Recommendations of the MediShield Life Council on MediShield Life's Coverage for Outpatient Cancer Drug Treatments

1. This report lays out the MediShield Life Council's recommendations on MediShield Life's coverage for outpatient cancer drug treatments[1], to ensure that Singaporeans can continue to access good and affordable cancer drug treatments, while keeping premiums sustainable for current and future generations.

Supporting Efforts to Keep Healthcare Good and Affordable

2. The Council had noted in its MediShield Life Council Report 2020 that Singapore's national healthcare spending had increased by about 11 per cent per annum from 2012 to 2017. This was driven mainly by a range of factors such as our ageing population, availability of new treatment options that may improve life spans and quality of life but come at a higher price, and rising healthcare manpower and other operating costs. During the public consultation on the MediShield Life 2020 Review last year, many respondents called for stronger measures to contain escalating healthcare costs and curb unnecessary utilisation of healthcare.

3. As the national basic health insurance scheme, MediShield Life can play a role in supporting the Ministry of Health (MOH)'s '3 Beyonds' strategy (Beyond Healthcare to Health, Beyond Hospital to Community, Beyond Quality to Value) to ensure quality and sustainable healthcare. Doing so will also ensure that we keep MediShield Life premiums affordable for all Singaporeans. For example, MediShield Life's extension of coverage to inpatient hospice care and higher claim limits for the first two days of acute hospital stays facilitate earlier discharges and care in the appropriate settings, supporting the strategy of Beyond Hospital to Community. A key area that the Council has been studying is outpatient cancer drug treatments.

Significant Growth in National Cancer Drug Spending

4. On a national level, spending on cancer drugs has been growing at a Compound Annual Growth Rate (CAGR) of 20%, far exceeding the 6% CAGR

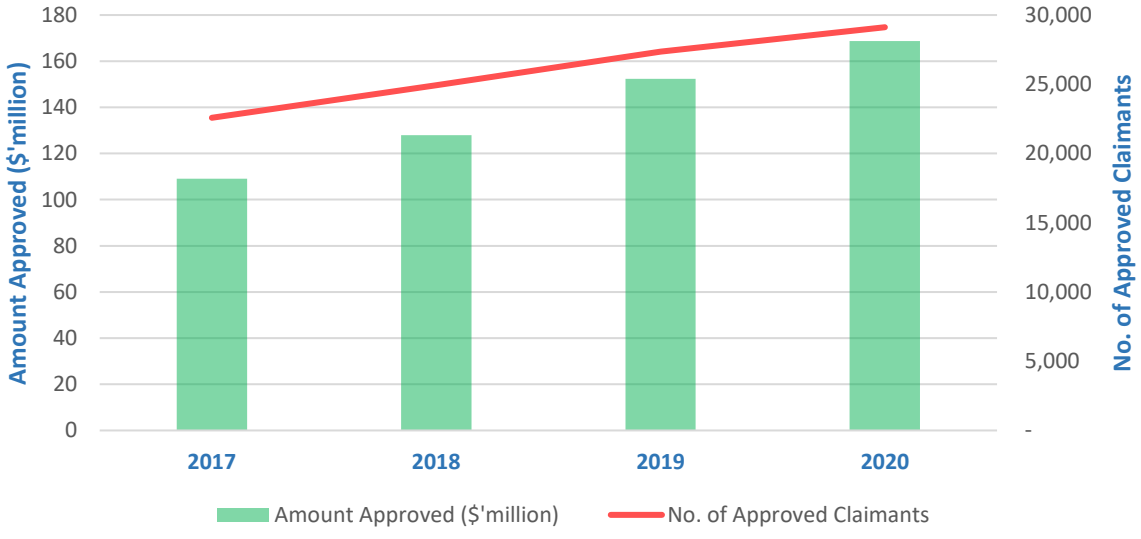
[1] Inpatient cancer drug treatments are covered separately under the inpatient claim limits, such as $800 per day for normal ward, together with other costs incurred during the inpatient stay.

for non-cancer drugs. Cancer drugs accounted for one-quarter of total drug spending in 2019, at $375 million. If this current trajectory continues, cancer drug spending is projected to reach $2.7 billion in 2030.

5. This is due partly to the rising cancer prevalence among Singapore Residents. The Singapore Cancer Registry reported a total of 71,748 newly diagnosed cancer cases during the period 2013-2017, a 25% increase from 57,303 cases reported during the preceding five-year period (equivalent to a 5% CAGR). At the same time, medical advancement has provided more treatment options that come at a higher cost. One example is immunotherapies, which can cost more than $5,000 per month compared to a few hundred dollars per month for traditional cancer drugs.

6. In tandem with the national trend, the number of MediShield Life claimants for outpatient cancer drug treatments has increased by 29%, from about 22,500 in 2017 to 29,100 in 2020. Payouts for outpatient cancer drug treatments have increased by more than 50%, from $109 million in 2017 to $168 million in 2020. This is more than double the increase in overall MediShield Life payouts over the same period. Outpatient cancer drug treatments accounted for 16% of the total MediShield Life payouts in 2020.

Figure 1: MediShield Life Outpatient Chemotherapy Claims from 2017 to 2020



7. With the rising cancer prevalence and emergence of higher cost cancer therapies, we need to ensure that MediShield Life can continue to support Singaporeans in accessing good and affordable cancer drug treatments, while at the same time avoid unsustainable premium growth.

MediShield Life Cancer Drug Committee

8. The Council appointed a Cancer Drug Committee to study how to re-design MediShield Life's coverage for cancer drug treatments to ensure its long-term sustainability. The Committee is chaired by Dr Tan Yew Oo, a member of the MediShield Life Council, and comprises 7 other senior oncologists from the public and private sectors. The composition of the Committee is in Annex A.

9. The Committee studied funding approaches in other developed countries with advanced healthcare systems, such as the United Kingdom, Australia, Canada, and South Korea. In these countries, funding under their national schemes is extended only to drugs which meet standards of safety, quality and efficacy set by their regulatory authority (the equivalent of Singapore's Health Sciences Authority (HSA)), and have undergone price negotiations with drug manufacturers to bring prices down to cost-effective levels. Drugs which are not approved by the regulatory authorities or are not cost-effective do not receive any funding.

10. Cost-effectiveness is assessed through Health Technology Assessment (HTA), an internationally established scientific research methodology that is used to inform policy and clinical decision-making on the value of new health technologies, such as drugs, vaccines, devices, and medical services. HTA draws on clinical, epidemiological and health economic data, and compares the incremental cost and incremental improvement in health benefits (e.g. quality of life and life expectancy) of the treatment, relative to the existing standard of care. Most countries, including Singapore, have a national HTA agency that is responsible for evaluating technologies to inform Government healthcare financing decisions.

11. The Committee identified two key strategies to ensure affordability and sustainability in cancer drug spending in Singapore, as follows:

a. **Negotiate with drug manufacturers for better prices for cancer drugs**. Singapore is paying higher prices for cancer drugs compared to regional jurisdictions such as Taiwan, South Korea, Australia, and New Zealand. Prices for some of the commonly-used cancer drugs here can be 50% to 100% higher. At current prices, most cancer drugs are not cost-effective and hence not subsidised in the public sector today. The prices we pay for many of these drugs are not commensurate with the health benefits they offer. We may be paying a lot more for a drug that is not much more effective in

treating the cancer, or just as effective as another drug. The Singapore Society of Oncology had also given feedback during the MediShield Life 2020 Review public consultation last year that cancer drug prices are high in Singapore and suggested to study ways of negotiating better prices with drug manufacturers.

b. **Encourage the use of clinically proven and cost-effective cancer drug treatments**. For patients who do not see improvements in their conditions after undergoing standard treatment regimens and wish to try other treatment options, they may sometimes be recommended emerging therapies even though there is still insufficient clinical evidence to prove that the therapy is effective in treating the particular cancer type. Some patients may also be using branded or more expensive cancer drugs even though equally effective, lower cost alternatives such as biosimilars and generics are available. MediShield Life should encourage the use of cancer drug treatments which are clinically proven and cost-effective in treating the particular cancer and target its coverage at these treatments to stretch the limited pool of premium dollars and support more patients in appropriate treatments.

12. The Committee also noted that the current MediShield Life claim limit of $3,000 per month is blunt. Under the outpatient chemotherapy claim limit, up to $3,000 per month can be claimed for traditional chemotherapy drugs, immunotherapies, and related services such as scans, blood tests, doctor consultations and supportive drugs (such as for pain and nausea management). While this claim limit was sized to be sufficient to cover the majority of bills for subsidised patients when MediShield Life was launched in 2015, it does not incentivise drug manufacturers to offer better prices or encourage the use of clinically proven and cost-effective treatments, as MediShield Life pays up to the claim limit for all cancer drugs regardless of health benefit or price.

Recommendations from the Cancer Drug Committee

13. To achieve better drug prices for Singaporeans and encourage the use of clinically proven and cost-effective cancer drug treatments, the Committee recommends the following measures, as endorsed by the MediShield Life Council:

a. **Create a "positive list" of clinically proven and cost-effective cancer drug treatments that are claimable under MediShield Life, and more granular claim limits**. Generally, the list should comprise drugs that are

registered with HSA and deemed clinically and cost-effective for the registered indications through the HTA process. There should be different claim limits for drugs in line with the agreed cost-effective price e.g. a higher cost drug on the positive list may be given a higher claim limit than a lower cost drug on the list if it is deemed to be cost effective at the proposed price. This will enable Singapore to negotiate for better drug prices from drug manufacturers.

The positive list should be published on the MOH website for easy access, and updated regularly to take into account new treatments, new clinical evidence, and price adjustments[2].

Which cancer drug treatments are clinically proven and cost-effective?

Clinically proven cancer drugs have met HSA's standards of safety, quality, and efficacy, and their use for different cancer types are endorsed by clinical practice guidelines and/or expert clinical opinion.

Cost-effective cancer drugs are those which provide good value whereby the incremental cost is justified by the incremental improvement in health benefits (e.g. quality of life and life expectancy), relative to the existing standard of care.

As cost-effectiveness takes into account both price and health benefits, it does not mean that all low-cost drugs are cost-effective, and all high-cost drugs are not. A low-cost drug that does not provide much more health benefit than the existing standard of care may not be cost-effective, while a high-cost drug that significantly improves the quality of life for patients may be cost-effective. Based on the evidence, MediShield Life should be prepared to pay more for the cost-effective high-cost drug, given the health benefits.

The Agency for Care Effectiveness (ACE), Singapore's national HTA agency, will assess the clinical effectiveness and cost-effectiveness of cancer drugs using published methodologies that are in line with international best practices. The MOH Oncology Drug Sub-committee

[2] Drugs may have their claim limits lowered in certain cases, e.g. when a lower priced drug with comparable health benefits (such as a generic or biosimilar) becomes available. Drugs may also be removed from the positive list under certain circumstances e.g. drug manufacturer raises the price such that the drug is no longer cost-effective.

(ODS), comprising local clinical experts from the public and private sectors, will be consulted as part of this process. Negotiations are also conducted to ensure that drug manufacturers have opportunities to offer cost-effective prices.

The MOH Drug Advisory Committee (DAC), chaired by the Director of Medical Services in MOH and comprising senior public sector doctors, pharmacists and MOH representatives, will review ACE's evaluations, companies' price proposals and make recommendations to MOH for subsidy and MediShield Life coverage. This is similarly done for subsidy recommendations for other drugs and vaccines. For the initial positive MediShield Life list, MOH has taken reference from the DAC's subsidy recommendations.

What happens to treatments not on the positive list?

The positive list will be made publicly available and is accessible on the MOH website here.

Treatments are not included on the positive list if their health benefits are not clinically proven, if they are not cost-effective at the price proposed by the manufacturer, or if there is no clinical need for the treatment in local clinical practice.

Oncologists can request ACE to evaluate treatments for potential inclusion on the positive list if there is sufficient clinical evidence to support their use. For example, rare cancers where the treatment is approved by a reputable overseas regulatory authority but not submitted for HSA's approval due to the small patient pool in Singapore.

Subsidised patients in the public sector can currently receive subsidy for clinically proven and cost-effective drugs. The Council is pleased to note that the Government has committed to extend subsidy to more cancer drug treatments in the public sector, as the prices of more cancer drugs drop to cost-effective levels. The Council welcomes the Government's move to play a larger role in supporting cancer drug treatments. As MediShield Life is a basic scheme designed for subsidised bills to keep premiums affordable,

the revised MediShield Life claim limits for cancer drug treatments should be set based on post-subsidy bills.

How are claim limits determined when more than one cancer drug is used in the treatment?

Most cancer drug treatment regimens involve the use of a high-cost drug and one or more low-cost drug. In these instances, patients will be able to claim up to the highest claim limit applicable for the individual drugs.

- E.g. Drug A has a claim limit of $3,000 per month and Drug B has a claim limit of $200 per month. Patients can claim up to $3,000 per month for their treatment regimen with A+B therapy.

Combination therapies involving more than one high-cost drug may be assigned a higher claim limit if they are clinically proven and cost-effective.

- E.g. Drug A has a claim limit of $3,000 per month and Drug C has a claim limit of $2,000 per month. If cancer drug combination A+C therapy is clinically proven and cost-effective, patients may claim up to $5,000 per month for combination A+C therapy.

b. **Create a new claim limit for cancer drug services.** This will provide better support to patients for other costs incurred to support their cancer drug treatments, such as scans, blood tests, genetic tests to guide precision therapy, doctor consultations and supportive drugs (e.g. for pain and nausea management).

14. To ease the transition for existing patients who are undergoing cancer drug treatments, the Committee recommends that patients be given sufficient lead time of at least six months before the recommendations take effect, so that they can complete their current course of treatment and switch their treatment plans where necessary.

Feedback from Focus Group Discussions

15. The Council held focus group discussions with key stakeholders to seek in-depth feedback on the recommendations. In total, close to 100 participants, including cancer patients on active treatment or in remission, public and private sector oncologists, public hospital staff, cancer support groups and grassroots leaders contributed their views.

16. In general, participants understood the need for the MediShield Life changes and welcomed the extension of subsidy and more granular MediShield Life claim limits for drugs on the positive list. Key concerns raised are summarised below:

a. Many participants asked for more transparency on the decision-making criteria and process for assessing drugs for inclusion on the positive list.

b. Some highlighted the importance of updating the positive list regularly and assessing appeals in a timely manner, to avoid delaying patients' treatment. A few questioned the need for drugs to have HSA approval before they can be included on the positive list, noting that there are drugs which are clinically proven and have become the standard of care in other countries, but are not submitted for HSA's approval.

c. Some cancer patients were concerned that the positive list would limit treatment options and patients would not be able to afford potentially life-saving treatments. Other participants felt that targeting coverage at only the clinically proven and cost-effective cancer drugs would help to keep healthcare costs sustainable.

d. Some participants welcomed negotiations with drug manufacturers to obtain better cancer drug prices but were unsure how successful these negotiations would be and were concerned about the impact on patient affordability if negotiations failed.

The Council's Responses

Criteria and Process for Determining the Positive List

17. The Council agrees that the criteria and process for assessing whether a particular cancer drug treatment should be included in the positive list should be transparent. The decision-making criteria and HTA process have been described in this report. More details can be found on ACE's website here.

Updating of the Positive List and Need for HSA Registration

18. We agree that it is essential for the positive list to keep up with medical advancements, especially in the field of cancer where treatments are evolving rapidly. The Council notes that MOH plans to update the list every four months. In addition, to minimise the time gap between HSA registration and inclusion on the positive list, ACE has set up a process in consultation with the pharmaceutical industry, to allow drug manufacturers to provide evidence submissions and price proposals for their cancer drugs to be assessed for listing in parallel with their assessment for regulatory approval by HSA. ACE also conducts regular horizon scans and works with drug manufacturers to identify new cancer treatments that are expected to enter the Singapore market, and will continuously review the positive list to keep up with medical advancement.

19. The Council notes that the standards of safety, quality and efficacy may differ across regulatory agencies, hence it is essential to await HSA's approval to ensure that the treatment has met Singapore's standards, before extending MediShield Life coverage. This is similarly practiced in other countries with developed healthcare systems. Nonetheless, the Committee has recommended that MOH provide a channel for oncologists to request ACE to evaluate treatments for potential inclusion on the positive list if there is sufficient clinical evidence to support their use.

Whether Price Negotiations Would be Successful

20. The Council is pleased to learn that MOH has negotiated with drug manufacturers over the past few months and achieved better prices for the public sector. The average price reduction achieved is about 30%, and over 60% have been achieved for some cancer drugs.

Additional Recommendation to Support Existing Treatments

21. The Council understands that the primary focus of cancer patients is to beat the cancer, and some are willing to try emerging therapies even if there is limited clinical evidence and regardless of the price. The recommendations could add to the stress and burden of patients and their families in this challenging journey. The Council is empathetic and hopes to minimise the impact on patients, especially those who are undergoing treatments.

22. Following discussions with MOH, we recommend that existing cancer drug treatments that are commonly used in the public sector but are not registered with HSA or are not cost-effective still be considered for inclusion on the MediShield Life positive list, even if they are not recommended for subsidy, provided there is a clinical need, the drug has been approved by reputable regulators overseas and it has not been rejected by HSA due to safety or efficacy concerns.

23. By making these allowances, the Council understands from MOH that about 90% of the existing cancer drug treatments used in the public sector will be included in the initial positive list. Among these, about two-thirds are clinically proven and cost-effective, and will therefore also be subsidised. The other one-third will be on the MediShield Life positive list but not subsidised, mostly because they are not cost-effective. In consultation with local oncologists, the remaining 10% of existing cancer drug treatments will not be included in the positive list mainly due to low clinical need – very few patients are using these treatments, and most are less effective in treating the cancer type than alternatives that are included in the positive list. A few of the treatments not included in the positive list are also not registered with HSA or reputable regulatory agencies overseas.

24. All cancer drug treatments on the positive list that are not subsidised will be assigned a MediShield Life claim limit that is assessed by MOH to be reasonable relative to the claim limit assigned to cost-effective alternatives with comparable health benefits. In many instances the claim limit will be lower than the current $3,000 per month. Patients are strongly encouraged to use subsidised alternatives, including generics and biosimilars, where available, to ensure affordability.

Figure 2: Changes in MediShield Life Coverage for Cancer Drug Treatments

	Current	Revised
Treatments that are Clinically Proven and Cost-Effective	MediShield Life claim limit of $3,000 per month	MediShield Life claim limit of between $200 and $9,600 per month, depending on treatment
Treatments that are Not Clinically Proven or Cost-Effective		Existing treatments commonly used in the public sector with clinical need and approved by HSA or reputable regulators overseas[#] will be assigned a reasonable MediShield Life claim limit, lower than $3,000 per month in many instances No MediShield Life claims for other treatments

[#] Note: The treatment must not have been rejected by HSA due to safety or efficacy concerns.

25. Patients should also be enabled to make informed choices on cancer drug treatments. The Council has asked MOH to look at how to better support patients in this, apart from publishing the positive list at least six months before the recommendations take effect. We are pleased to note that MOH is working on system enhancements to support financial counselling in public hospitals and looking into developing an online calculator so that patients can easily estimate their bill sizes.

Impact on Patients

26. The majority of subsidised Singaporean patients who use clinically proven and cost-effective cancer drugs will see an improvement in affordability through lower drug prices, availability of subsidy for more cancer drugs, and MediShield Life claim limits sized to cover the post-subsidy bills. Close to 90% of subsidised Singaporean patients who use clinically proven and cost-effective treatments will have their cancer drug bill fully covered by subsidy and MediShield Life, and their 10% co-insurance can be paid using MediSave.

27. On the other hand, patients who use cancer drugs which are not clinically proven or not cost-effective will incur higher out-of-pocket costs as they will not be supported by subsidy or MediShield Life (except for some of the existing cancer drug treatments that will retain some level of MediShield Life coverage). This is a necessary step to ensure the best use of MediShield Life premiums and avoid unsustainable premium increases due to the use of cancer treatments which are not clinically proven or not cost-effective.

28. The Council studied the impact of the recommendations by applying the lower cancer drug prices, subsidy extension and granular claim limits to bills. The detailed calculations for two illustrations can be found in Annex B.

Issues for Further Study

Integrated Shield Plan Coverage

29. Integrated Shield Plans (IPs) also play an important role in helping Singaporeans pay for their cancer drug treatments, particularly in the private sector. As close to 70% of Singapore Residents have IPs, and IPs currently provide as-charged coverage for outpatient cancer drug treatments, the Council recommends that MOH and IP insurers consider similar shifts to better manage the rapidly rising cancer drug spending, while allowing some flexibility for IP policyholders who are willing to pay more to obtain additional coverage for cancer drug treatments.

Price Negotiations for the Private Sector

30. Several members of the Cancer Drug Committee, as well as a few doctors and patients in the focus group discussions, suggested for price negotiations to be conducted at the national level, instead of just for the public sector. There would be more bargaining power with the higher market share, potentially leading to even lower cancer drug prices. It would also help private sector clinics which are unable to negotiate on their own to provide cancer drugs to patients at lower prices.

31. The Council agrees that there is merit in negotiating cancer drug prices at the national level. However, we recognise that further study will be needed. Unlike the public sector where drugs are procured centrally, there is a wide range of private sector entities with different contractual arrangements with pharmaceutical companies. There is also a range of business models and pricing arrangements that may be impacted in shifting to a national approach, and drug margins for the private sector may need to be standardised to ensure that savings from the price reductions are passed on to patients. We suggest that MOH study further with the private sector on the feasibility of price negotiations to be conducted at the national level.

17 August 2021

ANNEX A

Composition of MediShield Life Cancer Drug Committee

Name	Designation
Dr Tan Yew Oo ***Chairman***	Member, *MediShield Life Council* Specialist in Medical Oncology, *Icon Cancer Centre Farrer Park*
Dr Benjamin Mow	Medical Oncologist, *Mow Blood & Cancer Clinic*
Prof Chng Wee Joo	Director, *National University Cancer Institute Singapore*
Dr Choo Su Pin	Medical Oncologist, *Curie Oncology*
Dr Elaine Lim	President, *Singapore Society of Oncology*
Prof Goh Boon Cher	Senior Consultant, *National University Cancer Institute Singapore*
A/Prof Ravindran Kanesvaran	Deputy Head, *National Cancer Centre Singapore* Vice-Chairman, *Singapore Cancer Society*
Prof William Hwang	Medical Director, *National Cancer Centre Singapore*

ANNEX B

Illustrations of Improved Affordability using Actual Bills

Illustration 1

Patient: Middle-income Singaporean with breast cancer
Cancer Drug Regimen: One high-cost drug and one low-cost drug
Services: Consultation fees and lab investigations fees

	Cancer Drug Bill		Services Bill	
	Current	**Revised**	**Current**	**Revised**
Bill before Subsidy[1]	$3,130	$1,785	$410	No Change
Subsidy[2]	($10)	($890)	($220)	
MediShield Life[3]	($2,805)	($800)	($170)	
Net Amount Payable	**$315**	**$95**	**$20**	

[1] In future, price of high-cost drug will be reduced after negotiation with manufacturer
[2] Today, only the low-cost drug and services are subsidised. In future, the high-cost drug will also be subsidised after price reduction
[3] MediShield Life fully covers the post-subsidy bill subject to 10% co-insurance

Illustration 2

Patient: Middle-income Singaporean with kidney cancer
Cancer Drug Regimen: Very high-cost drugs
Services: Consumables, facility fees, consultation fees and lab investigations fees

	Cancer Drug Bill		Services Bill	
	Current	**Revised**	**Current**	**Revised**
Bill before Subsidy[1]	$22,570	$11,340	$1,170	$1,170
Subsidy[2]	($0)	($5,670)	($640)	($640)
MediShield Life[3]	($3,000)	($5,100)	($0)	($475)
Net Amount Payable	**$19,570**	**$570**	**$530**	**$55**

[1] In future, drug prices will be reduced after negotiation with manufacturers
[2] Today, there is no subsidy for the drugs as they are not cost-effective. In future, subsidy will be extended after the price reductions
[3]Today, MediShield Life payout is capped by the claim limit. In future, with higher claim limits for the very high cost drugs and a separate claim limit for cancer drug services, MediShield Life will fully cover the post-subsidy bill subject to 10% co-insurance