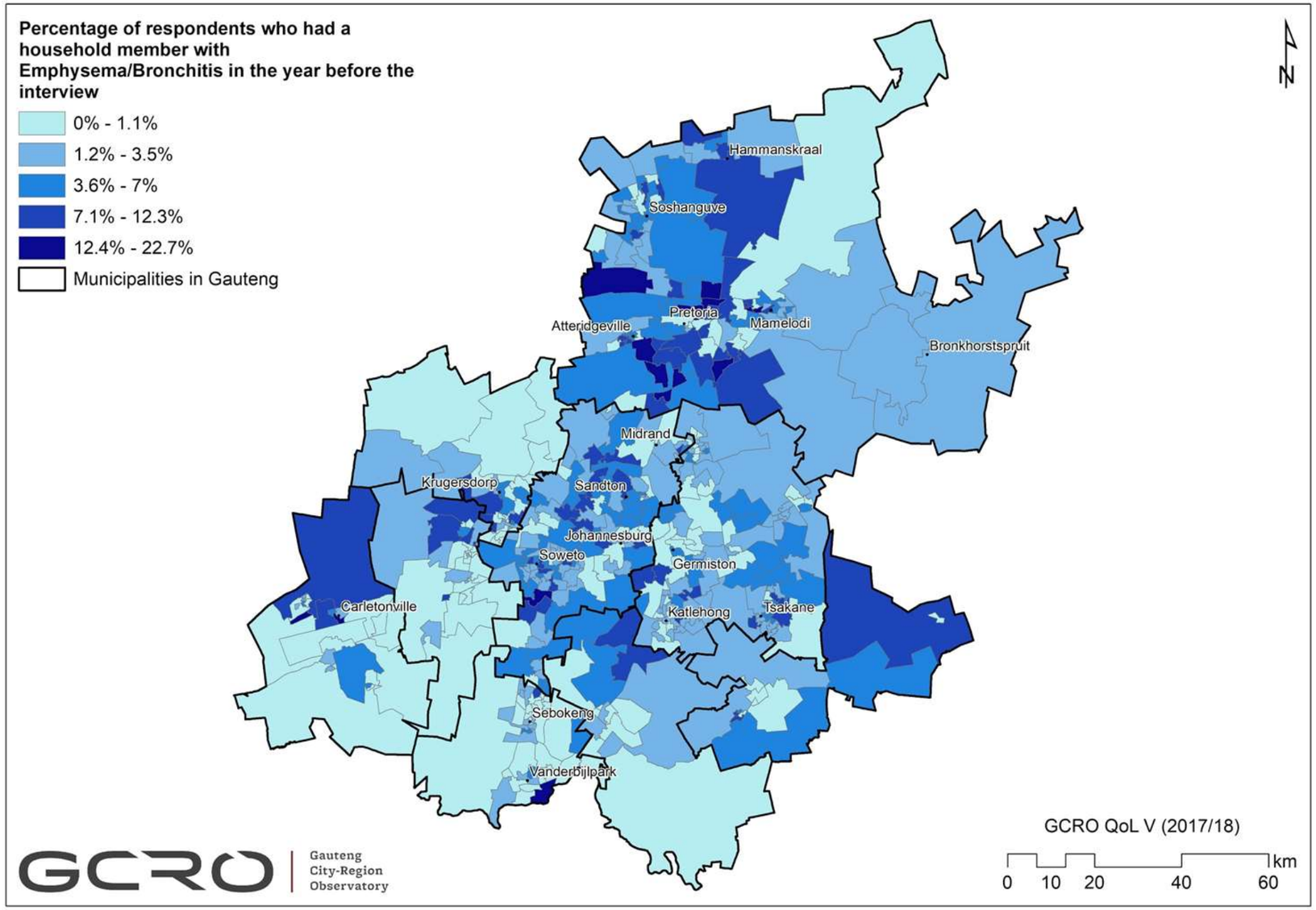


lease note that this is self-reported ousehold-level data. It is not erived from medical records.

ata source: GCRO QoL V (2017/18)

2.2 d Pre-existing health conditions

Emphysema/Bronchitis

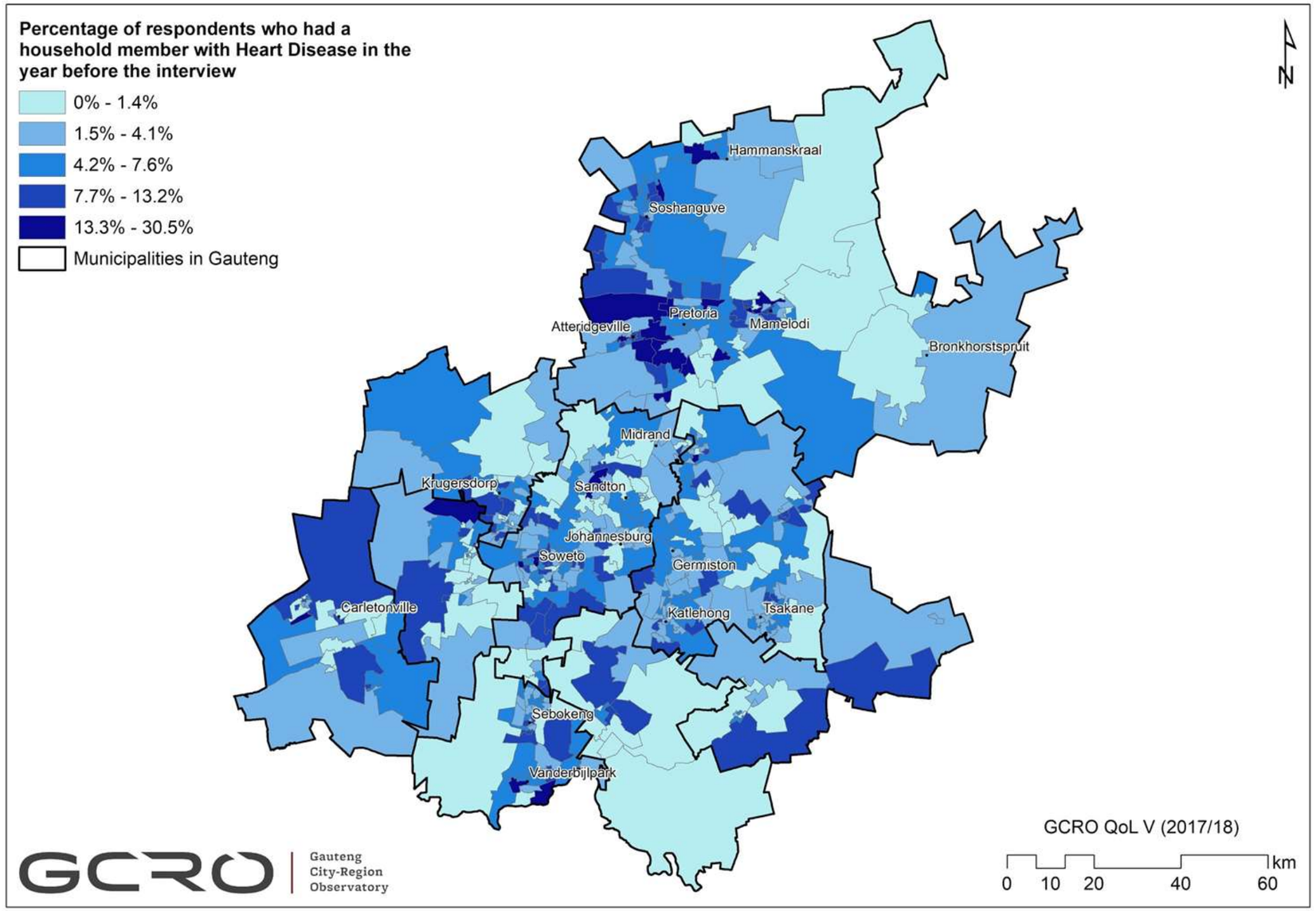


Please note that this is self-reported household-level data. It is not derived from medical records.

Data source: GCRO QoL V (2017/18)

2.2 e Pre-existing health conditions

Heart disease

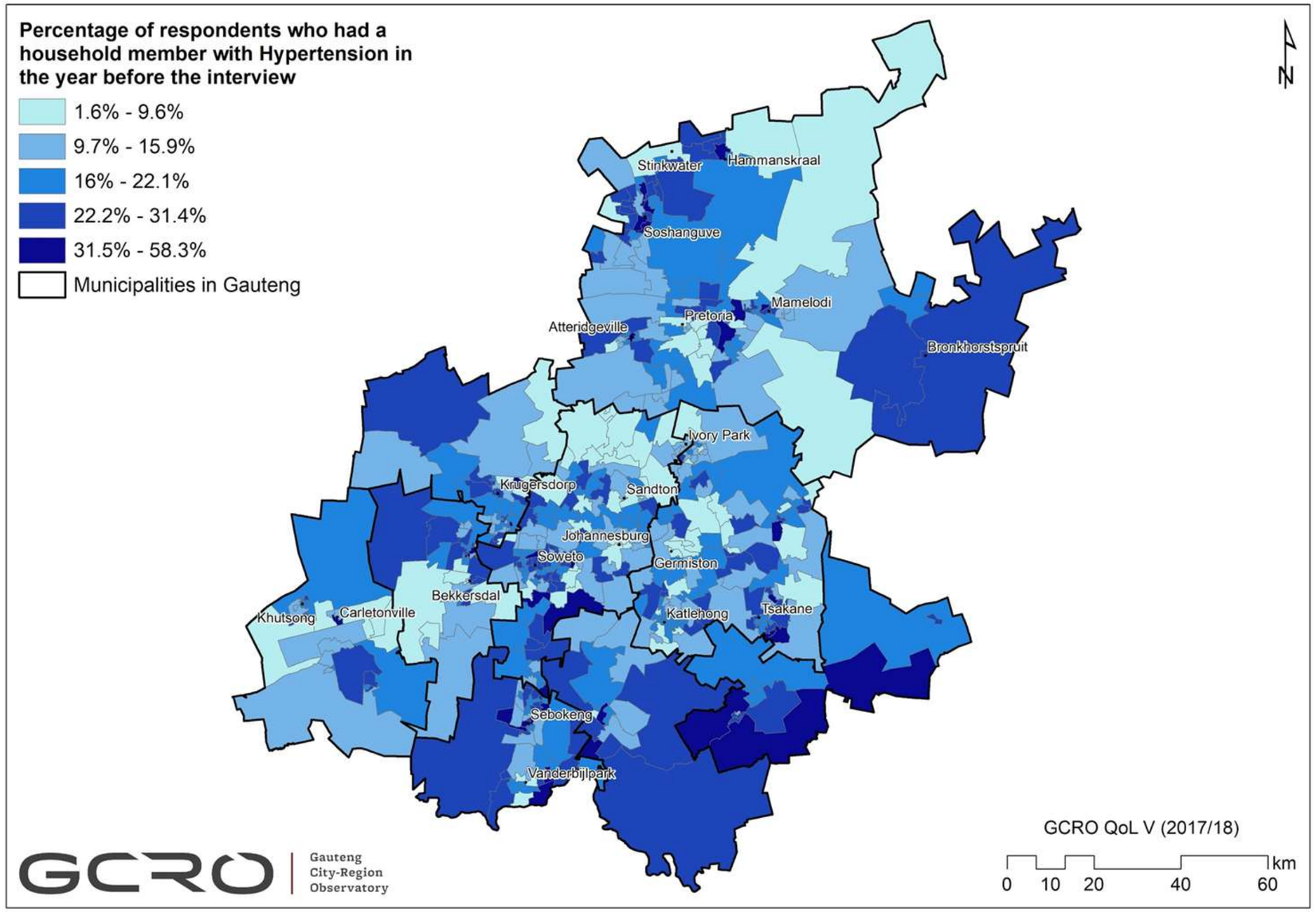


Please note that this is self-reported household-level data. It is not derived from medical records.

Data source: GCRO QoL V (2017/18)

2.2 f Pre-existing health conditions

Hypertension

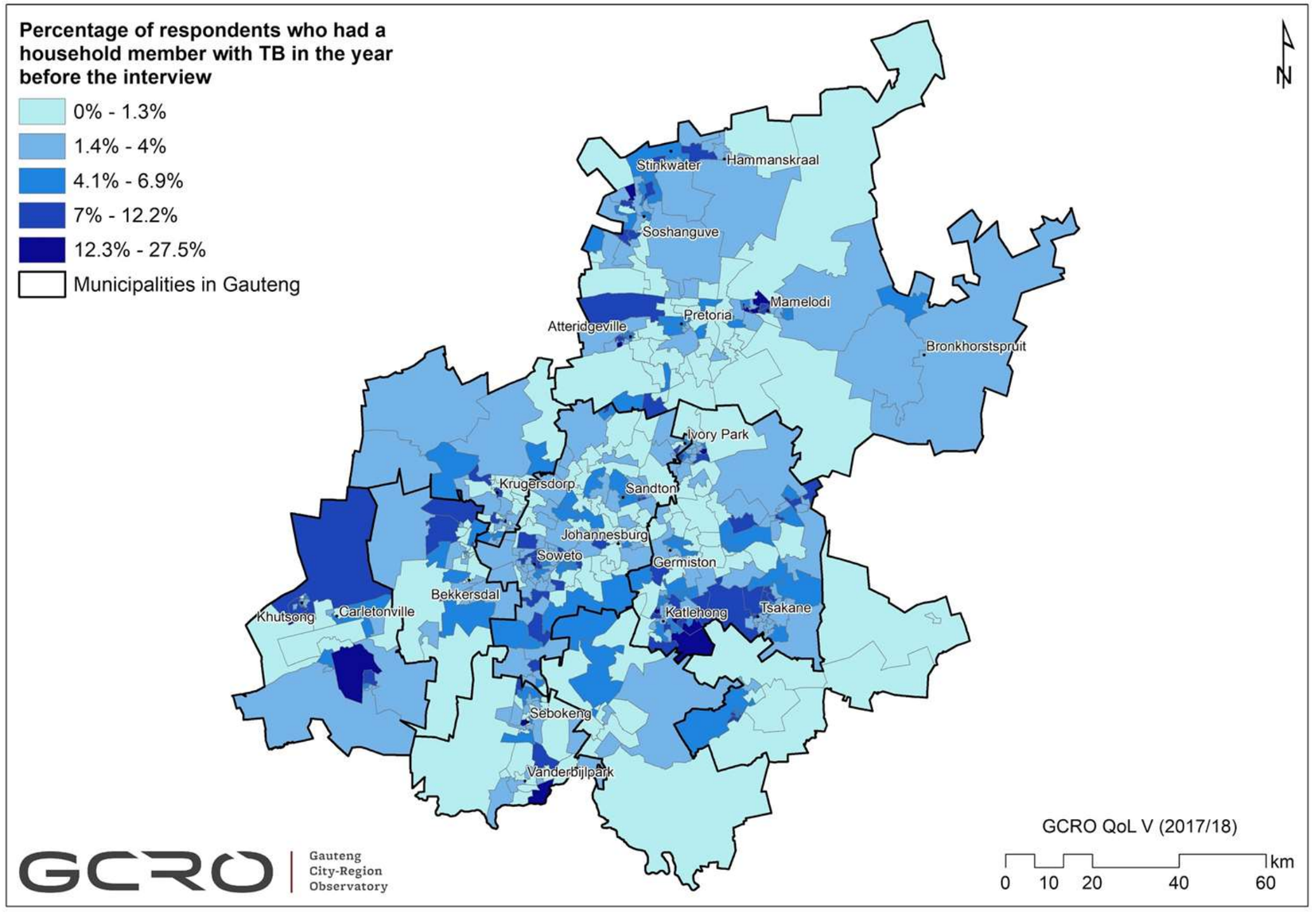


Please note that this is self-reported household-level data. It is not derived from medical records.

Data source: GCRO QoL V (2017/18)

2.2 g Pre-existing health conditions

Tuberculosis



Please note that this is self-reported household-level data. It is not derived from medical records.

Data source: GCRO QoL V (2017/18)

COVID-19: INDEX OF RISK FACTORS FOR MAINTAINING SOCIAL DISTANCE AND PREVENTATIVE HYGIENE

GCRO | Gauteng City-Region Observatory

Indicator name	Indicator definition	Rationale for inclusion
1.1 Household crowding	Percentage of respondents per ward who live in dwellings with 3 or more people per functional room, OR where more than one household is sharing a single room dwelling.	Household crowding is also a known risk factor for a range of health challenges, particularly respiratory illness (Ref: https://www.ncbi.nlm.nih.gov/books/NBK535289/). Maintaining adequate sanitation is also challenging under these circumstances. Multiple people living in a small dwelling or single room poses challenges in isolating sick people, or simply maintaining social distance, as it is hard for people to remain at home in crowded dwellings. Additionally, requirements for social distancing and closure of public spaces are likely to place substantial strain on individuals living in these conditions. Spending additional time in these dwellings may increase vulnerability to other medical conditions, and is likely to induce substantial psychological strain.
1.2 Sanitation shared	Percentage of respondents per ward whose households do not have access to a flush toilet that is either connected to the sewerage system or septic tank.	On properties where pit toilets are shared between a number of households, or in less formal settlements where many families share public ablution facilities such as chemical toilets, it will be extremely difficult to maintain social distance and maintain high standards of hygiene. Without preventative measures, shared ablutions may become a key site of transmission, particularly in informal settlements.
1.3 No access to clean running water on site	Percentage of respondents per ward whose households do not have piped water in their dwelling or in their yard.	Reliance on shared water sources limits effective implementation of social distancing, by forcing interactions between households. Maintaining appropriate preventative hygiene, such as regular hand washing, is likely to be more challenging in households without piped water. Households reliant on non-piped water are also likely to be at increased risk of contracting other water-borne illnesses, weakening immune systems, and increasing general likelihood of needing other medical care.
1.4 Reliance on public health facilities	Percentage of respondents per ward who normally use public health services.	Public health facilities are usually far more crowded than private facilities, often requiring long waits in queues in crowded waiting areas. Resource constraints and supply chain challenges mean that protective equipment is more likely to be in short supply than in the private sector, a challenge likely to be exacerbated by the fact that a far larger proportion of the population will attend public health facilities in the event that they do get sick. These factors may mean that the challenges of maintaining appropriate social distancing and preventative hygiene will be relatively greater in public health facilities than private ones.
1.5 Lack of access to electronic communication	The percentage of respondents per ward who do not access the internet at all, AND who also do not have a TV, satellite TV, radio, or cellphone in their households that is in good working order.	Access to information is critical in ensuring that households understand the reasons for social distancing and preventative hygiene, and that they understand how to appropriately implement the measures outlined by the government. Connectivity, whether by internet, phone, TV or radio means that information can reach a household without any direct human contact. Additionally, having easy access to information and entertainment in the home is likely to make it easier for households to practice social isolation. Finally, having no access to the internet or a phone will make it difficult for households to seek medical assistance without leaving the home.
1.6 Reliance on public transport	The percentage of respondents per ward who did not have a car in good working order in the household, AND whose mode of transport for the longest part of their most frequent trips was a lift club, minibus taxi, train, or bus.	Reliance on public transport involves exposure to many other people, both in queues waiting for the transport, and on the trip itself, making it difficult to maintain social distancing. Minibus taxis, which are the most widely used form of public transportation in Gauteng, are likely to pose particular challenges, because passengers are all seated in extremely close proximity, there is high passenger turnover, there is limited air circulation/ventilation, and there is a high level of exchange of money in the vehicle.

These six factors have been compiled into a single index and mapped to highlight areas where these factors combine to indicate multiple risks to maintaining social distance and preventative hygiene. The percentage of respondents in each ward affected by each of these factors was added together and divided by six to derive the index. This index has been mapped in Map 1 below.

COVID-19: INDEX OF RISK FACTORS THAT INCREASE HEALTH AND SOCIAL VULNERABILITY DURING AN OUTBREAK OR BROADER SHUTDOWN

GCRO | Gauteng City-Region Observatory

Indicator name	Indicator definition	Rationale for inclusion
2.1 Pre-existing poor health status	The percentage of respondents per ward who considered their health in the four weeks prior to the interview to be poor or very poor.	Respondents with poor health status are spatially concentrated in certain areas, such as townships and informal settlements. This may reflect a higher prevalence of some diseases, such as TB, HIV/AIDS and hypertension, in poorer communities. It may also reflect how certain areas are more affected by environmental health factors such as poor water quality or air pollution. Pre-existing poor health status will likely increase susceptibility to COVID-19 infection, placing both these individuals and other household members at greater risk. If they do become sick, they will be more susceptible to serious illness and death.
2.2 Pre-existing relevant health conditions	The percentage of respondents per ward who said that a member of their household had been affected by one or more of the following in the past year: cancer, diabetes, emphysema/bronchitis, asthma, pneumonia, heart disease, hypertension, or tuberculosis (TB). Note: It is very important to note that this is self-reported health data from a sample survey, rather than any official record of the condition in the District Health Information System. We have limited this analysis to conditions expected to increase COVID-19 morbidity and mortality. We have excluded HIV/AIDS from this analysis as we do not have data on whether individuals reporting this condition are on treatment. There is currently no evidence that individuals on effective treatment are at increased risk, although those with untreated HIV/AIDS are thought to be.	Individuals with pre-existing medical conditions (and by extension their households) are particularly vulnerable during a pandemic or a shutdown. Due to the significance of environmental and social factors in contributing to conditions such as diabetes, hypertension, heart disease and asthma, there is substantial spatial clustering of these households. Vulnerability is increased due to ongoing medical needs requiring regular visits to health facilities. If health facilities become overwhelmed, chronic services are likely to suffer. Additionally, many conditions weaken immunity. There is clear evidence that these conditions significantly increase risk of serious illness or death in individuals infected with COVID-19 (ref: https://www.nejm.org/doi/10.1056/NEJMoa2002032).
2.3 Difficulty accessing health care	The percentage of respondents per ward who indicated that in the past year there was someone in their household who needed healthcare but was unable to access it. We have excluded those who said that the reason for this was that the sick person did not have time to seek care, thought they would get better on their own, or gave another unspecified reason.	An inability to access healthcare in the past - for example due to distant health services, overcrowding, costs, or refusal of services - will likely mean that individuals are more vulnerable during a shutdown or an outbreak. Vulnerability is likely to be enhanced by undiagnosed or untreated pre-existing conditions. If they develop COVID-19 symptoms, they may also be particularly constrained in their ability to seek care - particularly if they have been refused care in the past. An inability to access health care is also often indicative of a level of social alienation, and alienation from other vital government services. Consequently, these individuals and households may be particularly unlikely to receive critical services from other spheres of government during shutdown or illness.
2.4 No access to medical aid	The percentage of respondents per ward who are not covered by any form of medical aid or insurance	Medical aid acts as a proxy for relatively secure employment, and adequate economic resources to provide a cushion to shocks such as unexpected medical expenses, a shutdown or a pandemic. Households with access to medical aid are also likely to have easier access to medication and medical care. Households without medical aid are less likely to have a cushion against shocks, and are also more likely to experience difficulties accessing appropriate medication and care related to both COVID-19 and other health conditions, both immediately and in the longer term.
2.5.Hunger	The percentage of respondents per ward who live in a household where at some point in the last year an adult or child had to skip a meal because there was not enough money to buy food, OR where there are children that benefit from a school feeding scheme	This variable serves as a proxy for a level of poverty severe enough that meeting basic needs is not always possible, even without the additional difficulties of a shutdown or pandemic. The closing of schools may mean that children miss out on meals, placing an additional resource burden on households already struggling to meet basic needs. An inability to meet basic nutritional needs is likely to substantially increase vulnerability to severe infection, as well as mortality.
2.6 Difficulty in saving money	The percentage of respondents per ward who say that it is difficult or impossible to save money	Difficulty in saving money is indicative of a limited financial cushion to protect against economic or medical shocks. The economic effects of a shutdown are likely to be severe, with many businesses closing or needing to reduce staffing. Temporary workers and service sector workers may be particularly vulnerable. Under these conditions, households without savings are likely to struggle to meet basic needs. Additionally, where household budgets are already tight, capacity to manage unanticipated medical expenses is likely to be very constrained.

These six factors have been aggregated into a single index, and mapped to highlight areas where these factors combine to indicate multiple risks to health and social vulnerability during an outbreak or broader shutdown. The percentage of respondents in each ward affected by each of these factors was added together and divided by six to derive the index. This index has been mapped in Map 2 below.

Technical notes

In support of the index mapping

Index of Multiple risk factors for maintaining social distance and appropriate levels of preventative hygiene

1. ***Dwelling crowding***. We have defined a crowded dwelling as 3 or more individuals per functional room, as well as any single-room dwelling shared by multiple households. About 14.4% of all respondents live in crowded dwellings. About 17.4% of all African respondents live in crowded dwellings, compared to 9.5% of coloured, 3.2% of Indian/Asian and 0.9% of white respondents. About 5.8% of respondents aged older than 65 years live in crowded circumstances. About 12.7% of respondents who live in households reporting pre-existing health conditions of concern also live in crowded dwellings.
2. ***Sanitation shared***. About 12% of respondents do not have access to a flush toilet that is connected to the sewerage network or a septic tank.
3. ***Main water source***. About 9% of respondents do not have access to piped water in their dwelling or yard.
4. ***Use of public health facilities***. About 66% of respondents who use healthcare facilities usually use public healthcare facilities. This suggests that a minimum of 10 million Gauteng residents rely on the public healthcare system.
5. ***Communication***. About 1.1% of respondents do not have access to any form of digital communication (no internet, no cellphone, no TV/satellite TV and no radio). About 5% of respondents do not have access to a cellphone, 8% do not have access to TV/satellite TV or radio and about 38% of respondents never access the internet. About 48% of QoL V interviews were conducted in English. This suggests that 52% of respondents are more comfortable in another language (22% isiZulu, 9% Sesotho, 8% Sepedi, 7% Setswana…), which makes communication in other languages very important. Further, only 12.3% of respondents indicated that their main household language is English.
1. ***Public transport***. About 44% of respondents rely heavily on public transport.

Index of Multiple risk factors contributing to increased vulnerability during an outbreak

1. ***Health status***. About 7.2% of respondents considered their health status to be poor or very poor in the four weeks before the interview.
2. ***Pre-existing health conditions***. About 33% of respondents indicated that they or someone in their household experienced one or more of the pre-existing health conditions that might increase their vulnerability to and ability to recover from Covid-19.
3. ***Failed to find healthcare***. About 4% of respondents indicated that, in the year before the interview, they or someone in their household needed healthcare but was unable to find it. This excludes respondents who provided unclear reasons why they didn't get health care or said it was because of time constraints or because they did not think it was worth trying to get healthcare.
4. ***Access to medical insurance***. About 67.4% of respondents indicated that they do not have any medical insurance.
5. ***Hunger risk***. About 37.3% of households face some hunger risk.
6. ***Difficult to save money***. About 80% of respondents indicated that they find it difficult or impossible to save money, but it is much harder to save money for respondents in poorer households