Results Framework - National Cancer Control Programme

Expected impact

| 1. | 5% Relative reduction of annual increase of cancer incidence rate of preventable cancers (Cervical |
|----|---|
| | and Oral), from the current level by 2025 |
| 2. | 25% Relative Reduction of the premature mortality rate of cancers from the current level by 2025 |
| 3. | 25% Increase of proportion of cancer patients who receive comprehensive palliative care services out of |
| | all cancer patients who require them by 2025. |
| | |

Expected outcome:

- 1. Reduction of risky lifestyle and environmental factors which promote the development of cancers in Sri Lanka
- 2. Increased early detection of breast cancer and pre-cancerous cervical and oral lesions by screening methods
- 3. Increased detection of breast, cervical and oral cancers at stages I and II by screening methods
- 4. Increased early diagnosis of cancer among symptomatic patients
- 5. Increased early treatment as per treatment plans and follow up
- 6. Collection of accurate and timely data on cancer prevention and control interventions
- 7. Availability of sustainable, quality and accessible palliative care services at all levels

Impact indicators

| Impact Indicators | Baseline | Target | Means of verification | Responsibility | Frequency of data collection |
|---|----------|-----------------------------|-----------------------------|----------------|------------------------------|
| % reduction of incidence of common preventable cancers (cervical and oral) | 2015 | 5% annually | SLCR /FHB | NCCP/FHB | Annual |
| % reduction of premature mortality rate of cancers | 2010 | 25% reduction by 2025 | SLCR/PBCR RGD | NCCP | Every 2 years |
| % of palliative care patients cared for, out of those referred from each treatment center | NA | 25% | Return Cancer unit | NCCP | quarterly |
| % of cancer deaths with access to palliative care | NA | 25% | Special sample survey | NCCP | |
| | | | | | |

Outcome & coverage indicators

| | Indicators | Baseline | Target | Means of verification | Responsibility | Frequency of data collection |
|------|--|----------|--------|-----------------------|----------------|------------------------------|
| | | | | | | + |
| SD 2 | %of current cigarette smoking among adults and | 2015 | | STEPS survey | NCD UNIT | Every 3-5 years |
| | out of school youth | | | - | | |
| | % of current smokeless tobacco use among | 2015 | | STEPS survey | NCD UNIT | Every 3-5 years |
| | adults and out of school youth | | | | | |
| | Total alcohol per capita (APC) consumption | | | | | |
| | among persons 15+ years of age within a | | | | | |
| | calendar year in liter of pure alcohol | | | | | |

| % of current alcohol use among adults | 2015 | 10% reduction | STEPS survey | NCD UNIT | Every 3-5 years |
|--|------|---------------|-------------------------------|----------|-----------------|
| % of betel and areca nut chewing among adults and out of school youth | 2015 | 30% reduction | STEPS survey | NCD UNIT | Every 3-5 years |
| % of physical inactivity in adults | 2015 | 10% reduction | STEPS survey | NCD UNIT | Every 3-5 years |
| % of adults who consume 5 servings of fruits and/or vegetables per day | 2015 | | STEPS survey | NCD UNIT | Every 3-5 years |
| % of adults who are overweight and obese | 2015 | | STEPS survey | NCD UNIT | Every 3-5 years |
| % of adults who consume >5g of salt daily | 2019 | | STEPS survey | NCD UNIT | Every 3-5 years |
| % of school going adolescents who are not using tobacco | 2016 | | GSBHS and GYTS | FHB | |
| % school going adolescents who are not consuming alcohol | 2015 | | SBT survey | FHB | |
| % of school going adolescents who are physically active | 2015 | | SBT survey | FHB | |
| % of school going adolescents who consume 5 servings of fruits and/or vegetables per day | 2015 | | SBT survey | NCD UNIT | |
| % of school going adolescents who are not using tobacco | 2015 | | SBT survey | NCD Unit | |
| % of school children who are overweight & obese | 2015 | | FHB data | NCD Unit | |
| % households using solid fuel as the primary source for cooking | 2015 | | STEPS survey | NCD Unit | |
| % of population with primary reliance on clean fuels (Clean household energy) | 2016 | | | | |
| Air pollution levels in cities (Ambient air pollution $2.5\mu g/m^3$) | 2016 | | | | |
| % of school girls aged 10 -11 who have had completed 2 doses of vaccination for HPV | 66% | 90% | Epidemiology Annual Report | | Annual |
| % of Under 1 completed vaccination for hepatitis B in the EPI | 99% | 100% | Epidemiology Annual Report | | Annual |

| Prevalence of hepatitis B among healthcare providers | | Less than | Special survey | Epidemiology | Annual |
|--|------|-----------|------------------|---------------|--------|
| | 2015 | 0.01 % | Annual report | Unit | |
| | | Annually | | | |
| Prevalence of hepatitis B among high risk groups?? | 2015 | Less than | Special survey / | NSACP | Annual |
| | | 0.1 % | annual report | /Epidemiology | |
| | | Annually | | Unit | |
| | | | | | |

| SD3 | % women in the 35 year cohort screened for | 2019 | 80% end | FHB Annual | FHB | Annual |
|-----|---|-----------|----------|------------------|------|--------|
| | cervical cancer | | of 2023 | Report | | |
| | % of women in the 35 year cohort who were | | | FHB Annual | FHB | Annual |
| | detected with pre-cancerous lesions | | | Report | | |
| | % women in the 45 year cohort screened for | 2019 | 60% 2023 | FHB Annual | FHB | Annual |
| | cervical cancer | | | Report | | |
| | % of women in the 45 year cohort who were | FHB | FHB | FHB Annual | FHB | Annual |
| | detected with pre-cancerous lesions | LOSHAN | LOSHAN | Report | | |
| | % of cervical cancers diagnosed in the 35 and 45 | | | Pathology cancer | | |
| | year old cohorts (disaggregated by type and | | | registry | | |
| | stage) | | | | | |
| | % of females 35-60 years diagnosed with cervical | 2019 | 80% end | Pathology cancer | | Annual |
| | cancer (outside the WWC in secondary and | | of 2023 | registries | | |
| | tertiary level gynae clinics) among those | | | | | |
| | screened in such institutions in the last 5 years | | | | | |
| | Percentage of stage I & II cervical cancers among | Not | 70% | SLCR/PBCR | NCCP | Annual |
| | all cervical cancer incidence cases | available | | | | |
| | (disaggregated by age, treatment centres & | (NA) | | | | |
| | Mode of referrals) | | | | | |

| Number of newly diagnosed cervical cancer cases after a negative screening episode (interval cancer rate) Number of HPV positive cases among all screened for cervical cancer | NA | | | | |
|--|----|-----|---------------------------------------|------|--------|
| % of primary, secondary and tertiary levels with referral pathways for cervical cancer | | | | | Annual |
| % of women screened for breast cancer by CBE (disaggregated by age, screening centers) among women attending primary health care centers | | | FHB Annual report | FHB | Annual |
| % women with breast abnormalities among those have had a mammogram (disaggregated by age, treatment centers) | | | Return from Mammography centers | NCCP | Annual |
| Percentage of stage I & II breast cancers among all breast cancer incidence cases (disaggregated by age, treatment centres & Mode of referrals) | NA | 70% | SLCR/PBCR | NCCP | Annual |
| % of primary, secondary and tertiary levels with referral pathways for breast cancer | | | NCCP | NCCP | Annual |
| | | | | | |
| Proportion of increase of OPMD from the baseline | | | | | |
| %of districts that has achieved the annual target for OPMD/ oral cancer screening for adults at a higher risk for oral cancer | | | NCCP quarterly meeting reports | NCCP | Annual |
| % of target group members (estate sector etc) screened for oral cancer among referrals | | | | | |

| | % adults detected with suspected oral lesions (sub-mucous fibrosis, leukoplakia, suspected | | | | | |
|-----|--|------------------|----------------|--|------|-----------|
| | cancer) out of the total first visits (disaggregated by clinic type –HLC/PMCI/dental clinic, age, sex) | | | | | |
| | % of adults diagnosed with oral cancer among all screened for oral cancer (disaggregated by age and sex) | 2015 | 5% annually | SLCR | NCCP | Annual |
| | Percentage of Stage I & II oral cancers out of all oral cancer incidence cases (disaggregated by age, treatment centres & Mode of referrals) | NA | 70% | SLCR/PBCR | NCCP | Annual |
| | % of primary, secondary and tertiary levels with referral pathways for oral cancer | | | | | |
| | | | | | | |
| SD4 | Number of suspected /diagnosed cases of breast, cervical and oral cancer referred to treatment centers (disease based comparison) | Not available | | comparison of pathology based National cancer registry &HBCR | NCCP | Quarterly |
| | Proportion of individuals diagnosed of breast, oral and cervical cancers within three months out of the all the symptomatic and asymptomatic patients relevant to that cancer (disaggregated by age, sex, treatment centers, mode of referral) | |) | | | Annual |
| | Proportion of cervical cancers diagnosed at Stage III/IV (disaggregated by age, treatment center, mode of referral) | | 30% | Special surveys/SLCR / facility surveys/reports from Tumor Boards/Reports | | Annual |

| | | | from Technical | |
|-----|---|-----|----------------|-----------|
| | % of cervical cancer patients followed up in treatment centers as per plan among those needing follow up | | Working groups | Annual |
| | Proportion of breast cancers diagnosed at late stages (Stage III/IV) (disaggregated by age, treatment center, mode of referral) | 30% | | Annual |
| | % of breast cancer patients followed up in treatment centers as per plan among those needing follow up | | | Annual |
| | Proportion of oral cancers diagnosed at late stages (III and IV) (disaggregated by age, treatment center, mode of referral) | 30% | | Annual |
| | % of oral cancer patients followed up in treatment centers as per plan among those needing follow up | | | Annual |
| | | | | |
| SD5 | % patients received palliative care at each health service level among those referred from treatment centers | | | Quarterly |
| | Number of people who received community and home based care per district | | | Quarterly |
| | % deaths among patients receiving palliative care at each health service level | | | |

Output indicators

| SD2.1 | Availability of a functioning National Social and Behavioral Cancer Communication strategy | | | NCCP | 2021 |
|---------|--|---|------------------------------------|-------------------|--------|
| SD2.2 | Number of schools adhering to the health promoting school policy per district | As planned per annually action plan of FHB | FHB Annual report | FHB | Annual |
| | Number of work places adopting Health Promoting Settings per district | As planned per annually action plan of HPB | HPB Annual report | НРВ | Annual |
| | Number of functioning healthy villages which address cancer prevention | As planned per annually action plan of HPB | HPB Annual report | НРВ | Annual |
| | Number of hospitals /Province adopting Health Promotion Settings | As planned per annually action plan of HPB | HPB Annual report | НРВ | Annual |
| | Number of estates in selected provinces with functioning Health Promoting settings | As planned per annually action plan of Estate and Urban Health Unit | EU UNIT Annual report | EU UNIT | Annual |
| | Number of estate workers referred for oral health examination | | | | |
| | Number of community groups established to promote healthy behaviors per district | | | | |
| SD2.3.1 | Number of multimedia programs addressed second hand smoke | | NATA/NCD/N CCP Annual report | NCD unit/ NCCP | Annual |
| | Availability of effective tobacco cessation (smoke and smokeless) hotline | | NATA | NATA | NA |

| | Number of institutions with tobacco cessation | | NATA Annual | NATA Annual | Annual |
|---------|---|-----------------|---------------|---------------|--------|
| | (smoke and smokeless) services per district | | report | report | |
| | Number of HCW trained in tobacco cessation | | NATA Annual | NATA | Annual |
| | (smoke and smokeless) per district | | report | | |
| | Number of cities with smoke-free | | HPB/NATA | HPB/NATA | Annual |
| | environments | | Annual report | | |
| | Number of workplaces in major cities with | | HPB/NATA | HPB/NATA | Annual |
| | smoke free areas | | Annual report | | |
| | | | | | |
| | | | | | |
| SSD | Availability of policies and regulations for | | NCCP | NCCP | NA |
| 2.3.2 | import of areca nut and use | | | | |
| | Number of education programs conducted for | | | | |
| | high risk groups per district | | | | |
| | Number of mobile oral clinics conducted for | | | | |
| | OPMD/oral cancer | | | | |
| | | | | | |
| SSD | Number of schools per district adopting | As planned per | FHB Annual | FHB | Annual |
| 2.3.3 | canteen policy | annually action | report | | |
| | | plan of FHB | | | |
| | Number of workplaces per district adopting | | E&OH Annual | E & OH | Annual |
| | canteen policy | | report | | |
| | | | | | |
| SSD | Number of physical activity programs | | | | |
| 2.3.4 | conducted per school per district | | | | |
| | Number of towns with a standard play area | | | | |
| | Number of venues available for physical | | | | |
| | activity per district | | | | |
| | | | | | |
| SSD2.3. | Number of cases filed against drunk drivers | | Department | Department of | Annual |
| 5. | per year | | of police | police | |

| | Availability of non- invasive methods to | | | | | |
|--------|--|----|---|------------------------|--|--------|
| | measure blood alcohol levels | | | | | |
| | | | | | | |
| SD 2.4 | Number of schools per district providing HPV vaccination | | As planned per annually action plan of Epidemiology unit &FHB | FHB/EPID | FHB/Epidemiol ogy unit | Annual |
| SD 2.5 | Availability of indoor air quality guidelines and a policy to reduce air pollution | | | E&OHU Annual report | Environmental and occupational health unit | 2021 |
| | Number of cities monitoring air and water pollution | | | E&OHU Annual report | Environmental and occupational health unit | Annual |
| | | | | | | |
| SD 3 | Availability of a National Plan for Early detection of Breast Cancer | | End of 2021 | NCCP | NCCP | NA |
| | Availability of a National Plan for Early detection of Oral Cancer | | End of 2021 | NCCP | NCCP | NA |
| | Number of functioning WWCs which are catering 15,000 population | | | FHB Annual report | FHB | annual |
| | Number of Districts with mammography facilities | | one per each district at the end of 2021 | NCCP Annual report | NCCP | annual |
| | Number of colposcopy centers per district | 11 | 24 | | | |

| | Number of functioning cervical cancer screening centers at primary health care level per district with basic facilities (disaggregate by /WWC/ PMCI) | | | FHB Annual report | FHB | Annual |
|--------|--|----------|--------------|---|--|---------|
| | Number of cervical cancer screening centers in secondary and tertiary level (Gynae clinics) hospitals per district | | | Provincial Director's Annual Report | Provincial director of health services | annual |
| | Number of women screened for cervical cancer in STD/HIV clinics and NCCP (disaggregated by age, abnormalities) | | | | | |
| | Number of centers carrying out Clinical Breast Examination per district (disaggregate by HLC/WWC/ PMCI) | | | FHB/NCD/NC CP Annual report | FHB/NCD/NCC P | Annual |
| | Number of oral cancer screening centers per district (disaggregate by HLC/ PMCI) | | | NCD/IOH/NCC P | NCD/IOH/NCC P | Annual |
| | | | | | | |
| SD 4.1 | Number of functional Center of Excellence | | 9 | | NCCP &PDHS | |
| | Number of satellite secondary and tertiary level treatment centers able to provide treatment for cancer breast, cervix and oral as per the stratified guidelines | NA | NA | Treatment center returns | NCCP | Annual |
| | Number of COE providing paediatric cancer care | 1 CENTER | 4 centers | SPECIAL SURVEY | NCCP | BY 2024 |
| | Number of treatment centers with SOP/guidelines /Protocols for shared care pathways of common adult and pediatric cancers | NA | Availability | Availability of guidelines endorsed by Secretary Health | NCCP | Annual |

| Functioning technical sub-committees for radiation safety, laboratory & diagnostic pathology, diagnostic radiology, and treatment (meet at least twice a year) – Yes/No | NA | 2 meetings held by each sub- committee / year | Annual report of the NCCPA | NCCP | Annual |
|---|----|--|---|------------|--------------------|
| Number of treatment centers with functioning Tumor Boards | NA | Availability of all COE &25% OF Satellite centers | Facility survey / Treatment center returns | NCCP | Annual |
| Number of treatment centers with functioning Multidisciplinary teams | NA | Availability of all COE | Facility survey / Treatment center returns | NCCP | BY END OF 2021 |
| Number of treatment centers per province with day treatment units | NA | 80% | Facility survey/ Treatment center returns | NCCP &PDHS | BY END OF 2024 |
| Number of patients getting day treatment disaggregated by age, sex, type of cancer, treatment center | | | Facility survey/ Treatment center returns | NCCP | Annual |
| Proportion of treatment centers with oncology essential medicinal drug list for adults and children | NA | 90% | MSD Records / Treatment center returns | MSD/ NCCP | BY END OF 2024 |
| % of cancer treatment centers with no essential drug stock-outs during the year | NA | 90% | MSD Records/ Treatment center returns | MSD | End year review |
| % of treatment centers linked to the Regional/Central MSDs and NCCP | NA | Availability | MSD Records /Treatment center returns | MSD | Annual |

| | Availability of tele medicine facilities at center of excellence and satellite centers | NA | 9 CoE and 50% of satellite centers | NCCP Records/ Treatment center returns | NCCP & PDHS | |
|--------|--|------------------|------------------------------------|---|----------------------------------|--------------------------|
| | | | | | | |
| SD 4.2 | Number of satellites treatment centers following stratified SOP/guidelines /Protocols on diagnostics | NA | Availability | NCCP Records | NCCP | BY THE END OF 2024 |
| | Number of centers per province with availability(Anolog/digital) of functioning mammography | | One per Districts | NCCP Records | NCCP | BY THE END OF 2024 |
| | Number of treatment centers with Quality Assurance systems (Laboratory, Radiology) | | Availability | NCCP Records | NCCP | BY THE END OF 2024 |
| | | | | | | |
| SD 4.3 | Genetic Marker testing available at Apeksha Hospital & NHSL | Not Available | Availability at NHSL | NCCP Records | DDG/Laborator y services | BY THE END OF 2024 |
| | Number of SPECT scan facilities available in the country | Not Available | Availability | NCCP Records | Additional secretary development | BY THE END OF 2024 |
| | Number of PET scan facilities available | 1 | 4 Numbers | NCCP Records | Additional secretary development | BY THE END OF 2024 |
| | | | | | | |
| SD 4.4 | Number of CoE with SOP /guidelines /Protocols following updated treatment pathways for adults and children | 0 | 9 | Facility survey | NCCP | |
| | Number of satellites treatment centers following stratified SOP /guidelines | 0 | All 24 | Special surveys | NCCP | |

| | /Protocols for treatment and care for adults and children | | | | | |
|--------|--|------------------|----|---------------------------------|--|------|
| | Availability of central Radio- Pharmacy | | 1 | | | 2023 |
| | Number of LA with CT stimulators in place Number of Internal Radiotherapy machines functioning | 3 | 18 | Facility Survey Facility Survey | NCCP &PDHS NCCP &PDHS | |
| | Number of treatment centers with Onco- surgical support | 9 | 9 | Facility Survey | NCCP | |
| | Number of Stem cell centers functioning | Not available | 1 | Facility Survey | National Blood transfusion Service | |
| | Number of treatment centers with Radiologists specialized in Nuclear Medicine | 0 | 4 | | PGIM / Ministry of Health | |
| | | | | | | |
| SD 4.5 | Number of provinces with functioning laser treatment facilities for oral cancers | 4 | 9 | SPECIAL SURVEY | Additional secretary Medical services | |
| | Number of functioning radioiodine treatment centres | 4 | 9 | SPECIAL SURVEY | Additional secretary Medical services | |
| | Number of patients who have had reconstructive surgical care for breast cancers among all breast cancer patients (new and old) disaggregated by age, stage of cancer, treatment center | NA | NA | | | |

| | Number of patients who have had reconstructive & rehabilitation surgical care for oral cancers among all oral cancer patients (new and Old) disaggregated by age,sex, stage of cancer, treatment center, | NA | NA | | | |
|---------|--|-----------|--------------|----------------|---------------------------------------|------|
| SD 4.6 | % CoE with Radiation safety-officers | | 9 | Special survey | Additional secretary Medical services | |
| | National Guideline on cytotoxic and radiation | Not | Availability | | NCCP | |
| | safety and management is available | available | | | A -1 -1*1* 1 | |
| | Number of cancer treatment centres with Iron chambers to monitor the dose of radioactive | 0 | 9 | | Additional | |
| | iodine | | | | secretary Medical | |
| | loune | | | | services | |
| | Number of cancer treatment centres with | 0 | 9 | | Additional | |
| | SOPs for laboratory safety and waste disposal | | | | secretary | |
| | of clinical waste | | | | Medical | |
| | | | | | services | |
| | Number of cancer treatment centres with a | 0 | 9 | | Additional | |
| | trained safety officer for cytotoxic drugs | | | | secretary | |
| | | | | | Medical | |
| | | | | | services | |
| | | | | | | |
| | | | | | | |
| SD 4. 7 | National strategic Plan for pediatric cancer | NA | Availability | NCCP | NCCP | 2021 |
| | prevention, treatment & care available | | | | | |
| | | | | | | |

| | Number of CoE with SOP /guidelines /Protocols following updated treatment pathways for children | NA | Availability | NCCP | NCCP | 2024 |
|--------|---|-------------|--------------------------------------|--------------------|------|----------|
| | Number of satellites treatment centers following stratified SOP /guidelines /Protocols for treatment and care for children | | | NCCP | NCCP | 2024 |
| | | | | | | |
| SD 5.1 | % of patients with survivorship plans disaggregated by treatment centers | NA | 75% | Sample survey HBCR | NCCP | annually |
| | % of patients assessed for rehabilitation care out of all cancer patients and referred | NA | 75% | Sample survey HBCR | NCCP | annually |
| | % treatment centres providing psychosocial support for patients | / ?? | 75% | Facility survey | NCCP | annually |
| SD 5.2 | Availability of guidelines on establishment and functioning of palliative care units at each levels of care (including home based care) | 0 | 100% | Facility survey | NCCP | |
| SD 5.3 | Number of training programs held in palliative care for private hospitals, hospices, CSOs and families | NA | At least 1 per year for each setting | MIS | NCCP | annually |
| | Number of medical officers/GP trained in palliative care | NA | 100 per year | MIS | NCCP | annually |
| | | | | | | |
| SD5.4 | Number of patients having a trained family member out of all patients who need palliative care (disaggregated by district) | NA | 50% | Sample survey | NCCP | |

| | Number of PHNO who is able to provide palliative care per district | NA | 10 per district | MIS | NCCP | |
|--------|---|------|--------------------|-----|------|-----------|
| | Proportion of PMCIs with a community care giver support group | | | | | |
| | | | | | | |
| SD 5.5 | % of treatment centers have had a continuous supply of palliative care essential drugs throughout the year | NA | 100% | MSD | NCCP | |
| | Consumption of strong opioids per cancer death | | | | | |
| | Consumption of strong opioids per capita | | | | | |
| | | | | | | |
| SD 6 | A functioning SIM unit with TOR established | 2021 | | | | |
| | A comprehensive Sri Lanka Cancer Registry available capturing data from all sources e-MIS functioning at NCCP | 2021 | | | | |
| | e wis functioning at recei | | | | | |
| SD 7 | Research committee functioning | | | | | Quarterly |
| | Annual research conducted | | | | | Annual |
| | Number of research published | | | | | Annual |
| | Availability of data on effective interventions | | | | | Annual |
| | | | | | | |