REVIEW OF THE IMPLEMENTATION OF THE SOUTH AFRICAN "STRATEGIC PLAN FOR THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES 2013-17".

Complied by Prof. Melvyn Freeman on behalf of the World Health Organization

August 2018.

Contents

i)Background to this Review

South Africa's Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-17 (SP) has come to the end of its implementation timeframe and adoption of a new Plan is vital - including new goals, objectives, targets and activities. However, before drafting this new Plan, the National Department of Health thought it prudent to first Review the implementation of the previous one.

In this context the Department of Health requested the World Health Organization (WHO) to assist them to have the SP reviewed. The WHO consequently contracted Prof Melvyn Freeman to conduct the Review[1].

The methodology used was to collate available data from Department of Health documentation (both formal and informal), published research and the District Health Information System. Interviews were conducted with key stakeholders at national, provincial and district levels as well as NGOs, academics and representatives of the private sector. Where needed this was combined with "insider" evidence and information.

Interviews were conducted with the National Department of Health (1 Senior Manager, 1 focus group [5 officials], 1 data specialist); 3 Provincial Departments of Health (3 Chief Directors, 1 Focus group [9 officials]); 3 District Departments of Health (3 Chief Directors, 2 focus groups [8 people and 6 people]); 3 Non-governmental organizations (3 representatives of National Organizations with affiliate organizations); 3 Academics (3 experts in public health/NCDs); and the Private Sector (2 interviews with National Organizations with affiliate members). Total number of interviewees – 41.

The availability of data to assess progress of the SP was difficult in the light of baseline and monitoring and evaluation data mechanisms not being established at the time that the SP was adopted and systematic data not being collected in a number of domains since then either. This was clearly a limitation of this Review and indeed of the SP itself. Nonetheless some data/information has been gathered and is provided for each of the 2017 targets that were set.

[1] Questions did arise regarding a potential conflict of interest as Prof Freeman had been intimately involved in compiling and drafting the SP as well as in its implementation in his role of Chief Director for Non-Communicable Diseases during the duration of the SP. Prof Freeman left the National Department of Health in April 2018. It was agreed that Prof Freeman should put the potential conflict of interest upfront in each interview conducted and inform respondents that should they have any issues or problems, alternate arrangements for the interview could be arranged. No objections were expressed.
While potential subjectivity, wanting to be seen and portrayed in a positive light and interviewees potentially being cautious in telling the full truth were possible negative influences in compiling this Review, the roles and responsibilities that Prof Freeman had played in the NDOH facilitated access to data and information and also provided an "insider" perspective of what transpired.

List of Tables

List of Figures

I)Executive Summary

In 2013 the Department of Health adopted a Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-17. Nine Strategic targets were set for 2020[2] and one for 2030, with "check-in" points on 20 specific objectives, including for the end of the Strategic plan in 2017. This Review assesses the extent of its implementation and reaching of its targets and provides analysis and context for future strategic planning for Non-Communicable Diseases in South Africa.

Data to assess the progress of implementation of the targets was haphazard, vague and in some instances questionable or simply unavailable. This was a limitation of this Review and indeed of the SP itself. Nonetheless some data/information is provided for each of the 2017 targets that were set. Of the 20 2017 objectives only 4 were assessed to have been met, 5 partially met and 9 were not met. In 2 instances it was not possible to assess the extent to which the objective had been reached. This Review does NOT assess any targets that are NOT part of the Strategies and Actions Plans of this SP. Hence for example it does not assess the WHO voluntary targets that are not part of this SP and it also does not assess SA summit targets that were not specifically included in the SP Strategies and Action Plans.

Interviews were conducted with officials from the National Department of Health, 3 Provincial Departments of Health, 3 District Departments of Health, 3 National Non-governmental Organizations, 3 Academics experts in public health/NCDs), 2 National Organizations representing the private sector. Total number of interviewees – 41.

Extent to which the 2017 targets were met[3]

Objective	**Target for 2017**	
1)Establish an intersectoral structure to reduce NCDs and for planning and monitoring.	Functional and ongoing intersectoral structure for prevention of NCDs	○ Yes ○ Partial X Not met ○ Don't know

[2] While targets on physical inactivity and cervical cancer do not specifically refer to 2020, this should be assumed given that the heading states "The 2020 goals and targets".
[3] How these conclusions were reached, what was done to reach them and the obstacles to reaching them are outlined in the main body of this review.

2)Develop an integrated and intersectoral plan for a co-ordinated response to prevention of NCDs	Intersectoral plan being implemented and monitored by intersectoral structure.	○ Yes ○ Partial X Not met ○ Don't know
3)Control tobacco Use	Reduce tobacco use by 10%;	○ Yes ○ Partial X Not met ○ Don't know
4)Reduce alcohol Consumption	19l/adult	○ Yes ○ Partial ○ Not met X Don't know
5)Reduce % of salt in processed foods.	Mean population intake of 7 grams per day	X Yes ○ Partial ○ Not met ○ Don't know
6)Reduce prevalence of overweight and obese people.	3% decrease in all age groups in Figure 8	○ Yes ○ Partial X Not met ○ Don't know
7)Reduce cervical cancer mortality	55% of women over 30 attending public sector clinics screened. 65% of women with STIs screened soon after/at diagnosis and at 5 year intervals	○ Yes X Partial ○ Not met ○ Don't know
8)Reduce mortality through Introduction of the Human Papilloma Virus Vaccine	All age appropriate girls in quintile 2 schools	X Yes ○ Partial ○ Not met ○ Don't know
9)Reduce morbidity and mortality through increased screening and treatment for hypertension, diabetes and asthma.	Numbers screened increased by10%	○ Yes ○ Partial ○ Not met X Don't know
10)Reduce NCD mortality through prevention and promotion	Reduction by 5% in premature mortality from NCDs	○ Yes ○ Partial X Not met ○ Don't know
11)Integrate NCDs into:-Primary health care package,	NCDs fully included in PHC package	X Yes ○ Partial ○ Not met ○ Don't know
12)Integrate NCDs into -re-engineering of PHC,	All CHWs trained in NCD issues.	○ Yes X Partial ○ Not met ○ Don't know
13)Integrate NCDs Into Human Resource development strategies and interventions	Increase in specialist health workers dealing with NCDs increased by 10%	○ Yes ○ Partial X Not met ○ Don't know
14)Improve health systems to attain higher levels of control for hypertension, diabetes and asthma.	[Dependent on evaluation of the model]	○ Yes X Partial ○ Not met ○ Don't know

15)Prevent blindness through increase in cataract surgery	1700 operations per million population	○ Yes ○ Partial X Not met ○ Don't know
16)Reduce morbidity from mental disorder	15% increase in Caseload	○ Yes X Partial ○ Not met ○ Don't know
17)Increase access to essential drugs and equipment	15% decrease in stock-outs and 90% availability of essential equipment.	○ Yes X Partial ○ Not met ○ Don't know
18)Establish a comprehensive surveillance mechanism for NCDs, health information systems and dissemination processes to assist policy, planning, management and evaluation of NCD prevention and control	Comprehensive surveillance mechanism and routine monitoring system for NCDs generate reliable data on: exposure to risk factors; management and control of NCDs; outcomes	○ Yes ○ Partial X Not met ○ Don't know
19)Ensure baseline information is available for each summit target.	Progress Report on the implementation of Summit Target produced	○ Yes ○ Partial X Not met ○ Don't know
20)Work with the National Health Research Committee to generate research to inform NCD policies and programmes based on sound scientific evidence.	Results of a least 3 research projects on the list of activities.	X Yes ○ Partial ○ Not met ○ Don't know

Table 1 Summary of whether SP Objectives were met.

Some of the main intersectoral achievements in prevention and control of NCDs during this SP period include regulations on salt in processed foods, a levy on sugar sweetened beverages, a bill on reducing access to alcohol and restrictions on advertising, HPV vaccine introduced, preparation for improved Tobacco legislation, education and information (limited) was conducted, school health screening for NCDs such as oral health, mental

health and hearing loss, an Integrated Clinical Service Management model was developed and rolled out in most clinics, a Bill that will facilitate comprehensive NCD surveillance (NAPHISA) was tabled in parliament and health systems and health economics research in NCDs was conducted.

At a national level the budget for NCDs decreased by 33% between the 2-13/14 financial year and 2017/18 from R28.9 million to R22.5 million. The NCD Cluster receives around 0.05% of the national Department's budget despite the fact that NCDs constitute over 40% of mortality and at the very least 33 of the burden of disease.

The following 9 items have been extracted from the Review process as being critical for discussion and debate, and in certain cases for action (depending on the outcome of the discussion), *prior to* a new Strategic plan being drafted:-

1)**Targets**. A number of considerations must be taken into account in deciding whether to have aspirational targets, targets that are likely to be met or something in between. Consideration should be given to utilizing a set of national NCD targets aligned with the global (WHO) targets.

2)**Information on NCDs.** Data for measuring progress in NCDs and their risk factors is extremely poor. This must be remedied for the new Strategic Plan to be credible.

3)Intersectoral collaboration. This has been highlighted in the UNGA declaration on NCDs and WHO global NCD action plan, and restressed in the recommendations of the recent WHO independent high level Commission on NCDs that recommended that Heads of State and Government, not Ministers of Health only, should oversee the process of creating ownership at national level of NCDs and mental health. Finding the correct mechanism for intersectoral collaboration is essential.

4)Resources. Prioritization of NCDs needs to be backed with resources (financial and human) otherwise this was not "real" prioritization. Investment in NCDs would bring excellent returns but that investments needed to be made first.

5)A public health or clinical care document. Finding a good balance between a preventive/promotive approach and health systems development/care and treatment must be found. Though clinical guidelines, essential medicines and treatment procedures may not have a place in a high level Strategic Plan, the

framework and platform through which NCD care would be given and the clinical approach that should be followed, may require greater inclusion.

6)Responsibility and Accountability. Meeting local as well as global NCD targets will require concerted and very focussed actions at the highest levels and from a range of role-players both inside and outside the department of health and at all levels of the health system. A key question is how does one make each of these role-players feel responsible and hence take responsibility and accountability for meeting the goals of the SP. Getting units in the NDOH other than the NCD unit to "own" the Strategic Plan will be critical to the success of any future SP.

7)A diseases verses a life-course approach. The SP under review takes the position that NCDs form a group of conditions/diseases that often co-exist and require somewhat similar approaches to prevention, control/care and surveillance/research and therefore a Strategic plan for NCDs as a group of conditions is appropriate. An alternative worth consideration is a "Life-course" approach across all disease areas (both communicable and non-communicable). A variation on this may be to divide the NCD SP into life stages and include all aspects of prevention, control and surveillance into this.

8)Putting cost effectiveness at the centre of the Plan. Serious consideration should be given to the idea that budget allocation for NCDs should be based on where the biggest impact will be, in other words determining what interventions are cost effective, in what order and plan interventions accordingly. This SP did try to work on the WHO best-buy prioritisation, but proper implementation of this approach would require far more local data to be generated to determine which interventions bring what returns for investment and hence to plan accordingly.

9)Scope of NCDs There are both advantages and disadvantages in having both a broad inclusion of different NCDs and focusing on a smaller number of conditions that have high mortality. Various "hybrids" are also worth consideration such as focussing on the main NCDs and (only) their comorbidities as they relate to the main NCDS; introducing different conditions through a phased approach; keeping this document at a high level with inclusion of a number of NCDs and then having

specific policies and plans focussing on different areas and/or allowing provinces to prioritise from a broad list proposed in the National Strategic Plan.

Conclusion.

While some targets of this SP were met, implementation was mainly poor. This can largely be attributed to the facts that adequate resources, human and financial, to implement the plan were generally not available, and that accountability was not adequately structured in. While NCDs were prioritised by leadership, without the resources to implement various goals, this (largely) didn't translate into actions. There were however a number of important achievements made such as regulations on salt, a sugar sweetened beverage levy was introduced and an Integrated Clinical Service Management Model was introduced

There are local NCD (summit) targets, WHO targets and an SDG NCD target to be met. If South Africa is serious about reaching these targets and wants the next Strategic Plan to guide this process then specifics of how it will be achieved, by whom doing what and how it will be funded will be required. Moreover, the mechanisms and systems of surveillance and monitoring and evaluation will need to be greatly strengthened. In addition to a broad strategic plan, an implementation plan with concrete actions/activities, responsibilities of relevant stakeholders, timeline and indictors, outputs will need to be developed

Investing in NCDs will bring economic returns but this review suggests that the investment will have to take place first, because without it agreed upon targets will remain unmet and development will be compromised.

II)Introduction

II.1)Background

The five-year South African "Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-17" (SP) was published by the Department of Health in 2013[i]. The Vision was for a Long and Healthy Life for all through Prevention and Control of Non-Communicable Diseases. The SP had three main components. 1)Prevent NCDs and promote health and wellness at population, community and individual level 2)Improve control of NCDs through health systems strengthening and reform and 3)Monitor NCDs and their risk factors and conduct innovative research. Nine Strategic targets were set for 2020[4] and one for 2030, with "check-in" points on 20 specific objectives, including reporting targets, for 2015 and for the end of the SP in 2017. This Review assesses the extent of its implementation, the merits and limitations of this Strategic Plan, and provides analysis and context for future strategic planning for Non-Communicable Diseases in South Africa.

The drafting and adoption of this Strategic Plan followed the 2011 United Nations General Assembly (UNGA) High level meeting and subsequent Political Declaration on Non-Communicable Diseases (NCDs) that inter alia noted a growing global NCD incidence and prevalence but a serious dearth in NCD strategic policies and planning in most countries, especially in Low and Middle Income Countries (LMICs). The SP also responded to a growing local groundswell both outside and within the Department of Health that recognised the urgent requirement for a Strategic Plan to guide NCD interventions in South Africa.

The UNGA declaration noted the pressing need for countries to plan and implement policy to prevent and control NCDs as not only a health concern but as an integral part of social and economic development. This vision was accepted, embraced and adopted by South Africa. In his foreword to this Strategic Plan, the Minister of Health, Dr. PA. Motsoaledi, emphasised that South Africa fully supported the UN Declaration, acknowledging both the increase in NCDs and the fact that NCDs constitute a critical health as well as development concern that must be reversed through increased and urgent action towards the

[4] While targets on physical inactivity and cervical cancer do not specifically refer to 2020, this should be assumed given that the heading states "The 2020 goals and targets".

prevention/promotion of NCDs and improvements in care and treatment through a revitalised health system.

The targets captured in this Strategic Plan were unanimously adopted at a summit convened by the Minister and Deputy Minister of Health just prior to the UN High level Meeting, and attended by stakeholders including users and survivors, government departments, the World Health Organization, non-governmental organizations, academics and other experts in NCDs as well as representatives of the private sector. According to the Minister these targets were "somewhat ambitious" but, he stated, "if all role-players stand together, work together and commit renewed energy to prevention and control of Non-communicable diseases, we can meet the targets and thereby make a significant contribution to well-being and development".

This Review is concerned with the extent to which these targets were in fact reached or not and is aimed at understanding the mechanisms that were or were not put in place to achieve them. The Review also explores how we know (or don't know) whether the targets have been met given the measuring instruments available.

II.2)Evaluation Methods

This Review draws on published research where this is available as well as data and (both formal and informal) documentation provided by the Department of Health where this was available. No primary research was conducted for this Review, however data was combined from different sources where this was feasible and analysis on trends obtained from various sources was conducted in certain instances. The review also relies on some "insider information" of the primary Reviewer.

Various selected key stakeholders were interviewed for this Review including representatives of various sections of the National Department of Health (1 focus group, 1 interview with senior manager, 1 interview with data specialist); Provincial Departments of Health (1 focus interview plus 2 interviews with senior managers); Health Districts (2 focus groups plus 1 interview with senior manager); Non-governmental organizations (3 representatives of national organizations with affiliate organizations); Academics (3 experts

in public health/NCDs); and the Private Sector (2 interviews with organizations with affiliate members).

1I.3 Targets measured

The targets set in the Strategic Plan align relatively well with the World Health Organization's 9 global targets for NCDs and the Global monitoring framework on NCDs (See Table 2). However certain targets are included in the SA Strategy but not in that of the WHO and vice versa. There is also some variation in the targets that overlap. It should be noted that the South African SP *preceded* the publication of the WHO global targets.

South African Target	WHO Target	Main differences
1) Reduce by at least 25% the relative premature mortality (under 60 years of age) from Non-communicable Diseases by 2020.	A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	a)SA refers to premature mortality while WHO refers to overall mortality. b)Specific NCDs (the "main" ones) are listed in the WHO document while the SA SP refers only to NCDS.
2) Reduce by 20% tobacco use by 2020.	A 30% relative reduction in prevalence of current tobacco use.	SA sets the target at 20% reduction while WHO require 30%.
3) Reduce by 20% the relative per capita consumption of alcohol by 2020.	At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context	SA requires 20% *per capita* reduction whereas WHO firstly require a 10% reduction and secondly this is of *harmful use.*
4) Reduce mean population intake of salt to < 5grams per day by 2020.	A 30% relative reduction in mean population intake of salt/sodium	SA requires a goal of <5g whereas WHO requires a relative reduction of 30%
5) Reduce by 10% the percentage of people who are obese and/or overweight by 2020.	Halt the rise in diabetes and obesity.	a)SA requires a 10% reduction in obesity whereas WHO requires no rise.

		b)WHO also includes a halt in rise of diabetes.
6) Increase the prevalence of physical activity 3 (defined as 150 minutes of moderate-intense physical activity per week, or equivalent) by 10%	A 10% relative reduction in prevalence of insufficient physical activity	SA requires an increase of 10% in physical activity whereas WHO requires a 10% reduction in inactivity
7) Reduce the prevalence of people with raised blood pressure by 20% by 2020 (through lifestyle and medication).	A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances	SA requires a 20% reduction in raised blood pressure whereas WHO a 25% reduction OR containment of prevalence of raised blood pressure.
8) Every woman with sexually transmitted diseases to be screened for cervical cancer every 5 years, otherwise every woman to have 3 screens in a lifetime (and as per policy for women who are HIV/AIDS positive)		WHO does not include screening for cervical cancer as a main indicator, but it is included as an additional indicator.
9) Increase the percentage of people controlled for hypertension, diabetes and asthma by 30% by 2020 in sentinel sites		WHO document only refers to the containment of raised blood pressure (see 7 above)
10) Increase the number of people screened and treated for mental health by 30% by 2030.		WHO only deals with 4 “main” NCDs and has no reference to mental health
		SA document does not deal with drug therapy to prevent heart attacks and strokes.
	An 80% availability of the affordable basic technologies and essential medicines, including generics,	SA does not include this as one of the 10 **main targets**, however it

	required to treat major noncommunicable diseases in both public and private facilities	includes an objective to increase access to essential drugs and equipment with a 2017 target of a 15% decrease in stock-outs and 90% availability of essential equipment.

Table 2 **South African and World Health Organization NCD targets** .

The aims set out in the Strategic Plan to reach the targets are divided into three main sections ie. 1)Prevent NCDs and promote health and wellness at population, community and individual levels 2)Improve control of NCDs through health systems strengthening and reform and 3)Monitor NCDs and their main risk factors and conduct innovative research. This review considers each of the 20 objectives under these sections and whether the targets set for 2017 were met (or were perceived to have been met where data is unavailable). Where the objective has not been met or only partially met this Review explores what the obstacles were to achieving the target may have been.

It is important to note that this Review does NOT assess any targets that are NOT part of the Strategies and Actions Plans of this SP. Hence for example it does NOT assess the WHO voluntary target of the percentage of eligible people receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes as this was not in the SP. It also does NOT assess summit targets that were not specifically included in the SP Strategies and Action Plans. Hence for example the summit target on physical activity is not assessed.

1I.4)Limitations of this Review

Assessing the extent of implementation of the SP was severely limited by inadequate data and monitoring mechanisms. In some instances this led to estimations or “educated guesses” by the reviewer as to whether the target had actually been met or not. Where this was too difficult to do or would have involved a mere guess, this objective was simply given a “don’t know” score.

It was not possible to conduct any primary research for this Review.

The numbers of interviews conducted and with whom was limited by time available for the Review and the availability of interviewees. While effort was made to include a range of stakeholders from both government and non-State actors and from more urban and more rural provinces and NGOs, not every province was represented and not every stakeholder that could have added value to this Review was interviewed. NGOs and academic groups representing more than one organization were preferred and this may have resulted in specifics of particular diseases being overlooked. A particular gap is NCD co-ordinators at provincial level and though senior management in a province may have given their views, as did officials working on NCDs in districts, this level of personnel may have yielded an important additional “on the ground” perspective.

III)Progress of implementation of the SP.

III.1)Have the 2017 targets in the SP been met for each objective and if not why not?

Objective 1	**Target for 2017**	
Establish an intersectoral structure to reduce NCDs and for planning and monitoring.	Functional and ongoing intersectoral structure for prevention of NCDs	○ Yes ○ Partial X Not met ○ Don't know

Data informing assessment outcome.

No physical intersectoral structure for prevention of NCDs has been established

What was done to achieve the target?

The idea of a national intersectoral structure to deal with prevention of NCDs is a resolution of congress of the ruling party (ANC) in 2007 and its implementation has been discussed at the highest levels of government. Following a wide review of the literature, examination of best practice and discussions with stakeholders, including SANAC, a concept document outlining the need for an intersectoral commission, its primary objectives and giving options for its specific structure and functions was developed. The structure was to be termed the National Health Commission (NHCom). The establishment of the NHCom was included in the NDOH Annual performance Plan over a number of years but never actually established. Some of the critical issues that needed to be decided on were:-

- Should this committee be chaired by the Deputy President of the country and consist of government Ministers (in addition to NGOs, researchers and other stakeholders) or should the NHCom consist of senior government department officials (in addition to NGOs, researchers and other stakeholders) and report to the Minister of Health/National Health Council?
- Should the NHCom be a sub-committee of the National Health Insurance?

- What should be the relation of the NHCom to SANAC (South African National AIDS Council) and to what extent should the NHCom resemble or even be integrated with the SANAC?
- How would the NHCom be funded and what levels of responsibility would it take for health promotion activities in addition to playing a co-ordinating role of the different sectors?

The concept document was adopted by the FOSAD (Forum of Directors General) for submission to Cabinet. The National Health Commission was also included as a committee of the National Health Insurance White paper in 2017 together with a proposed composition and terms of reference. Nominations for the committee were received. The NHCom was included in this White paper because prevention of NCDs was seen as critical to the outcome of the NHI particularly in terms of expected additional pressures on the health system from preventable chronic diseases.

Some respondents felt that the commitment to the NHCom was not as urgent as it should have been and that there was some lip service to this while in actuality pandering to the needs of industry.

Notwithstanding the fact that the NHCom was not established, certain provinces established provincial structures for intersectoral collaboration. For example in KZN an annual consultative forum was established including a number of different government departments, NGOs and academics. The provincial DoH has MOUs with certain government departments including Social Development and Sports and Recreation. There is also a Substance Abuse Forum chaired by the Premier in which a number of government departments, civil society and rehabilitation centres participated. In the Western Cape a number of Strategic Goals that require intersectoral collaboration have been identified, of which Health and Wellness is one. A Whole of Society Approach (WOSA) has been adopted. A forum chaired by politicians consists of a number of government departments, civil society and the private sector has been established. A life course approach has been adopted whereby for example the first 1000 days is focussed on while physical activities for older persons have also been implemented. A focus on reduction of alcohol related harm is

chaired by the Premier and the focus of the Provincial Liquor Board has been shifted from being purely concerned with economic development to focus significantly on promoting health and reducing harm.

Moreover within districts, respondents reported collaboration with different departments such as with Sport and Recreation whereby physical exercise was included in the curricula at all schools (Nkangala district); with SASSA and the Department of Social Development whereby pensioners were given information around healthy eating and other healthy lifestyle education

If not met or partially met, why?

Setting up a commission such as the one described is a sensitive political decision and for reasons that fall outside of the Review, the timing for this to happen was not correct within the timeframes determined in the SP.

Objective 2	**Target for 2017**	
Develop an integrated and intersectoral plan for a co-ordinated response to prevention of NCDs	Intersectoral plan being implemented and monitored by intersectoral structure.	o Yes o Partial X Not met o Don't know

Data informing assessment outcome.

No physical intersectoral structure for prevention of NCDs has been established and therefore no plans are being implemented and monitored by such a structure.

What was done to achieve the target?

This objective was directly linked to the achievement of Objective 1. It was intended that one of the first tasks of the NHCom would be to identify priority areas for different partners,

including government departments, to implement. This would then have been collated into an integrated and intersectoral plan for the prevention of NCDs. With a target of 2015 for actions plans to have been developed, by 2017 it was intended that the implementation would be monitored by the NHCom itself. This was not done.

If not met or partially met, why?

Given that the NHCom was not established this objective could not be met. However collaboration between partners to reduce risk factors, including formal MoUs have been established in some provinces and districts.

Objective 3	**Target for 2017**	
3)Control tobacco Use	Reduce tobacco use by 10%;	o Yes o Partial X Not met o Don't know

Data informing assessment outcome.

There appears to have been a consistent downward trend in tobacco use between 1993 (33%) and 2012 (18%) with a possible rise in 2016 (22%). This would reflect a 20% rise during the SP period rather than the targeted SP 10% reduction. However, the 2012 SANHANES data may be a statistical outlier (the measured prevalence was lower than the true prevalence), creating a false impression of the extent of success between 2007 and 2012. In fact both the AMPS and National Income Survey find that prevalence was higher in 2012, so the reliability of this figure may be questionable.

The discernible reductions between the 1998 DHS and the 2016 are evident below[ii].

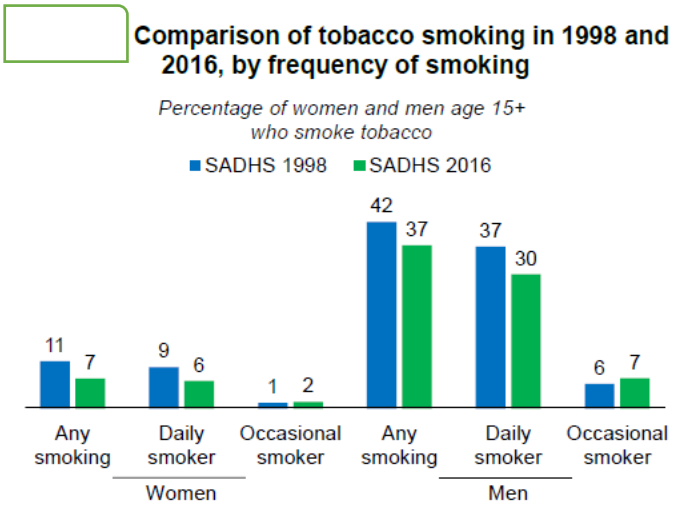


Figure 1 Comparison of tobacco smoking in 198 and 2016, by frequency of smoking

In the light of statistics that are not comparing like with like it is difficult to make too many conclusions around current tobacco trends, however it seems very unlikely that the 10% *reduction* was achieved between 2013 and 2017.

What was done to achieve the target?

The period 2013-2017 did not herald major legislative/regulatory changes in tobacco, while initiatives such as awareness and education, stop lines, incremental additions in taxes and so forth continued "on" and "as usual". This period saw the intention of revising regulations to be more in line with the Framework Convention on Tobacco (FCT) with regard to regulations at point of display, smoke free public areas and health messages and warning labels together with plain packaging, but this was delayed when it was realised that this required changes in the primary Act rather than just in regulations. New draft legislation was published for public comment in May 2018 with the following main proposals.

- A zero-tolerance policy on in-door smoking in public places (including the removal of designated smoking areas in restaurants);
- A ban on outdoor smoking in public places;
- When smoking outside, smokers must be at least 10 metres away from public entrances;

- The removal of all signage on cigarette packaging aside from the brand name and warning stickers;
- Cigarettes may no longer be publicly displayed by retailers.

In the interim, albeit with very small budgets, health promotors in provinces have continued to run campaigns in schools, communities and work places.

If not met or partially met, why?

The extent to which this target was met is unclear due to poor and inconsistent ongoing data collection sources, but it is highly doubtful whether the target was met, or even partially met.

One important theory as to why the smoking trend may be increasing rather than decreasing is that the tobacco taxes have not been rising at a rate that impacts on use and that possibly illegal tobacco use has increased based on lower costs[iii].

The fact that concerted efforts were not made during this period (as seen above) probably also contributes to the fact that there was little tobacco reduction during this period.

Objective 4	**Target for 2017**	
4)Reduce alcohol Consumption	19l/adult	○ Yes ○ Partial ○ Not met XDon't know

Data informing assessment outcome.

The baseline for per capita consumption in the SP is 20l/adult, with a 2017 target of reducing consumption to 19l/adult. It is not quite clear where this figure was derived from but appears to fall between adult population consumption and consumption by "binge" drinkers. In 2010 the WHO estimated an average per capita consumption of alcohol for

South Africa (over 15) as 11 litres; and the numbers of heavy episodic drinkers as 25.6%. The numbers of people abstaining from alcohol consumption was estimated at 51% males and 79% female. Therefore the numbers drinkers that consumed to binge levels was very high.

Notwithstanding, from the figures available it appears that the total adult consumption did not rise and may have come down during the period of the SP. According to the Genesis report Evaluating the Economic, Health and Social Impacts of the proposed Liquor Amendment Bill, 2017, based on the averages of the Legal Drinking Age population from 2012 to 2016, it is estimated that the volume of liquor consumed (L/per capita) decreased from 11.52 to 10.98[iv] (Genesis 2018).

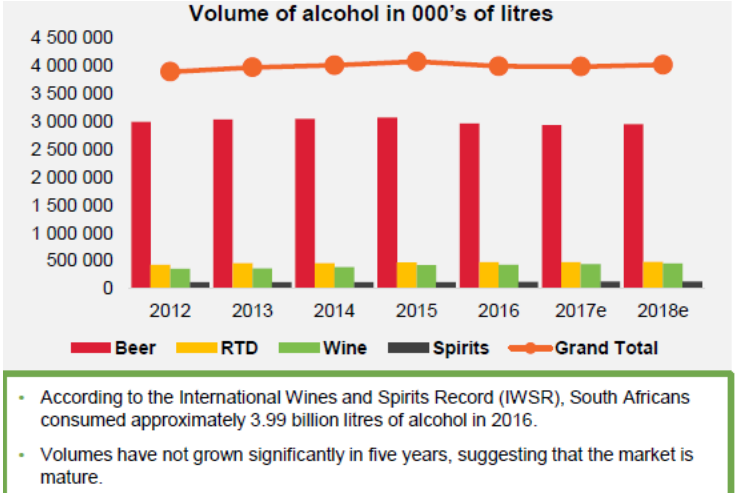


Figure 2 Volume of alcohol in 000's of litres

Moreover according to the Centre for Addiction and Mental Health (CAMH) in Toronto that calculates global alcohol consumption patterns, there also seems to have been a small decline in consumption in South Africa.

2012	9,86
2013	9,70
2014	9,60
2015	9,43
2016	9,14

Table 3 Per capita alcohol consumption in South Africa

Whether the actual per capita consumption came down or not, it is clear from the Demographic and Health Survey that risky drinking is still high, especially amongst men[ii].

Percentage of men age 15 and older who ever drank alcohol, who drank alcohol in the past 12 months, who drank alcohol in the past 7 days, who drank five or more drinks on at least one occasion in the past 30 days, and who show signs of problem drinking as assessed by the CAGE test, according to background characteristics, South Africa DHS 2016

Background characteristic	Ever drank alcohol	Drank alcohol in past 12 months	Drank alcohol in past 7 days	Drank five or more drinks on at least one occasion in past 30 days[1]	Show signs of problem drinking by the CAGE test[2]	Number of men
Age						
15-24	56.4	49.3	26.3	20.7	13.0	1,241
15-19	45.6	38.8	16.6	11.8	5.8	651
20-24	68.4	60.8	37.0	30.5	20.8	591
25-34	65.5	60.5	43.4	36.1	21.5	962
35-44	68.3	60.1	40.2	31.8	18.4	744
45-54	53.9	47.5	36.7	27.8	15.5	492
55-64	64.9	54.3	45.1	25.7	14.4	406
65+	59.0	46.8	39.5	20.9	8.8	364
Population group						
Black/African	61.5	53.9	36.0	28.3	16.7	3,534
White	77.2	71.0	57.7	25.7	8.2	257
Coloured	52.4	46.0	34.9	25.6	15.9	335
Indian/Asian	39.8	27.0	12.9	6.2	7.8	82
Other	*	*	*	*	*	2

Table 4 Alcohol consumption and risky drinking: Men

What was done to achieve the target?

The importance of the need to reduce alcohol related harm, not just to reduce NCDs, but also from the perspectives of reducing motor vehicle accidents, lowering violence related morbidity and mortality (including gender based violence), decreasing foetal alcohol spectrum disorders, dropping social and economic harm to families and communities and other additional reasons was recognised by government, prioritised and driven primarily through the establishment of the Inter-Ministerial Committee on Alcohol and other Substances, chaired by the Minister of Social Development. This high-level committee determined objectives and tasks for different government departments and monitored their implementation on a quarterly basis. Moreover, alcohol was included as a drug by the statutory Central Drug Authority and the National Drug Master Plan developed for implementation by various government departments and others. Provincial Plans were also drawn up.

Specific tasks given to the Department of Health included drafting legislation on restricting alcohol advertising, amending the regulation on warning labels on alcohol products, developing guidelines for detoxification and expansion of substance abuse services within hospitals and clinics.

Draft legislation on the control of marketing of alcohol beverages was drawn up by the DoH but following extensive consultations it was decided that rather than introducing separate legislation, aspects of this Bill would be included in the amendment to the Liquor Act that was being drafted by the Department of Trade and Industry in 2017. This Bill also includes a number of other mechanisms aimed at reducing alcohol related harm including restricting access, increasing the age of legal consumption from 18 to 21 and limiting sales to intoxicated individuals. This Bill has been introduced to parliament for debate and adoption.

Regulations on increasing the visibility of warning labels on alcohol products were signed by the Minister of Health.

If not met, partially met or don't know, why?

It appears from the data available that overall per capita consumption of alcohol may have decreased but due in part to the ambiguity of the baseline figure it is not possible to say definitively whether the target was reached or not. There has though been important attempts to reduce alcohol related harm particularly through the Inter-Ministrial Committee.

Objective 5	**Target for 2017**	
5)Reduce % of salt in processed foods.	Mean population intake of 7 grams per day	X Yes o Partial o Not met o Don't know

Data informing assessment outcome.

While no baseline is given in the SP for salt intake, one study is quoted for the Western Cape whereby consumption is estimated at 7.8 grams in black people, 8.5 in coloured population and 9.8 in whites. While still no national representative sample has been done, studies suggest that 2016 intake was probably on average a medium of around 7 grams per day –7 grams being the target set for 2017.

A study published in 2017 by Ware et al embedded in the SAGE Wave 2 study found a medium salt intake of 6.8 g/day[v] – which meets the 7g/day target for 2017 in the SP. Similarly a study published in 2018 by Charlton et al found medium salt intake values measured through 24 hr urine sampling to be under the 7g/day mark[vi]. However as many as 28% of the sample had values over 9g/day. Another study of 3 South African populations of black, white and Indian origin found a mean population intake of 7.2 g/day[vii].

Studies have not yet been conducted on salt intake since the introduction of the first regulation targets in 2016 and thus it is too early to assess the impact of the salt regulation. And while the evaluation of the advertising campaign does show important reductions in salt use, it is unclear whether current salt intake has actually reduced from the baseline figures in the SP, or whether the baseline was perhaps inaccurate, or indeed whether the latest figures on consumption are not representative. Nonetheless it does appear from the available research that the 2017 target of 7 grams a day was met.

[The 2020 target is 5 g/day and this may be on target to be reached given that the regulations were yet to kick in at the time of the latest available studies].

What was done to achieve the target?

There were two main mechanisms to reduce salt intake utilised during the reporting period. The first was the introduction of regulations restricting the amount of salt permitted in 13 categories of foodstuffs through which most South Africans consume salt (Regulations relating to the reduction of sodium in certain foodstuffs and related matters[viii]) while the second was to raise public awareness around salt intake in collaboration with NGOs.

Regulation R214 was passed in 2013 and amended in 2017 to accommodate various technical changes that were required. Progressive targets for reduction were set for 2016 and further lowered for 2019. According to large industry role-players over 95% of the 2016 targets were met, however independent assessments that attempted to verify this found some discrepancies. These need to be further evaluated.

The process of adopting the regulations and the subsequent amendments were thoroughly consulted with industry representatives, academia, NGOs as well as international experts.

The Department of Health supported the Heart and Stroke Foundation to run a Salt Watch campaign. This mass media campaign consisted of TV and radio adverts that commenced in July 2014 and ran until April 2015. Evaluation of this campaign showed some changes in attitudes towards salt and salt intake itself.

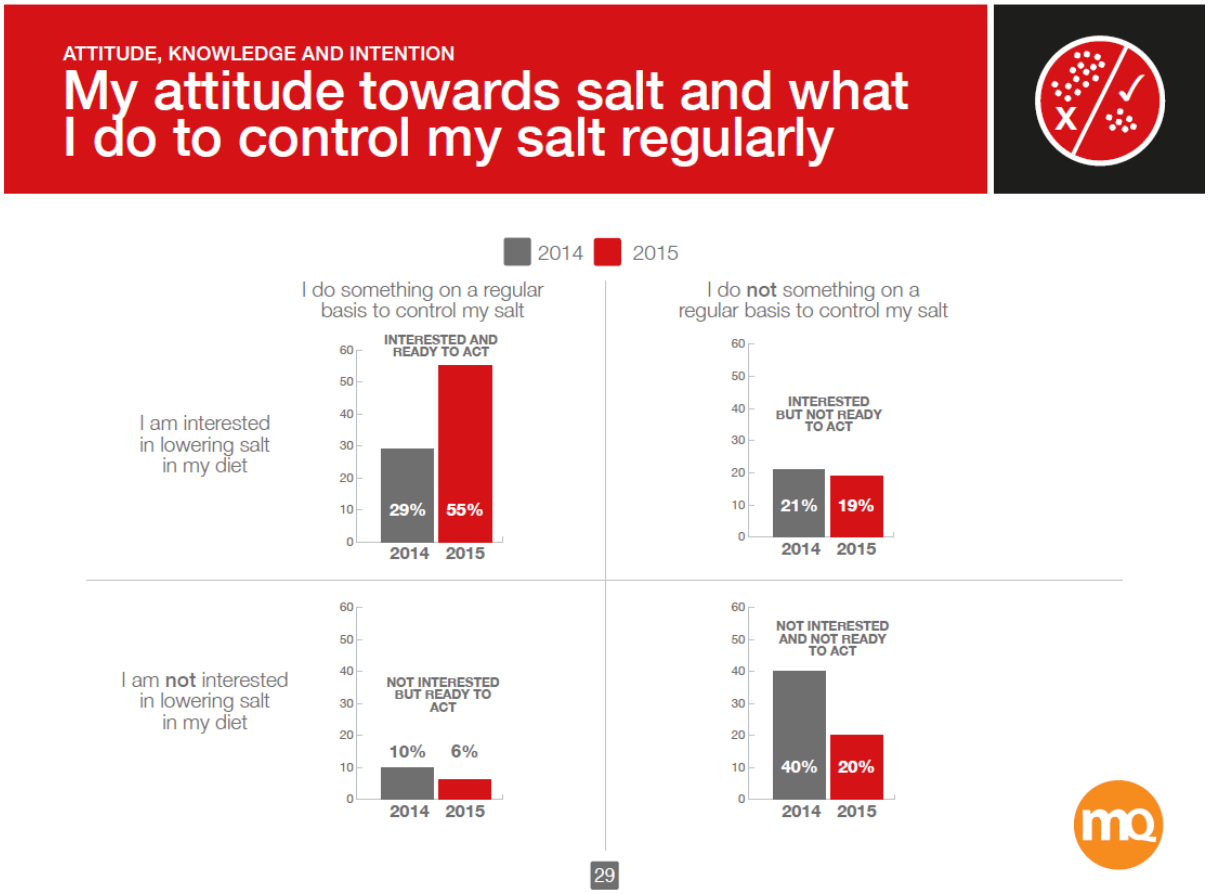


Figure 3 Intention, Knowledge and intention around salt

If not met, partially met or don't know, why?

Target met

Objective 6	Target for 2017	
5)Reduce prevalence of overweight and obese people.	3% decrease in all age groups in Figure 8	○ Yes ○ Partial X Not met ○ Don't know

Data informing assessment outcome.

The target set in the SP is for a 3% decrease in overweight and obesity in all age groups. While the South African Demographic and Health Survey (2017) of data collected in 2016 indicates some small reductions in younger men and men up to 54[ii], it appears that overweight and obesity in older men and in women of all age groups is increasing.

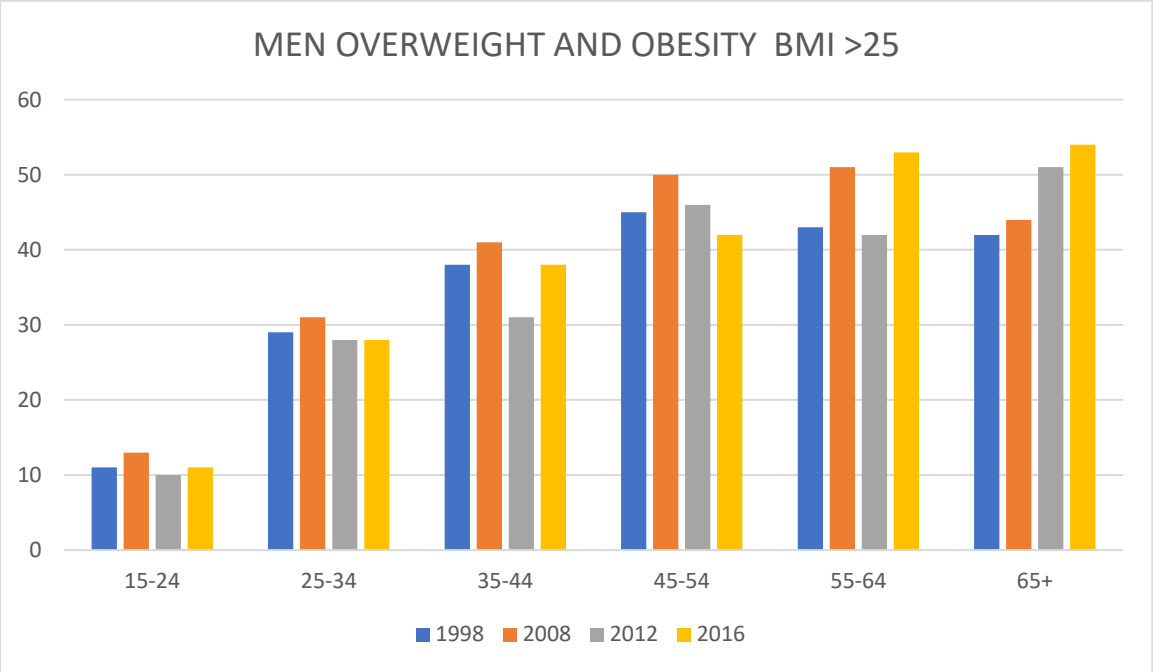


Figure 4 Men Overweight and obesity

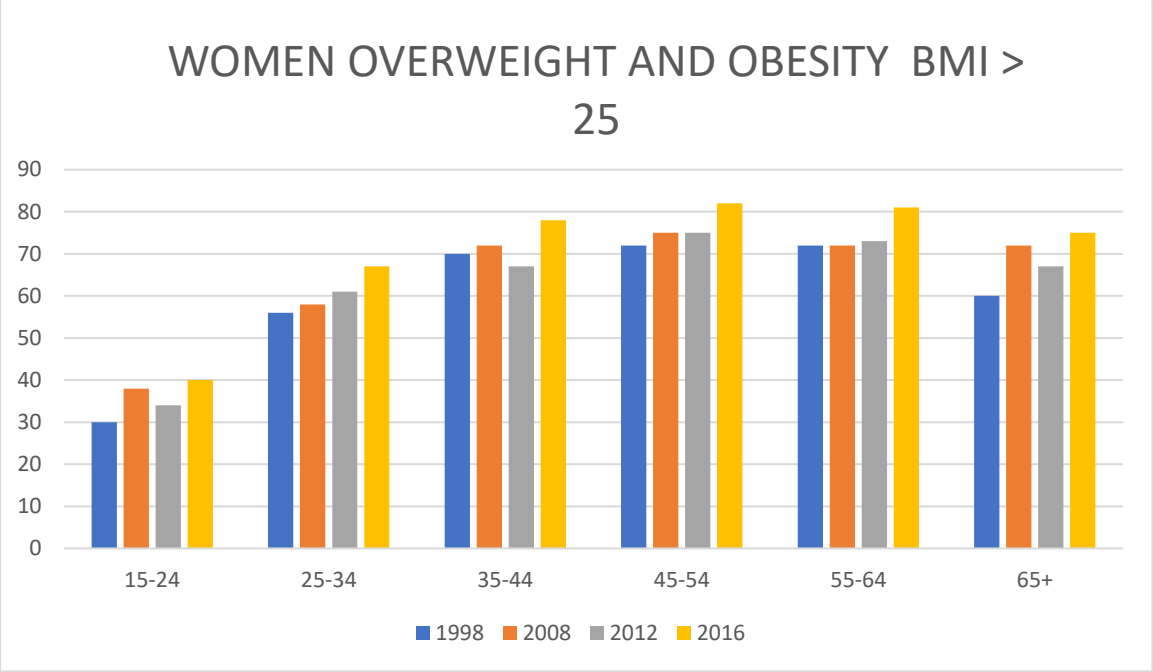


Figure 5 Women Overweight and Obesity

There is also high numbers of people, especially women, with severe obesity BMI >35

Severe obesity among women and men

Percentage of women and men age 15 and older with a body mass index (BMI) ≥35, according to background characteristics, South Africa DHS 2016

Background characteristic	Women		Men	
	Body mass index[1] (BMI) ≥35.0	Number	Body mass index (BMI) ≥35.0	Number
Age				
15-24	5.8	1,040	0.7	927
15-19	4.5	520	1.0	499
20-24	7.1	520	0.3	428
25-34	17.3	1,016	2.3	700
35-44	26.4	784	5.0	540
45-54	29.0	676	4.8	340
55-64	29.9	553	6.2	313
65+	23.8	592	4.0	286
Population group				
Black/African	20.2	4,066	2.1	2,663
White	14.5	188	14.1	175
Coloured	25.7	317	6.6	207
Indian/Asian	18.0	87	(5.4)	60
Other	*	3	*	0
Residence				
Urban	22.3	2,880	3.6	2,025
Non-urban	17.0	1,782	2.2	1,080
Province				
Western Cape	26.3	415	4.7	261
Eastern Cape	20.0	627	2.3	413
Northern Cape	15.3	106	4.5	68
Free State	21.3	265	2.0	177
KwaZulu-Natal	22.5	923	5.0	520
North West	14.4	354	1.9	271
Gauteng	22.1	1,072	3.4	848
Mpumalanga	15.3	394	0.8	273
Limpopo	16.2	506	2.2	276
Education				
No education	22.8	417	3.8	169
Primary incomplete	21.3	571	1.1	398
Primary complete	17.9	231	3.2	163
Secondary incomplete	20.5	2,053	1.7	1,437
Secondary complete	17.9	946	4.8	624
More than secondary	21.5	443	8.3	313
Wealth quintile				
Lowest	12.1	951	0.4	630
Second	16.0	911	1.2	649
Middle	21.4	999	2.6	677
Fourth	24.0	937	2.6	595
Highest	28.5	863	9.5	554
Total 15+	**20.3**	**4,662**	**3.1**	**3,105**
Total 15-49	**16.7**	**3,179**	**2.4**	**2,353**

Notes: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres (kg/m^2). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on 25 unweighted cases and has been suppressed.

[1] Excludes pregnant women and women with a birth in the preceding 2 months

Table 5 Severe obesity in men and women

What was done to achieve the target?

Using the target determined in this SP a Strategy for the Prevention and Control of Obesity in South Africa (2015-2010) was developed. This Strategy has the following six goals:

Goal 1: Create an institutional framework to support inter-sectoral engagement

Goal 2: Create an enabling environment that supports availability of and accessibility to healthy food choices in various settings

Goal 3: Increase the percentage of the population engaging in physical activity (PA)

Goal 4: Support obesity prevention in early childhood (in-utero – 12 years)

Goal 5: Communicate with, educate and mobilize communities

Goal 6: Establish a surveillance system and strengthen monitoring, evaluation and research

Activities engaged in to reach the targets include:-

- Engagements with food industry through Consumer Goods Council of South Africa resulted in initiatives for product reformulation wherein retailers/manufacturers produce alternative low-sugar beverages and reduced volume per product i.e previously 500ml now available as 440ml sugar sweetened beverage, wider range of low/reduced -sugar sweetened beverages.
- Introduction of regulations to reduce trans fats in foods, resulted in reformulation of some food products such as margarine
- Healthy meal options such as salads now available in some Quick Service Restaurants
- Some retailers have removed some unhealthy food items at snake aisle or point-of-purchase
- A national guide for healthy meal provisioning in the workplace has been developed. National and provincial government departments orientated on the guide. The guide is used as reference for development of catering policies as well as nutritional standards and food specifications for procurement of catering for government departments' events/meetings/workshops.
- Annual campaign, National Nutrition Week in October, to educate communities about healthy eating. This has now included the obesity week which focus on creating awareness about obesity and prevention thereof.
- Nutrition guidelines for Early Childhood development programmes have been developed to provide guidance for provision of nutritious foods in early childhood. Capacity building workshops are being conducted for those responsible for implementation of the guidelines.

The Department worked very closely with the Treasury to introduce a levy on Sugar Sweetened Beverages. It is anticipated that this will have an important impact on obesity in the future.

If not met, partially met or don't know, why?

It would appear that the interventions that have been introduced have been inadequate to reverse or even slow down a trend towards increased obesity in South Africa that is being driven by increased urbanization, industrialization, availability and marketing of "junk" food and (though not established here) less physical activity.

Objective 7	**Target for 2017**	
7)Reduce cervical cancer mortality	65% of women over 30 attending public sector clinics screened. 65% of women with STIs screened soon after/at diagnosis and at 5 year intervals	o Yes X Partial o Not met o Don't know

Data informing assessment outcome.

Table 5 (and the only data available) does not differentiate between the two aspects of the target of women over 30 attending public sector clinics and 65% of women with STIs screened soon after/at diagnosis and at 5 year intervals.

Organisation unit	**Apr 2015 to Mar 2016 Cervical cancer screening coverage 30 years and older**	**Apr 2016 to Mar 2017 Cervical cancer screening coverage 30 years and older**	**Apr 2017 to Mar 2018 Cervical cancer screening coverage 30 years and older**
Eastern Cape Province	61,6	65,1	64

Free State Province	60,2	55,8	50,9
Gauteng Province	47,2	52,8	47,7
KwaZulu-Natal Province	77,6	91,5	79,9
Limpopo Province	52,7	58,4	56,6
Mpumalanga Province	69	68,6	78,7
Northern Cape Province	35,5	43,3	40,3
North West Province	67,6	71,9	68,9
Western Cape Province	55,4	56,1	58,2
South Africa (National Government)	59,3	64,5	61,2

Table 6 Cervical cancer screening coverage

During the 2016/17 financial year screening was included in the HIV services and this led to the increase from 59% to the targeted 65%. This however was not kept up and the number was reduced for 2017/18 to 61%. As some provinces reached the target, this target has been assessed as having been partially met.

What was done to achieve the target?

Screening for cervical cancer was identified by the DoH as critically important to reduce morbidity and mortality in women and provinces and districts all said that they had made big efforts to try to realise these targets.,

If not met, partially met or don't know, why?

Some problems were experienced with only specific staff being able and available to do cervical cancer screening and with data collection. In certain provinces the targets were reached but not in others.

Objective 8	**Target for 2017**	
8)Reduce mortality through introduction of the Human	All age appropriate girls in quintile 2 schools	X Yes ○ Partial ○ Not met ○ Don't know

Papilloma Virus Vaccine		

Data informing assessment outcome.

A bivalent vaccine (Cervarix) was given at five to six month intervals using a campaign-like approach implemented through the Integrated School Health Programme (ISHP). The actual HPV outputs achieved for Dose 1 in 2017, was 82.6% and School coverage of 86.3%.

Dose 2 of 2017 will be completed during the second round of 2018 (August-September 2018) for those girls who were missed due to the following reasons: under 9 years, absenteeism, previously immunised, without consent forms and contra-indications.

Organisation unit	Agg_Girl Grade 4 - learners total	HPV1 dose total_2017 cohort	HPV 1st dose coverage_2017 cohort
South Africa (National Government)	468533.0	386876.0	82.6
Free State Province	29405.0	24696.0	84.0
North West Province	34932.0	29711.0	85.1
Limpopo Province	62095.0	52872.0	85.1
Mpumalanga Province	38475.0	29940.0	77.8
KwaZulu-Natal Province	108982.0	91404.0	83.9
Eastern Cape Province	70106.0	57603.0	82.2
Gauteng Province	85507.0	70089.0	82.0
Northern Cape Province	12303.0	9280.0	75.4
Western Cape Province	26728.0	21281.0	79.6

Table 7 HPV Dose 1 2017 cohort

Organisation unit	Agg_Girl Grade 4 - learners total	HPV2 dose total_2017 cohort	HPV 2nd dose coverage_2017 cohort
South Africa (	471202.0	290375.0	61.6
Free State Province	29423.0	20455.0	69.5
North West Province	35502.0	26480.0	74.6

Limpopo Province	62315.0	40176.0	64.5
Mpumalanga Province	39470.0	23327.0	59.1
KwaZulu-Natal Province	109028.0	70280.0	64.5
Eastern Cape Province	70922.0	45657.0	64.4
Gauteng Province	85511.0	57238.0	66.9
Northern Cape Province	12303.0	6761.0	55.0
Western Cape Province	26728.0	1.0	0.0

Table 8 HPV Dose 2 2017 cohort

Dose 2, 2017 will be finalised during the second round 2018 for those girls who received dose 1 during the second round of 2017(August – September 2017)

What was done to achieve the target?

The Human Papilloma Virus (HPV) campaign was launched in 2014 by the National Department of Health (NDoH), in partnership with the Department of Basic Education (DBE), as part of primary prevention against cervical cancer.

While the SP target was all age appropriate girls in quintile 2 schools the final agreed upon target was an estimated 500 000 girls in grade 4, aged 9 to 13 years old, in 17 000 public and special schools, before they are exposed to HPV infection. The expected output for HPV vaccination programme is 80% of grade four girls aged 9 and above vaccinated for HPV and 80% of schools with grade four girls reached by the HPV vaccination team. This is in fact a larger target than in the SP where the target was only for girls in quintile 2 schools.

If not met, partially met or don't know, why?

Target met as more girls were vaccinated than anticipated in the SP due to the increase beyond Quintile 2 schools.

Objective 9	**Target for 2017**	
9)Reduce morbidity and mortality through increased screening and treatment for hypertension, diabetes and asthma.	Numbers screened increased by10%	o Yes o Partial o Not met X Don't know

Data informing assessment outcome.

Screening for hypertension and diabetes appears to have dramatically increased following the inclusion of this objective in the SP and collection of data around screening in the APP and DHIS. There is however concern that this may include numbers with chronic diseases in addition to those being screened prior to diagnosis. From these figures one assumes a year on year increase in diabetes and hypertension screening of several hundred percent in the first years of data collection. However it is difficult to explain the drop for March 2018. This could be a real drop or may be simply that a number of clinics failed to report.

The following figures should be hence read with great caution.

	April 2015	March 2016	March 2017	March 2018
Client screened for diabetes	450 631	1 555 211	2 620 349	1 256 653
Client screened for hypertension	745 205	2 124 099	3 032 729	1 310 158

Table 9 Clients screened for diabetes and hypertension

There is so much suspicion around the accuracy of this data that a "don't know" assessment has been given.

What was done to achieve the target?

The summit Declaration on the Prevention and Control of Non-communicable Diseases stated that "...more than half of people who have these conditions (hypertension and diabetes) are not aware of their condition and do not receive health care". The objective arising from this was to increase screening by 10%. As screening had not previously been part of the Annual performance plan and hence was not measured in the DHIS, it was included from 2015. It seems that this led to significantly more screening taking place within clinics as well as outreach programmes into communities. For example it appears that screening for diabetes increased 5 fold and hypertension nearly 3 fold from April 2016 to March 2016. It is not clear however whether in fact screening increased, whether possibly recording of screening took place for each screening which wasn't done previously or whether there may in fact be data recording problems that both exaggerate and underestimate actual screening (See section below). Numbers seemed to have decreased for March 2018 from the highs in 2017 and again the reasons for this are unknown and debatable.

While the data indicator was number of people over 40 screened for diabetes and hypertension it was noted that prevalence studies were showing high levels of both diseases but especially hypertension amongst younger people. (See 2016 SADHS data below showing rates of hypertension in 20% of men aged 15-24, increasing to 50% in the 35-44 year age group and amongst women rates of 17% in the 15-24 age group going up to 43% in the 35-44 age group[ii]).

Women

Background characteristic	Prevalence of hypertension[1]
Age	
15-24	17.0
25-34	26.6
35-44	42.7
45-54	62.5
55-64	77.6
65+	84.3

Men

Background characteristic	Prevalence of hypertension[1]
Age	
15-24	20.1
25-34	33.2
35-44	50.8
45-54	55.4
55-64	73.6
65+	83.7

Table 10 Hypertension rates. Women and Men

It was therefore proposed that the age of screening should be decreased to 18 – which then aligned with WHO recommendations and reporting criteria. A draft Standard Operating Procedure for screening for hypertension and diabetes was drafted and submitted for approval. However questions were raised as to the credibility of lowering the age of screening and consequently the SOP was not finalised during the period of the SP.

If not met, partially met or don't know, why?

It is suspected that the target was not only reached but far surpassed, however this can only be said with large reservation given the quality and reliability of the data.

Data around asthma was not collected and it is unknown whether there has been any increase in asthma screening.

Objective 10	**Target for 2017**	
10)Reduce NCD mortality through prevention and promotion	Reduction by 5% in premature mortality from NCDs	o Yes o Partial X Not met o Don't know

Data informing assessment outcome.

Determining trends in mortality by cause and by age is complex as reporting processes and systems through Statistics South Africa are not reliable and many deaths are poorly recorded, reported late, not at all or are unspecified. Hence around 44% of deaths are attributed to "other natural causes" outside of the top 10 causes of death. The Medical Research Council analyses and reports on adjusted mortality[ix] but this is usually at least 5 years after the initial data is published by Statistics South Africa and hence not reflective of current causes of mortality.

More people in South Africa die annually of non-communicable diseases than of communicable diseases, however to determine premature mortality trends it is necessary to examine actual numbers of deaths in different age groups rather than percentages.

From 2014 to 2016 there were the following number of deaths due to NCDs amongst the top 10 causes of deaths.

	2013	2014	2015	2016	Increase/ decrease from 2014 to 2015	Increase/decrease from 2015 to 2016	Increase/decrease from 2013 to 2017
Diabetes mellitus	22 183	24 092	25 774	25 255	Increase of 6.5%	Decrease of 2%	Increase of 12.1%
Other forms of heart disease	21 050	23 009	23 299	23 515	Increase of 1.2%	Decrease of 0.9%	Increase of 10.6%
Cerebrovascular diseases	22 438	24 258	23 505	23 137	Decrease of 3.2%	Decrease of 1.6%	Increase of 3%
Hypertensive diseases	16 740	18 416	19 845	19 960	Increase of 7.2%	Increase of 0.5%	Increase of 16%
Ischaemic heart disease (IHD)	Not in top 10	Not in top 10	12 714	12 883		Increase of 1.3%	
Chronic respiratory disease	12 019	12 793	13 006	12 659	Increase of 1.6%	Decrease of 2.7%	Increase of 5%
Total excluding IHD	**94 430**	**102 568**	**105 429**	**104 526**	**Increase of 2.7%**	**Decrease of 0.9%**	**Increase of 9.7%**
Total	**94 430 (excluding IHD)**	**102 568 (excluding IHD)**	**118 143**	**117 409**		**Decrease of 0.6%**	

Table 11 Deaths due to NCDs amongst the top 10 causes of deaths.

Between 2013 and 2017 deaths declined by 11 171 and AIDS related deaths by 21 877. By implication non-AIDS related deaths increased by 10 706.

The population growth during this time increased by around 3.5million. If one assumes a broad estimate of around 10 000 “expected” deaths per million population per annum (ie rough calculation based on current estimates of around 500 000 deaths in a population of 50 million), the growth in population alone would be anticipated to yield around 40 000 additional deaths over the 4 years – which appears to be far more than actual deaths, thus suggesting a possible decline in NCD deaths.

When examining only premature mortality the following picture emerges between 2013 and 2016

Ages 1 – 14	**2013**	**2016**	**Increase/decrease**
Other forms of heart disease	297	345	Increase of 13%
Metabolic disorders		213	
Ages 15-44			
Other forms of heart disease	3102	3415	Increase of 9.1%
Cerebrovascular disease	1911	1701	Decrease of 12.3%
Renal failure		1602	
Diabetes Mellitus		1357	
Ages 45- 64			
Diabetes Mellitus	8265	9280	Increase of 10.9%
Other forms of heart disease	5813	6708	Increase of 13.3%
Cerebrovascular disease	6662	6668	Increase of 0.1%
Hypertensive diseases	4813	5408	Increase of 11%
Chronic respiratory diseases	4397	4551	Increase of 3.4%
Malignant neoplasm of digestive organ	3795	4306	Increase of 11.9%

Table 12 Premature deaths due to NCDs

It is important to note that none of the above data takes deaths due to population increases into account and it is not possible from available published data to estimate anticipated additional deaths in these age groups due to NCDs.

What was done to achieve the target?

Preventive and promotive interventions to reduce premature mortality from NCDs have been outlined above. [It must also be remembered that mortality is also related to health systems and clinical interventions and it is thus impossible to say what proportion of increase/decrease in mortality can be attributable to prevention and promotion. This target is possibly also ambiguous as the activities appear to include treatment, but these may equally qualify as tertiary prevention].

If not met, partially met or don't know, why?

Given the length of time required for preventive interventions to impact on mortality it would be unlikely that even highly intensive and focussed interventions would impact in a period as short as the SP. In addition though, the preventive interventions have been limited and in themselves probably insufficient to reduce premature mortality by the 5% required.

Objective 11	**Target for 2017**	
11)Integrate NCDs into:-Primary health care package,	NCDs fully included in PHC package	X Yes o Partial o Not met o Don't know

Data informing assessment outcome.

NCDS were fully included in the Primary Health Care Service Package drafted in 2015.

The most common NCDs have also been included into the Adult Primary Care package[x] including Asthma/COPD; Cardiovascular Disease, Diabetes, Mental Health conditions; Epilepsy, Musculoskeletal Disorders.

What was done to achieve the target?

The approach taken in the Primary care Package is comprehensive of all the main disease areas in South Africa. It takes a life cycle approach and covers all areas from prevention and promotion/healthy lifestyles through to rehabilitation and palliative care. The document states "The approach looks at maximizing health and well-being through the life cycle by taking four basic principles into account: that the costs and benefits of interventions later in life are partially dependent upon those that occurred earlier; that sustaining improved outcomes at any stage of the life cycle depends on interventions occurring during several stages; that interventions in one generation can influence outcomes in later generations; and that clearly identifying the different stages of the life cycle facilitates the identification of risks for both individuals and families"[xi].

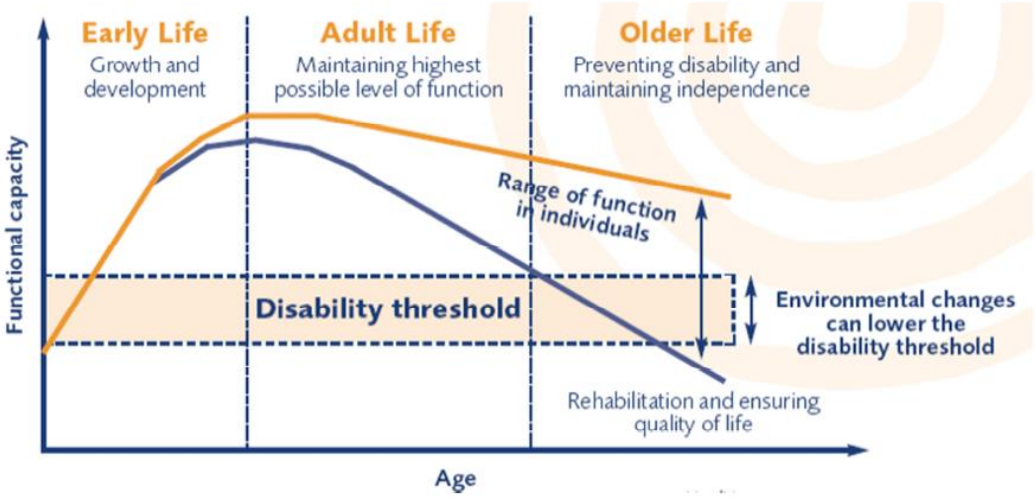


Figure 6 Life cycle approach to NCDs

That NCDs are well included is evidenced in the following table[ix]:-

Age Cohort		Description		
EN D-OF-LIFE	**Pre-birth:**	Outlines the delivery of services during pregnancy and childbirth and deals with specific services required by pregnant women to ensure a health delivery.	ENVIRONMENTAL HEALTH	INTER-SECTORAL NEEDS
	Neonatal:	Focusses on the specific needs of the newborn baby including immediate, routine newborn care and care of sick newborns. Health screening to be conducted to detect 4Ds: defects, deficiencies, diseases, development delays including disabilities		
	28 days – 12 months:	The interventions in this phase of life mainly focus on children under 5 years of age and address the most common causes of mortality in this period, child nutrition including essential micronutrients supplementation, immunisation against common childhood diseases and management of common childhood illnesses (IMCI)		
	1 – 5 years:			
	6– 18 years:	Interventions for reducing the burden of disease and to address the most common conditions, including communicable and non-communicable diseases and other infectious diseases are included. Services in these age groups address many of the life style risk factors associated with disease, disability and premature death in adult life. Access to reproductive health services is required in various life stages starting from the adolescence phase.		
	19 – 45 years:			
	46 – 65 years:			
	+65 years	In addition to many of the interventions from other age groups which remain applicable to this age cohort, the Package of Services addresses the social, psychological, cognitive and biological aspects of aging.		

Table 13 NCD interventions in the Life Cycle

Provinces and district representatives interviewed all stated that NCDs were fully incorporated into the primary care package and interventions provided. All were happy with the quality of the materials and said that training did take place. However some representatives felt that more ongoing support and supervision was needed to retain and improve the quality of care provided and ensure sustainability.

If not met, partially met or don't know, why?

Target met**.**

Objective 12	Target for 2017	
12)Integrate NCDs into -re-engineering of PHC,	All CHWs trained in NCD issues.	o Yes X Partial o Not met o Don't know

Data informing assessment outcome.

The initial training of Community Health Workers (CHWs) was divided into Phase 1 and Phase 2 training with NCDs being included in Phase 2. According to interviewees Phase 2 training has been done in a number of districts, though somewhat haphazardly. Of the provinces and districts interviewed the Western Cape, KZN, Tshwane District, Nkangala District, Dr Kenneth Kaunda District all reported that NCD training had been done, however keeping this sustainable and ensuring for example that people are referred once identified as being at risk by the CHWs is a problem. The competencies of CHWs was questioned by some respondents. Most CHW do not do screening for NCDs as there is no screening tool for them to use. They are also not furnished with equipment that would allow them to screen directly. In the Free State it appears that the CHWs are still mainly doing household profiling and haven't done any NCD work in terms of defaulter tracing, screening or providing healthy lifestyle education.

What was done to achieve the target?

See above.

The (new) training programme for CHWs will include NCDs[xii]. The focus of CHWs will be on health promotion, screening, referral, and disease prevention (as defined by scope of work).

The core components of the integrated services are to:

- Promote overall health and well-being within households and communities
- Provide information, health education and promote healthy behavior and disease preventions
- Conduct structured household screening and profiling to identify health needs

- Provide appropriate direct basic services including treatment for minor health problems/needs, counselling and psychosocial support for individuals or households, as defined by the CHW Scope of Work
- Facilitate appropriate referral for health, rehabilitation and social support services as needed for individuals or households
- Provide adherence support for people on medication and support follow-up care, including delivery of chronic medication
- Facilitate community mobilisation and create awareness on health diseases through awareness campaigns and mobilise around community needs

The programme proposed:-

Hypertension • Facilitate appropriate referral for health services, rehabilitation and social assistance where required. • Provide adherence support to those on chronic medication.	Number of clients referred for hypertension services
Diabetes • Do foot assessment for risk assessment e.g. diabetic foot. • Facilitate appropriate referral for health services, rehabilitation and social assistance where required.	Number of clients referred for diabetes services

Table 14 NCDs in Community Health Worker programme

If not met, partially met or don't know, why?

The extent that training has been done and that CHW are already dealing with NCDs appears to be variable and inconsistent. The role and functions of CHWs and the capacity of these workers to intervene in a range of health issues was assessed during this SP period following implementation of the 2 Phase approach. The decision was then taken to have a single training that would include NCDs.

Objective 13	Target for 2017	
13)Integrate NCDs Into Human Resource development strategies and interventions	Increase in specialist health workers dealing with NCDs increased by 10%	o Yes o Partial o X Not met o Don't know

Data informing assessment outcome.

The specific SP 2017 target was "increase in specialist health workers dealing with NCDs increased by 10%". This was in acknowledgement of the fact that though the model proposed in the SP was to decentralise NCD care and to task shift as must as possible, there were firstly too few specialists to refer to when required and that NCD specialists were critical to training and supporting lower level workers.

In 2010 there were 5 424 medical specialists at a per capita ratio of 1 per 10 308. In 2018 this had decreased to 4 783 at a per capita ratio of 1 to 11601, a reduction of 12%.

Figures for NCD specialists cannot be disaggregated from specialists in general and given that there has been a reduction rather than increase in specialists overall, it is highly likely that this target was not met for specialist in NCDs.

What was done to achieve the target?

Overlapping with this SP was the Department of Health's "Human Resources for Health. HRH Strategy for the Health Sector: 2012/13 – 2016/17"[xiii]. There was hence not much opportunity following the NCD SP to engage in the activity of ensuring that NCDs are fully included in the human resource development initiatives.

When referring to the epidemiological context in which the Human Resources for Health Plan was drafted the following is stated:-

- Health professional training and development must provide for **a wide spectrum of conditions**
- - The short term priority for the NDoH is to improve maternal and child health

- - Innovative HR approaches and interventions are needed, in particular for the high AIDS and TB burden, **the emerging cardiovascular and diabetes burden and mental health problems.**
- The ageing trend in the population also calls for **training and services to meet the needs of older people.**

Hence while the short term objective of the document is to prioritise maternal and child health, there is strong acknowledgement of cardiovascular and diabetes burden, mental health and the needs of older persons. These concerns are integrated throughout the document.

If not met, partially met or don't know, why?

The issues involved in the targets set in the Human Resources for Health not being met are complex and fall outside of the scope of this Review. Importantly though the shortfalls were across the board and not merely in relation to NCDs.

Objective 14	**Target for 2017**	
14)Improve health systems to attain higher levels of control for. hypertension, diabetes and asthma.	[Dependent on evaluation of the model]	o Yes X Partial o Not met o Don't know

Data informing assessment outcome.

As at July 2017 the following numbers of clinics had achieved the various elements of this model. Eighty seven percent of clinics had reorganized with designated consulting areas for management of chronic conditions while 73% had patient appointment systems for people

with chronic conditions.

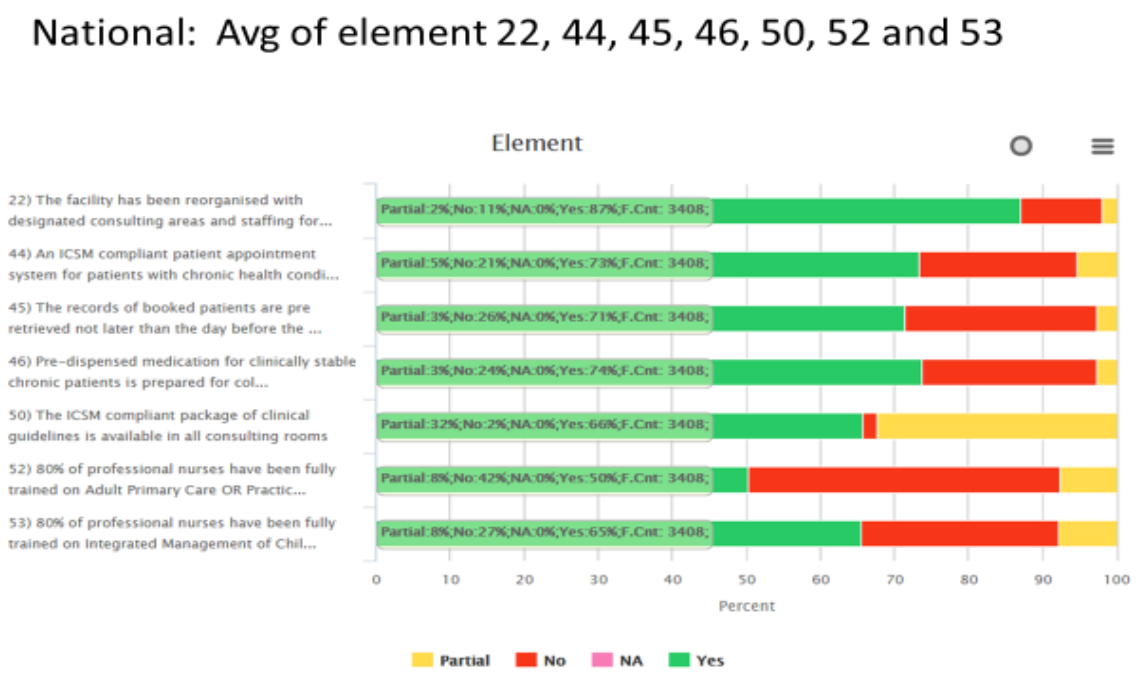


Figure 7 Implementation of The Integrated Clinical Service Management System (ICSM)

The extent to which better control of NCDs has been met through the introduction of the ICSM is not yet clear as no randomised control studies have been done to establish its efficacy. However a baseline study conducted in (non-pilot sites in) Bonjala; Ehlanzeni; Thabo Mfotshanyana; Tshwane and uMgungundlovu found that only 31% of hypertensive patients and 47% of patients with diabetes were controlled.

On the other hand control levels in clinics in the pilot ICSM clinics found to be:-

INDICATOR	BUSHBUCKRIDGE	DR KENNETH KAUNDA	WEST RAND HEALTH	OVERALL NATIONAL
BLOOD PRESSURE < 140/90	76,6%	66.8%	77%	74.1%
RANDOM BLOOD GLUCOSE < 11.1 MMOL	66.3%	61.4%	64.9%	64.2%

Table 15 Proportion of patients with controlled Hypertension

Overall, 74.1% of hypertension patients had blood pressure measurements below 140 systolic and 90 diastolic across the three districts. The proportion of patients with blood sugar < 11,1 mmol was 64.2% across the three districts.

What was done to achieve the target?

The Integrated Clinical Service Management System (ICSM) was piloted as a health systems mechanism for attaining higher levels of control for hypertension, diabetes and asthma and then rolled out in clinics in all provinces (See Figure 7).

If not met, partially met or don't know, why?

While initial results of the outcomes of the ICSM model appear to be positive and control for chronic NCDs seem to be a lot better than under the older model, there has still (as far as can be established) to be results of any study that scientifically measures outcomes for both communicable and non-communicable diseases in a full and comprehensive (randomised trail) manner. Until this happens, the full rollout of the integrated model will continue to happen in fits and starts.

Objective 15	**Target for 2017**	
15)Prevent blindness through increase in cataract surgery	1700 operations per million population	○ Yes ○ Partial X Not met ○ Don't know

Data informing assessment outcome.

Year	**Total surgeries required (1700/ mil pop)**	**Total surgeries performed**
2013/14	71 414	49 375
2014/15	72 055	44 306
2015/16	73 443	46 496
2016/17	74 741	47 356
2017/18	76 036	49 430

Table 16 CSR Target and output 2013/4- 2017/18

The numbers of cataract surgeries has **not** increased and is no-where close to the SP target. In fact given population growth the per capita numbers have in fact decreased from 2013/14 to 2017/18.

What was done to achieve the target?

A number of initiatives were put in place to increase the cataract surgery rate, including the employment of an eye health focal person in March 2016. Bi-annual meetings with provincial eye health managers were held, with one of the standing items being the review of the progress of provinces in meeting cataract surgery targets. Monitoring and support visits were conducted to provinces to monitor activities to meet eye health targets, including cataract target. Numerous meetings with ophthalmologists and eye health co-ordinators throughout the period of the SP tried to find mechanisms to, for example, free theatre time, to ensure consumables were available when needed and to examine options that would allow more operations within the same time and money – for example using small incision surgery techniques

For the past 10 years, the National Department of Health has had a contract with the Bureau for the Prevention of Blindness to provide cataract surgery services to provinces that are struggling to meet their cataract surgery targets. The department also has partnership with NGOs and the private sector to provide cataract surgery services to indigent populations.

A Meta-analysis on small incision cataract surgery (sics) versus the phaco cataract surgery procedures was commissioned by the DOH that showed that there is not much difference in clinical surgical outcomes between the 2 procedures and that m-sics costs less and takes less time. However while this was shared with public sector experts this does not appear to have had much influence on their choice of intervention where phaco appears to still be the intervention of choice in most cases.

Cataract surgery has also been prioritized in the current NHI grant funding.

If not met, partially met or don't know, why?

Permanent eye health centres have not been established, staffed and equipped in a number of provinces. There should be at least one surgical centre for each one million population but this has not been achieved. Surgeons have tended to not move to the quicker and cheaper m-sics method of cataract surgery. Problems are experienced with theatre time and availability of consumables.

Each centre should be staffed by either an ophthalmologist or an ophthalmic medical officer cataract surgeon, an optometrist, and one or two ophthalmic nurses. Provinces and districts interviewed complained of difficulties in recruiting ophthalmic surgeons and they had also experienced problems in setting up high volume "camps" as costs were high and logistics difficult.

Objective 16	**Target for 2017**	
16)Reduce morbidity from mental disorder	15% increase in Caseload	o Yes X Partial o Not met o Don't know

Data informing assessment outcome.

In 2014/15 an average of around 193 000 cases were seen. For reasons unknown, and very possibly linked to problems with collection of data, this decreased to an average of 138 000 in 2015/16, went up to 163 000 in 2016/17 and then returned to the 2014/15 number of 193 000 in 2017/18. The target of a 15% increase was not met. In fact given that some increase would have been anticipated due to population increase, the case load actually decreased. In terms of the percentage of cases seen in primary health care for mental health problems relative to the number seen at the clinic as a whole, there was a 10% increase ie from 1.78% to 1.95%.

What was done to achieve the target?

Soon after this SP was published, the National Mental Health Policy Framework and Strategic Plan 2013-2020 was adopted by the National Health Council. An effort was made in provinces to screen for mental disorders as part of the Adult Primary Care package as a mechanism to increase the numbers of people receiving mental health care. This was meant to identify people in need of mental health care but that were not receiving it – estimated to be around 75% of all cases[xiv].

If not met, partially met or don't know, why?

The mental health data collected from the DHIS appears to be highly unreliable. For example given that the National Mental Health Policy Framework and Strategic Plan 2013-2020 appeared to have been taken seriously by provinces, it would seem highly unlikely that immediately following its publication whereby the objective was to increase numbers of people seen, that there would be a decrease of around 55 000 visits or 29%. The data is thus simply not good enough to make an assessment of whether the target was reached or not.

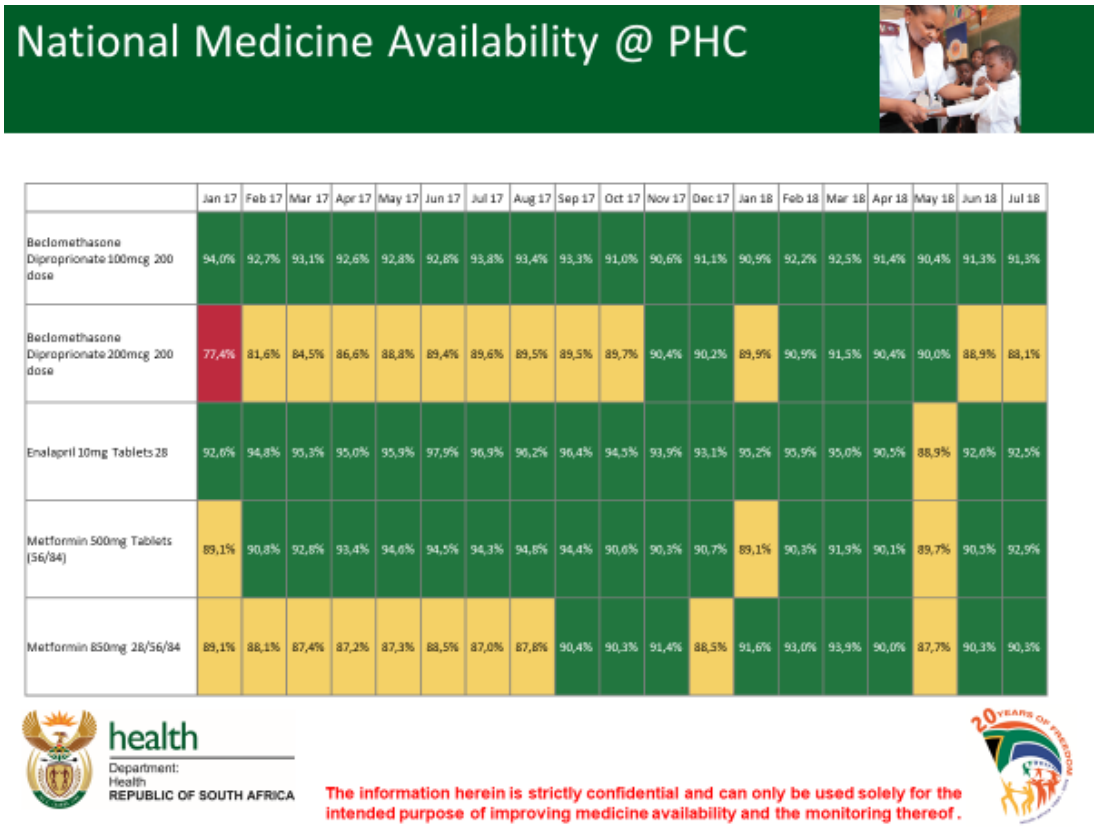
Objective 17	**Target for 2017**	
17)Increase access to essential drugs and equipment	15% decrease in stock-outs and 90% availability of essential equipment.	○ Yes X Partial ○ Not met ○ Don't know

Data informing assessment outcome.

The target for reduction of stock outs was pronounced as a percentage decrease from the 2013 level. Unfortunately there were no systems in place at the time to monitor stock outs - this only began in 2017 – and therefore this indicator cannot be measured. For simplicity

purposes the acceptable level of drugs can be taken at 90%, which would be the same as the equipment target.

Five commonly used medicines for NCDs are taken here as representative of NCD drug availability.



	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar 18	Apr 18	May 18	Jun 18	Jul 18
Beclomethasone Diproprionate 100mcg 200 dose	94,0%	92,7%	93,1%	92,6%	92,8%	92,8%	93,8%	93,4%	93,3%	91,0%	90,6%	91,1%	90,9%	92,2%	92,5%	91,4%	90,4%	91,3%	91,3%
Beclomethasone Diproprionate 200mcg 200 dose	77,4%	81,6%	84,5%	86,6%	88,8%	89,4%	89,6%	89,5%	89,5%	89,7%	90,4%	90,2%	89,9%	90,9%	91,5%	90,4%	90,0%	88,9%	88,1%
Enalapril 10mg Tablets 28	92,6%	94,8%	95,3%	95,0%	95,9%	97,9%	96,9%	96,2%	96,4%	94,5%	93,9%	93,1%	95,2%	95,9%	95,0%	90,5%	88,9%	92,6%	92,5%
Metformin 500mg Tablets (56/84)	89,1%	90,8%	92,8%	93,4%	94,6%	94,5%	94,3%	94,8%	94,4%	90,6%	90,3%	90,7%	89,1%	90,3%	91,9%	90,1%	89,7%	90,5%	92,9%
Metformin 850mg 28/56/84	89,1%	88,1%	87,4%	87,2%	87,3%	88,5%	87,0%	87,8%	90,4%	90,3%	91,4%	88,5%	91,6%	93,0%	93,9%	90,0%	87,7%	90,3%	90,3%

Figure 8 National Medicine availability at PHC level

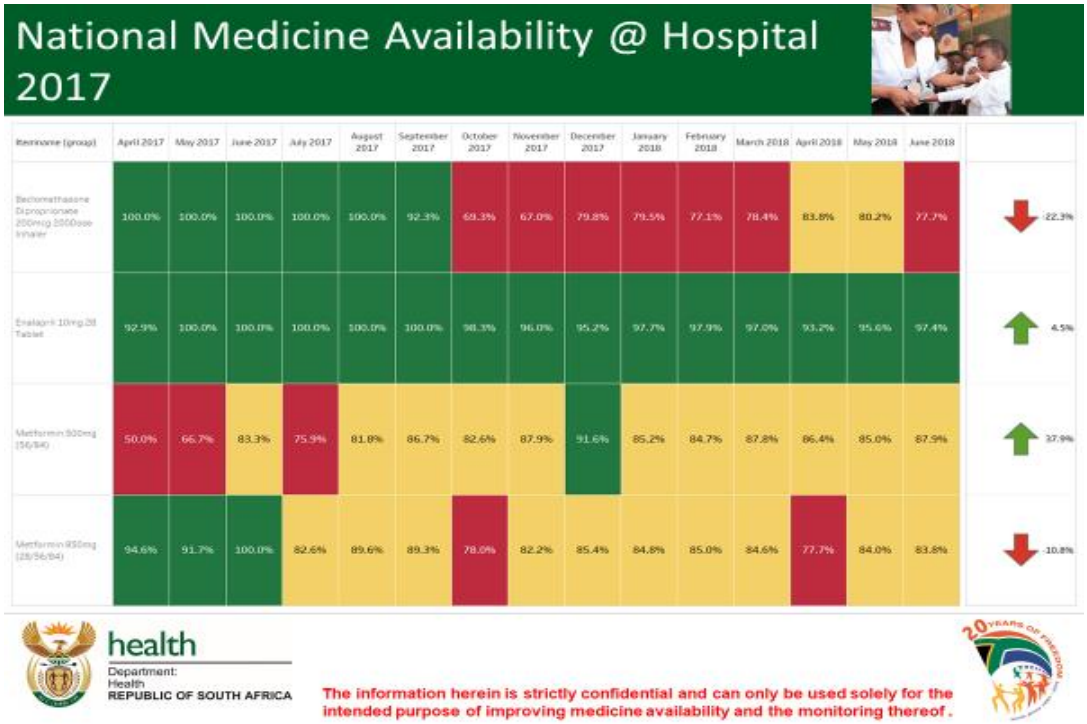


Figure 9 National Medicine availability at Hospital level

Availability of equipment within primary care facilities is measured as part of the Ideal Clinic Monitoring. Equipment is measured in 3 sections of the facility all of which are important for NCDs ie Consulting areas, Emergency Trolley and Resuscitation Room . However measurement pf equipment is not divided into disease categories and hence essential equipment covers all health areas.

Domain 7: Facilities and infrastructure	1) Infrastructure			31	50	58	62	0	19	37	37	50	43
	1) Infrastructure												
		163	Essential equipment is available and functional in **consulting areas**	31	50	58	62	0	19	37	37	50	43

Ideal Clinic Category	Not achieved

National Core Standards	Component	Sub Component	Element	Weighting	Control	Province / Country	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	Overall %
Domain 7:	1) Infrastructure						28	57	72	67	6	22	25	33	66	45
	1) Infrastructure	1. Essential Equipment and Furniture					28	57	72	67	6	22	25	33	66	45
				V	HF		28	57	72	67	6	22	25	33	66	45

Average Result

Vital	28	57	72	67	5,9	22	25	33	66	45
Essential										
Important										
Not weighted										
Total	28	57	72	67	5,9	22	25	33	66	45

Ideal Clinic Category	Not ideal	Not ideal	Not ideal	Not ideal	Not ideal	Not ideal	Not ideal	Not ideal	Not ideal	Not ideal

Figure 10 Equipment availability PHC level

It appears that NCD drugs were largely available at Primary Health care level, but that more problems were experienced at hospital level. Also some drugs appeared to almost always be available whereas other drugs were regularly in short supply. The way the target was written would require all NCD drugs to be assessed and averaged out. Taking certain drugs as proxys would be a more feasible way of measuring availability.

Equipment is way behind the required 90% level.

What was done to achieve the target?

A system was put in place in 2017 allowed rapid reporting of stock outs anywhere in the country and mechanisms were put in place to rectify problems as quickly as possible. Availability of equipment within primary care is being dealt with as part of achieving "Ideal Clinics".

If not met, partially met or don't know, why?

As there was no baseline data it is impossible to say whether a 15% decrease in stock outs was obtained or not. If a minimum requirement of 90% stock availability is used, then this has been partially achieved.

Objective 18	**Target for 2017**	
18)Establish a comprehensive surveillance mechanism for NCDs, health information systems and dissemination	Comprehensive surveillance mechanism and routine monitoring system for NCDs generate reliable data on:	○ Yes ○ Partial X Not met ○ Don't know

processes to assist policy, planning, management and evaluation of NCD prevention and control	exposure to risk factors; management and control of NCDs; outcomes	

Data informing assessment outcome.

There are a number of surveys that are conducted periodically in South Africa that collect data on Non-communicable Diseases and their risk factors. These include the South African Demographic and Health Survey (SADHS), the South African National Health and Nutrition Examination Survey (SANHANES), the National Income Dynamic Survey (NIDS), the Study on Ageing and Adult Health (SAGE), the Youth Risk Behaviour Survey and others[5]. Unfortunately these studies are not regular and are not standardised and therefore data is usually not comparable. There are also a number of studies that get done on specific risk factors such as smoking, drinking, nutritional intake, physical activity, salt intake and so on but these also tend to be one off and also do not use standardised and comparable methodology.

It would be expected of survey data to be regular and comparable and hence one would be able to make health planning decisions on this data, but despite the SP objective and target this has not been achieved. Probably the biggest obstacle to having a comprehensive surveillance mechanism is cost.

What was done to achieve the target?

The most significant step towards having standardised data on NCDs and their risk factors during the period of the SP was the tabling to parliament of the Bill on NAPHISA (National Public Health Institute of South Africa). One of the objectives of this bill is to strengthen epidemiology and surveillance of communicable diseases, **noncommunicable diseases, cancer**, injury and violence prevention and occupational health and safety.

[5] The WHO STEPS is not conducted in South Africa. While STEPS questions are included in some of the surveys mentioned, this is not a formalised STEPS survey.

In addition to surveillance this objective also aims for management and control of NCD and measurement of outcomes. An NCD register that attempted to measure control and outcomes was withdrawn through a process of rationalization of the many registers that were operative.

If not met, partially met or don't know, why?

The NCD register (mentioned above) was not being completed properly and it was proposed that NCD data should rather be incorporated into the existing TIER.NET system. Meetings were held to attempt to make this incorporation but the expansion of this system was not finalised. Provincial and District interviewees all felt that the incorporation of NCDs into TIER.NET would be the most effective way to measure NCD control and outcomes.

NCD surveillance is plagued by lack of consistency, disagreement amongst experts as to which is the best surveillance system to collect NCD data and cost issues. Each of these will need to be addressed.

Objective 19	**Target for 2017**	
19)Ensure baseline information is available for each summit target.	Progress Report on the implementation of Summit Target produced	o Yes o Partial X Not met o Don't know

Data informing assessment outcome.

No progress report on the implementation of the Summit Targets was produced.

What was done to achieve the target?

Eight of the main 10 summit targets and at least 10 of the SP objectives are based directly on having information of where one is starting from (ie 2013) and then achieving percentage reductions/increases. While it was known at the time of the summit that there was contestation around some of the starting points and others were not known at all, it was felt that it would be relatively easy to determine these baselines. Hence instead of not

setting targets because baselines were not known it was decided to make made a specific (measurable) objective of the SP to establish baselines. This objective was however not met with respect to a number of the targets.

A meeting of experts was convened by the NDOH with the objective of determining each of the 10 baselines against which the targets would be measured. Unfortunately the experts did not provide adequate guidance to the NDOH on which figures should be used for each baseline, with huge levels of contestation around whose figures were more accurate and experts not being prepared to accept figures that were not their choice. No consensus was thus reached.

The DOH also did not ensure that other baseline information was collected in order to do later evaluation. For example percentage of stock-outs in 2013 was not known, the numbers of people that had controlled blood pressure, diabetes, and asthma was not known etc.

If not met, partially met or don't know, why?

This target was not met and the DOH was not "brave enough" to make decisions on what data would be used as the baseline. As a result measuring the targets as well as the voluntary targets set by the WHO has been made extremely difficult.

Objective 20	**Target for 2017**	
20)Work with the National Health Research Committee to generate research to inform NCD policies and programmes based on sound scientific evidence.	Results of a least 3 research projects on the list of activities.	X Yes o Partial o Not met o Don't know

Data informing assessment outcome.

The modest target of at least 3 research projects on the list of priorities was easily surpassed. Each of the academic representatives interviewed provided publication lists showing that their institution alone had produced more than 3 research projects that fitted with the NCD research priorities listed in the SP.

What was done to achieve the target?

Most of the interviewees, including the researchers/academics, were not aware of the National Health Research Committee but had gone ahead with research projects identified in the SP as Priority Research Areas for NCDs.

If not met, partially met or don't know, why?

Target met.

IV)Progress on main strategic areas of NCD prevention and control

Summary of main progress

a)NCD governance.	- NCDs are accepted as one of South Africa's "quadruple burden of disease" and as such are prioritised. - The adoption of the SP helped to elevate the profile of NCDs - However, many interviewees felt that until NCD programmes and health promotion activities were adequately resourced at the same levels as communicable diseases such as HIV and TB, with human and financial resources, it could not be said that government was taking NCDs seriously. - NCD governance in a number of provinces is inadequate with low level officials being given responsibility for prevention and control of NCDs
b)Reduction of risk factors	- Intersectoral achievements included ○ Regulations on salt in processed foods ○ Levy on sugar sweetened beverages

	○ Bill on reducing access to alcohol and restrictions on advertising ○ HPV vaccine ○ Preparation of improved Tobacco legislation ○ Education and information (limited) ○ School health screening was introduced
c)NCD management	- An Integrated Clinical Service Management model was developed and rolled out in most clinics. This combines chronic communicable and non-communicable diseases and addresses access, stigma, waiting times and comorbidities.
d)NCD Surveillance	- A Bill that will facilitate comprehensive NCD surveillance (NAPHISA) was tabled in parliament.
e)Progress on NCD Research	- Health systems and health economics research in NCDs was conducted by various research organizations and universities.

V)Budgets for NCDs

The majority of budgets spent on NCDs appears to be on service delivery at district level, though provincial, tertiary and central hospitals also consume large amounts on treating people with NCDs and their complications. However no province or district was able to give a breakdown on what percentage of their budget was spent on NCDs as budgets are not broken down into specific disease areas. Rather, according to the provinces and districts, a budget is given to each clinic or hospital and they then are only able to break it down into categories such as compensation of employees, medication, equipment etc. It was pointed out by one district though that around 65% of its drugs budget was spent on chronic NCDs.

One fairly large provincial hospital provided a breakdown of expenditure (Table 17). Other hospitals have similar breakdowns and it is clear that from this it is impossible to know what expenditure is spent on NCDs. For example general medicine (under medical) as well as surgical services will include both communicable and non-communicable diseases. Orthopaedics involve both interventions following a motor vehicle crash and amputations as a result of diabetes. Part of the security, food, nursing, radiology, occupational therapy, finance, administration and so forth is "spent" on NCDs as a proportion of the total hospital budget but it would not be possible to break down the proportion.

Medical	General Medicine	21%
	Psychiatry	
	Cardiology	
	Rheumatology	
Surgical	Orthopeadic	16%
	Nuerosurgery	
	ENT	
	General Surgery	
	Plastic Surgery	
Clinical Support	Theatre	15%
	ICU	
	Radiology	
	Emergency Department	
	Poly Clinic	
Allied	Dieticians	
	Food Services	
	Social Services	

	Psychiatric	8
	Occupational Therapy	
	Physiotheraphy	
	Speech and Audiology	
	Podiatry	
	Pharmacy	
	Clinical Technologists	
	Radiography	
	Health Care Waste Practitioners	
	Optometry	
Human Resources	Human Resources	2%
	Occupational Health and Safety	
Finance	Budget Management	2%
	Revenue	
	Debt Management	
	Case Management	
	Asset Management	
	Clinical Engineer Technology	
	Supply Chain Management	
Administration	Patient Affairs	3%
	Mortuary	
	Records	
	Telephone Exchange	
	Porters	
	CIT	
	Transport	
Quality Assurance	Quality Assurance	0.2%
Nursing		14%
Communications		0.3%
Facility	Infrastructure	7%
	Cleaning	
	Laundry Sevices	
	Garden Services	
Security		9%
Hast	Themba Lethu	8%
	TB Focal	
	MMC	

Table 17 Breakdown of Hospital Expenditure

Each and every province and district representative complained that their budget for prevention and health promotion was almost non-existent and that impacts were consequently minimal. While all provinces and districts interviewed said that they went into communities, including schools and workplaces, especially on international days marking particular diseases or risk factors, no programmes could be sustained and coverage vis-à-vis need and population was negligible.

At a national level the budget for NCDs **decreased** by 33% between the 2-13/14 financial year and 2017/18 from R28.9 million to R22.5 million. The NCD Cluster receives around 0.05% of the national Department's budget despite the fact that NCDs constitute over 40% of mortality and at the very least 33 of the burden of disease.

VI)Discussion

The fact that a number of targets set in the SP were not met or were only partially met, as well as the fact that baseline and ongoing data was generally in a poor state for doing accurate monitoring and evaluation raises important concerns for the drafting of a new Strategic Plan. Moreover during interviews a number of concerns were raised that must be debated and decided on prior to the drafting and adoption of a new Strategic plan.

This section raises nine critical matters arising from the interviews, from the data collected and from some analysis of the SP, that needs to inform a new Strategic Plan. It is strongly recommended that each of these matters be seriously considered when planning for and drafting the new Strategic Plan.

1)**Targets**. Whether a Strategic Plan should be aspirational with targets that most people feel at inception may be somewhat ambitious, or whether to set targets that are reasonably easy to reach and that will show progress and achievements, or to set targets somewhere in between, will probably be debated as long as there are Strategic Plans being made and a decision around this will be critical for the next Strategic plan.

Some of the interrelated considerations that may determine where to pitch the goals and targets are:-

i)How serious will it be for the country from a health, economic and social perspective if lessor goals are set and achieved? Modest goals may be good for those that are being evaluated, but still disastrous for the country.

ii)How likely is it that the leadership and resources required to either reach the target or at least make a significant dent, will be given during the SP duration? If the guidance and resources needed to reach the target are unlikely to materialise (and this involves both a judgement and a formal commitment) then one may simply be setting up for failure and it would be better to set far less ambitious targets.

iii)International targets must be considered. Global targets are usually set using evidence based criteria of what is needed to prevent serious adversities and countries are obliged to report on the extent to which they have reached these targets. Should a country set and even meet targets that are below the international

standard, they will not only fail to meet the reporting standard and be identified for this, but they will have fallen behind the standards needed to advert the crisis that led to the targets being set in the first instance.

From the interviews conducted it appears that while the NCD targets in the SP were indeed aspirational, and perhaps some of them still a "step too far", they were mainly felt to be necessary given the looming disaster for health and health services in South Africa should this issue not be handled head on. The big issue though is that the human and financial resources needed at all levels of the health system in terms of health systems changes, early identification, surveillance, research, monitoring and evaluation, awareness and communication, for non-governmental organizations to function effectively and in terms of high level drivers was simply not forthcoming and hence is was felt to be not at all surprising that we are falling behind the curve to meet our own and the WHO 2020 targets. In short most people felt that it was not the targets that were inappropriate but that the support needed to reach them was (and is) simply not there.

A set of national NCD targets aligned with the global ones should be considered.

2)**Data.** If one is going to have targets – which one must – then there has to be credible data sources to measure whether one is meeting the targets. It is clear from this Review that relevant NCD data either doesn't exist, is irregular or is methodologically questionable.

It is debatable if one knows that baseline data does not exist or is of a questionable nature when drafting a strategic plan whether it is acceptable to put as one of the objectives (with a target date) of the SP that such baseline will be collected and then measured against. This question is particularly relevant if no source of finance has been identified to collect the baseline information. On the other hand a Strategic Plan without targets doesn't deserve the name.

Public health surveillance by definition is "… systematic, ongoing collection, management, analysis, and interpretation of data followed by the dissemination of these data to public health programs to stimulate public health action."(CDC). Importantly it must be **systematic** and **ongoing**. Though the DOH attempted to get consensus on which data would be used as

baseline from experts, no agreement was reached. It should then have been incumbent on the NDOH to make the decision of which data would be used as baseline, and which data source would be used to measure progress against at the various measuring points of the SP.

In addition to information of prevalence of NCDs and the extent of risk factors, clinic and hospital data is critical. Information such as levels of control, defaulting, complications and referral, numbers in support and adherence groups and so forth is crucial to health planning. This information is critical for Objectives 14 and 18.

The NCD data collected through the DHIS appears to be highly questionable in terms of both what is collected and its veracity. This will have to be sorted out if the next NCD Strategic plan is to be credible and measure actual progress.

3)Intersectoral collaboration. Many interviewees lamented the fact that high level collaboration for a health in all policies and whole of government approach to NCDs had not happened as per the intention of the SP and respondents felt that valuable and critical years for intervention across sectors that would save and prolong quality life was being wasted. It was felt that the urgency of this was not well understood.

These comments are particularly important in the light of the first recommendation of the recent WHO Independent High level Commission on NCDs, that Heads of State and Government, not Ministers of Health only, should oversee the process of creating ownership at national level of NCDs and mental health and that political leaders at all levels, including the subnational level, for example, city mayors, should take responsibility for comprehensive local actions, together with the health sector, that can advance action against NCDs and mental disorders.

4)Resources. Issues of prioritization and resource allocation are often synonymous. Most respondents that were interviewed said that in actuality any talk of prioritization of NCDs was not backed up by resources that would make a difference and hence there was no "real" prioritization. This was expressed at all three levels of government as well as by NGOs

and researchers. People doing health promotion were particularly frustrated by their inability to make much difference due to resource constraints.

A number of respondents felt that medical care and treatment was reasonable, and though there were drug stock outs from time to time and equipment sometimes broke down, was not available or improperly calibrated, fair quality medical care was usually available and provided to people with NCDs. However, beyond this not nearly enough was being done, whether this was primordial or primary prevention, early detection, treatment support, rehabilitation or palliative care. It was remarked that health services are geared up for acute care and that anything beyond this simply didn't get a show in. By not doing sufficient prevention and by not providing support to people in treatment, including things like tracing defaulters or providing stroke assistance in homes, the costs are ultimately higher. Moreover, by not putting the patient at the centre of their own care, relapses were far higher, outcomes worse and costs higher.

The economic returns on investing in NCDs was not adequately considered in the 2013-17 SP. The WHO have recently published a document on the returns of investing in key NCD prevention and control interventions[i] and respondents suggest that these need serious consideration.

5)A public health or clinical care document. What was the purpose of the document? The documents is called "Strategic plan for the Prevention and Control of Noncommunicable Diseases" and most respondents felt that the 3 main subsections ie prevention and promotion, health systems strengthening and reform and surveillance/monitoring and research were appropriate and given suitable space in the document. Clinical guidelines, essential medicines and treatment procedures do not have a place in a Strategic Plan – other than that an objective may be to ensure that such guidelines/procedures should be developed and monitored.

A view was expressed by more than one person however that more emphasis should have been given to the framework and platform through which NCD care would be given and the clinical approach that should be followed, if not the medical guidelines themselves. The first step of what a patient needs and wants may have been usurped in this document by what was convenient and easy for the provider to give.

Probably the biggest health systems change introduced by this policy was the Integrated Chronic Disease Model (later to become the Integrated Clinical Management Model). Most respondents, including all people interviewed at a district level, felt that this was an excellent way of utilising the strengths that had been developed through chronic HIV care and of dealing with multimorbidity and stigma. However there were some respondents that felt that this major move was being done without sufficient evaluation of the model in the pilot sites. They felt that chronic NCDs were far harder to manage than HIV, and that more vertical care for People with NCDs was still needed. Moreover, the referral paths for those needing higher levels of expertise as well as support structures around particular diseases (eg support group for people with diabetes) were now getting worse care than previously.

6)Responsibility and Accountability. It has emerged very strongly in this Review that meeting the NCD target of the Sustainable Development Goal ie reduce by one third premature mortality from NCDs by 2030 - mirrored with slightly different timeframes and numbers in the WHO Global Action plan and in the key mortality target of this document – will require concerted and very focussed actions at the highest levels and from a range of role-players, but also require focus and actions from all levels of the health service and from numerous different sections within health.

A lot has been said in the WHO High level Commission report[xv] about the need for leadership at an even higher level than the Minister of Health in countries and about the need for many different government departments, the private sector, NGOs, researchers and others to commit to the NCD enterprise, and there can be no doubt at all that this is true and required. However what this review is showing is that even within health a different commitment is needed from what has been given during this SP, not just from the NCD section at the National DOH but right through the health bureaucracy and service delivery platforms.

For example from a National level alone reaching the targets required direct and concerted efforts from such sections as :- Non-communicable Diseases (Chronic Diseases, Disability and Geriatrics, Mental Health); Health Promotion, Nutrition and Oral Health (all

sections); Primary Health Care (District Health Services); Environmental Health Services; Maternal and Women's Health; Child Health; Human Resource Development; Legal Services; HIV and AIDS; TB; Pharmaceuticals; Hospital services; Infrastructure; International Health Liaison. At provincial and districts levels similar involvement would have been required.

A key question is "how does one make each of these sections feel as responsible for meeting the goals of the SP as for example the NCD section may"? Not doing this at the national and/or provincial/district level responsible and accountable for specific targets arose as a critical issue from the interviews. Not only were people/units/sections not identified as being responsible for reaching targets in this SP, but the SP was not merged adequately into the Department Strategic Plan and APP and into the performance agreements of senior managers and hence no one took sufficient responsibility or accountability.

Getting units in the NDOH other than the NCD unit to "own" the Strategic Plan will be critical to the success of any future SP.

7)A diseases verses a life-course approach.

This SP takes the position that NCDs form a group of conditions/diseases that often co-exist and require somewhat similar approaches to prevention, control/care and surveillance/research and therefore a Strategic plan for NCDs as a group of conditions is appropriate. The WHO and the High level commission on NCDs similarly take the position that countries require a specific policy and strategic Plan for NCDs.

One ''out of the box" alternative that was offered by one of the interviewees and then put as an option to others being interviewed, was that rather than have an NCD SP at all, that a "Life-course" approach should be adopted (See Section III). This deserves further consideration. However, this would require that other disease areas, including HIV, also give up a separate disease specific Strategic Plan and given that a new National Strategic plan for HIV, TB and STIS 2017-2022 has recently been passed this seems an unlikely scenario. A variation on this may be to divide the NCD SP into life stages and include all

aspects of prevention, control and surveillance into this rather than divide the document into the 3 Objectives of the current SP.

8)Putting cost effectiveness at the centre of the Plan.

Serious consideration should be given to the idea put forward in Section III that budget allocation for NCDs should be based on where the biggest impact will be, in other words determining what interventions are cost effective, in what order and plan interventions accordingly. This SP did try to work on the WHO best-buy prioritisation, but this approach would require far more local data to be generated to determine which interventions bring what returns for investment and plan accordingly.

This may be an option for the SP after the next one, but in the interim data would need to be collected on all possible preventive, promotive, screening, care, control and treatment options from primary through to quaternary care. Ways of increasing the importance of this approach and utilising what information we currently have on cost-effectiveness would need to be incorporated into the next SP. Moreover, as the WHO say "Cost-effectiveness analysis is a useful tool but it has limitations and should not be used as the sole basis for decision-making. When selecting interventions for the prevention and control of noncommunicable diseases, consideration should be given to effectiveness, cost-effectiveness, affordability, implementation capacity, feasibility, according to national circumstances, and impact on health equity of interventions, and to the need to implement a combination of population-wide policy interventions and individual interventions"[xvi].

How to include more cost-effectiveness thinking into the next SP will be an important consideration.

9)Scope of NCDs

What is and what is not an NCD and what should be included in an NCD policy was discussed in Section IV. Strong feelings were expressed for both a narrow and a broad definition of NCDs, while quite a number of respondents didn't want to commit themselves as there are clear advantages and disadvantages either way. In short, a future Strategic Plan will need to decide whether to use criteria of mortality alone,

burden of disease, cost effectiveness and/or utilise other measures such as “leave no-one behind” to decide what to focus on. Various “hybrids” are also worth consideration such as focussing on the main NCDs and (only) their comorbidities as they relate to the main NCDS; introducing different conditions through a phased approach; including a range of conditions and then allowing provinces and districts to prioritise in terms of their own situations and epidemiological evidence; keeping this document at a high level and then having specific policies and plans focussing on different areas.

VIII)Conclusion

Most respondents in this Review felt that though this SP certainly had limitations (as discussed above), it had a lot right with it and certainly for most interviewees the broad intentions and approach were admirable[6]. Clearly though the implementation has been poor, and though some sub-objectives have been reached, it will take monumental efforts and inputs from here in to now meet (almost all of) the 2020 SA targets, the WHO 2025 targets and indeed the 2030 SDG NCD targets.

Critical to the next stage of planning is the question “Can South Africa afford to give up on reaching these targets”? If yes then the next Strategic Plan will be able to set realistic targets and plan accordingly. This doesn’t mean not taking NCDs seriously or not prioritising them from a prevention or care perspective, or even that some additional resources may not be invested including through making investment cases and submitting them to the Treasury, but it does mean shifting expectations, and with this knowledge that though as a country we have signed up to international objectives that we will not reach them, but that we have given up on reaching them. On the other hand another aspirational Strategic Plan without the means to achieve the objectives could very easily lead to even greater despondency in the sector and cynicism about government’s commitment to address NCDs.

[6] There was of course the strong view that with better consultation, both a better SP and better implementation would have been possible.

If, however, South Africa is still committed to the local and global targets that have been set, then a very different approach will be needed – especially as the targets are fast approaching. Undoubtedly working smarter and more efficiently; getting better buy in from different sections within health and from the different levels of the health system; putting in cost efficient mechanisms to improve data; focusing on known cost effective interventions for prevention and treatment; holding people accountable for implementation of specific objectives and so forth, will improve the situation and assist to get closer to the targets, the reality though is that without a major investment of resources and true prioritization of NCDs, including implementing a whole of government approach, the targets will remain unmet.

Investing in NCDs will bring economic as well as health returns, but to achieve this specific and focused investment will be needed. The magnificent achievements that South Africa has made with regard to HIV have not come easily or without huge efforts and investments. It can be concluded from this Review that if South Africa truly sees NCDs as the next big epidemic, then a similar approach will be needed and reflected in the next Strategic Plan.

Annexure 1 – Interviewees

National Department of Health

Sandhya Singh
Itumeleng Setlhare
Kgwiti Mahlako
Maletsema Mahonko
Livhuwani Dala
Lorato Mahura
Bilqees Sayed

Provincial Departments of Health

Kwa-Zulu Natal

Dr Jimmy Mthethwa

Western Cape

Dr Tracy Naledi

Free State

L Katsen
MP Ntechane
M Mosiea
T Mabesa
C Naude
O Erasmus
M F Moloi
NN Manyana
SJ Monare

Health Districts

Tshwane

M Pitsi
M Makhudu
P Silwimba
L Komane
N Davis
R Ntlatleng
R O Oyedipe
A Thobakgale
R Makau

Nkangala

Cheryl Nelson
Johanna Mashego
Mary Manopola
Joyce Tlou
Maryan Middlejans

Dr Kenneth Kaunda

Nela Maganaga

Non-governmental Organizations

Dr Vicki Pinkney Atkinson **–** South African Non-Communicable Disease Alliance
Prof David Sanders – Peoples' Health Movement
Dr Jayne Bezuidenhout – Rural Doctors Association of South Africa

Academics/Researchers

Prof Dinky Levitt – Chronic Diseases Initiative for Africa
Prof Debbie Bradshaw – Medical Research Council
Prof Karen Hofman – PRICELESS

Private Sector

Dr Konji Sebati – Innovative Pharmaceutical Association of South Africa
Linda Drummond – Consumer goods Council of South Africa.

Annexure II - Sample of questionnaire. Provincial representatives

QUESTIONNAIRE – EVALUATION OF THE SOUTH AFRICAN STRATEGIC PLAN FOR THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES 2013-2017.

Provincial representatives

Are you aware of The South African Strategic Plan For The Prevention And Control Of Non-Communicable Diseases 2013-2017?

If no, stop the interview.

The Department of Health has requested the World Health Organization to assist with conducting a review of this Strategy, with the intention of ensuring that the next policy and strategic plan takes into account both the strengths and shortcomings of the previous one. Identifying obstacles in implementation and finding ways to overcome these is a central goal of this review. The WHO have contracted me (Melvyn Freeman) to conduct this evaluation.

I will be asking you questions that don't have right and wrong answers, but are aimed at understanding the extent to which the previous plan has assisted us in moving forward with NCDs and how far we have come during the period of this Strategy, guided by the Objectives set in the Plan.

You are probably aware that the Strategic Plan sets out 10 goals/targets – nine of which must be reached by 2020 and one to be reached by 2030. There are 3 broad sub-Strategies and 20 objectives set out in the Strategic Plan, each with indicators and time frames. I will be asking you about your views and insights around these goals and impediments to reaching them.

It is NOT the intention of this interview to question the 10 targets set as these were agreed to at a consultative summit that included most stakeholders in the area of NCDs. The questions will focus on how well the policy was able to assist in realizing these targets; how far we are in reaching them and what has hindered implementation.

Questions start here:-

1)Without going into specific details what in your view have been the major successes of the Strategic plan?

2)Without going into specific details what in your view have been the major failures of the Strategic plan?

3)Did your province develop an implementation plan for realizing the objectives in the National Plan?

i)If so explain

ii)If not why not

4)The definition of NCDs taken in the 2013-17 Strategic plan covered a wide range of conditions ranging from cardiovascular diseases, diabetes, cancer, COPD through to areas such as oral health, muscular skeletal diseases, eye health and mental health. In your view was this a strength or a weakness of this policy? Explain.

5)The 3 Broad sub-strategies in the document deal with a)Prevention, promotion and wellness b)control through health systems strengthening and c)monitoring, evaluation and research. In your view do these 3 broad areas cover the main goals needed in the NCD strategy?

i)If you think that this is too broad, what would you have excluded?

ii)If you think other things needed to be included, please indicate what these areas are?

6)What percentage of total health budget of the National Department of Health was allocated to NCD prevention and control during the years 2013 to 2017.

i)What percentage of the budget was spent in each year?

7)I now want to turn to the specific objectives.

Objective	Target for 2017	How far in reaching the target.	Evidence/explanation for saying this – including information on what has been done to achieve the target.	Data set used to establish implementation	What obstacles in the way of achievement	How could obstacles to achieving the goal be removed in the future
1)Establish an intersectoral structure to reduce NCDs and for planning and monitoring.	Functional and ongoing intersectoral structure for prevention of NCDs	○ Yes ○ Partial ○ No ○ Don't know				
2)Develop an integrated and intersectoral plan for a co-ordinated response to prevention of NCDs	Intersectoral plan being implemented and monitored by intersectoral structure.	○ Yes ○ Partial ○ No ○ Don't know				
3)Control tobacco Use	Reduce tobacco use by 20% by 2020;	○ Yes ○ Partial ○ No ○ Don't know				
4)Reduce alcohol Consumption	19l/adult	○ Yes ○ Partial ○ No ○ Don't know				
5)Reduce % of salt in processed	Mean population intake of 7 grams per day	○ Yes ○ Partial ○ NDon't know				

foods.						
6)Reduce prevalence of overweight and obese people.	3% decrease in all age groups in Figure 9	○ Yes ○ Partial ○ No ○ Don't know				
7)Reduce cervical cancer mortality	65% of women over 30 attending public sector clinics screened. 65% of women with STIs screened soon after/at diagnosis and at 5 year intervals	○ Yes ○ Partial ○ No ○ Don't know				
8)Reduce mortality through introduction of the Human Papilloma Virus Vaccine	All age appropriate girls in quintile 2 schools	○ Yes ○ Partial ○ No ○ Don't know				
9)Reduce morbidity and mortality through increased	Numbers screened increased by10%	○ Yes ○ Partial ○ No ○ Don't know				

screening and treatment for hypertension, diabetes and asthma.						
10)Reduce NCD mortality through prevention and promotion	Reduction by 5% in premature mortality from NCDs	○ Yes ○ Partial ○ No ○ Don't know				
11)Integrate NCDs into:-Primary health care package,	NCDs fully included in PHC package	○ Yes ○ Partial ○ No ○ Don't know				
12)Integrate NCDs into -re-engineering of PHC,	All CHWs trained in NCD issues.	○ Yes ○ Partial ○ No ○ Don't know Yes ○ Partial ○ No ○ Don't know				
13)Integrate NCDs Into Human Resource development strategies and interventions	Increase in specialist health workers dealing with NCDs increased by 10%	○ Yes ○ Partial ○ No ○ Don't know				

14)Improve health systems to attain higher levels of control for. hypertension, diabetes and asthma.	[Dependent on evaluation of the model]	○ Yes ○ Partial ○ No ○ Don't know				
15)Prevent blindness through increase in cataract surgery	1700 operations per million population	○ Yes ○ Partial ○ No ○ Don't know				
16)Reduce morbidity from mental disorder	15% increase in caseload	○ Yes ○ Partial ○ No ○ Don't know				
17)Increase access to essential drugs and equipment	15% decrease in stock-outs and 90% availability of essential equipment.	○ Yes ○ Partial ○ No Don't know				
18)Establish a comprehensive surveillance mechanism for NCDs, health information	Comprehensive surveillance mechanism and routine monitoring system for NCDs	○ Yes ○ Partial ○ No ○ Don't know				

systems and dissemination processes to assist policy, planning, management and evaluation of NCD prevention and control	generate reliable data on: exposure to risk factors; management and control of NCDs; outcomes					
19)Ensure baseline information is available for each summit target.	Progress Report on the implementation of Summit Target produced	○ Yes ○ Partial ○ No ○ Don't know				
20)Work with the National Health Research Committee to generate research to inform NCD policies and programmes based on sound scientific evidence.	Results of a least 3 research projects on the list of activities.	○ Yes ○ Partial ○ No ○ Don't know				

8)In your view what system or systems of surveillance are best suited to measuring NCDs and their risk factors?

9)What would you like to see included in the NIDs/DHIS for NCDs?

10)Would you say that you have had enough resources at your level to implement the Strategic plan? Explain

!1)What do you want to see in the next Strategic plan that is different from the 2013-2017 Plan?

12)What would you like to see happen at the Provincial level to improve implementation of an NCD Strategic plan?

References

[i] Department of Health. Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-2017. Pretoria 2013

[ii] Stats SA. 2017. South African Demographic and health Survey. Key indicator report.

iii Van Walbeek C. How illicit tobacco trade undercuts effort to curb smoking. Business day. https://www.businesslive.co.za/bd/opinion/2018-05-30-how-illicit-tobacco-trade-undercuts-effort-to-curb-smoking/ 2018.

iv Genesis Analytics . Evaluating the economic, health and social impacts of the proposed Liquor Amendment Bill, 2017

v Ware L.J. et al Associations between dietary salt, potassium and blood pressure in South African Adults: WHO SAGE Wave 2 Salt and Tobacco. Nutrition, Metabolism and Cardiovascular Diseases (2017) 27, 784-791

[vi] Charlton K et al (2018) How will South Africa's mandatory salt reduction policy affect salt iodisation programme? A cross-sectional analysis from the WHO-SAGE Wave 2 Salt and Tobacco study. BMJ Open access.

[vii] Swanepoel B et al. Sodium and potassium intake in South Africa: an evaluation of 24-hour urine collections in a white, black and Indian population.

viii Department of Health. Foodstuffs, cosmetics and disinfectants act, 1972 (act 54 of 1972). The regulations relating to the reduction of sodium in certain foodstuffs and related matters, r.214 of 20 March 2013: amendment

[ix] Dorrington R, Bradshaw D, Laubscher R, Nannan N. Rapid Mortality Surveillance Report 2015. Research Council 2016.

[x] Department of Health. Adult Primary Care. 2016/17.

[xi] Department of Health Primary Health Care Service Package For South Africa. 2015

[xii] Department of Health The Scope of Work for a Community Health Worker (CHW) June 2018.

[xiii] Department of Health. Human Resources For Health South Africa. HRH Strategy for the Health sector 2012/13 to 2016/17.

[xiv] Williams D, Herman A, Stein D et al. Prevalence, Service Use and Demographic Correlates of 12-Month Psychiatric Disorders in South Africa: the SA Stress and Health Study. Psychological Medicine 2007 38(2) 211-220.

[xv] World health Organization. Time to Deliver. Report on the WHO Independent High-Level Commission on Noncommunicable Diseases. 2018.

[xvi] World Health Organization. 2017. Best Buys and other interventions for tackling NCDs. Geneva.