ABSTRACT
With the growing ageing population in Singapore, and longer life expectancies, more hospital and community resources will be required. Effective optimization of our resources to make the best use of the health dollar is mandatory. Appropriate integration of care, especially in those who have complex medical and social needs will be one way of making the best use of available resources and funds. The financing philosophy of Singapore's healthcare delivery system is based on: individual responsibility, and community support. To help Singaporeans to pay for their medical expenses, the government has put in place a financing framework, which consists of Medisave, Medishield, Medisave-approved Integrated Shield Plans and Medifund. To these have been added the Eldershield and IDAPE, as well as MOH subsidies for the needy in the PCPS, acute hospital services, intermediate care services, and long term care services. The quantum of subsidy for the needy is determined by means testing. Together, these frameworks form the 5 layers of support for healthcare financing in Singapore: First layer – Heavy government subsidy of up to 80% of the total health bill in acute public hospital wards. Second layer – Self funded or family funded financing e.g. savings and Medisave. Third layer – Insurance e.g., MediShield, ElderShield. Fourth layer – MOH subsidy for the needy – PCPS, Acute, ILTC services – the quantum of subsidy depends on means testing. Fifth layer – “Safety net” financing – Medifund.

Key words: hospital resources, community resources, financial policies, funding schemes, Singapore, means testing, Medisave, MediShield, Medifund, ElderShield, IDAPE

NEED FOR INTEGRATED CARE
Appropriate integration of care is needed in Singapore:
• The ageing population in Singapore, coupled with longer life expectancies and higher incidence of chronic disease, is shaping the way we deliver care. By 2030:
• Our resident population aged 65 and above is projected to triple from 300,000 today to 900,000.¹
• Coupled with our declining birth rate, one in five residents will be aged 65 and above, as compared to one in eleven residents today.²
• We must optimise our resources as the cost of acute care at tertiary hospitals is high and we cannot rely on acute care infrastructure to provide long-term care. For patients who no longer require acute care services but are unable to return home due to medical conditions, they may rely on Long-Term Care services to continue their treatment.
• As most of the elderly prefer to remain within the community and not be institutionalised, efficient and appropriate community services must be developed to support the elderly in the community.

NAVIGATING THE HEALTHCARE SYSTEM
How can we ensure that our patients transit seamlessly from one provider and one healthcare setting to another, and receive the appropriate level of care?

Appropriate integration of care is the way to go. The Agency for Integrated Care (AIC) was set up to oversee, coordinate and facilitate all efforts in integrating acute care and Long-Term Care services. To recap, AIC aims to achieve best health outcomes for our patients by:
• Working with partners and stakeholders in the healthcare industry to drive the development of a patient-centric and integrated care model in Singapore.
• Being the primary body to advise and guide patients and their families on the use of appropriate healthcare services.
• Helping the Professionals, ILTC partners and the general public to better navigate the healthcare system.
• Coordinating, managing and monitoring patient referrals to a greater range of Long-Term Care services.
• Playing an active role to support the growth and development of the Primary Care and Long-Term Care sectors, as critical partners in our healthcare system.

MEETING HEALTHCARE NEEDS
It is important to know the available resources to support a patient as he navigates the healthcare system.
He or she will need one or more of the following:
- Primary care and ancillary services.
- Hospital services – for acute care.
- Dental services.
- Intermediate & Long Term Care (ILTC).
  - Residential ILTC services – Hospital, Hospice, Nursing Home.
  - Community-based ILTC Services – Home based, centred based.
- Support services – Lab, pharmacy etc.
- Others – e.g. TCM.

**FINANCING PHILOSOPHY**
The financing philosophy of Singapore’s healthcare delivery system is based on the ‘Many Hands’ approach which includes:
- individual responsibility,
- family & community support, and
- Goverment subsidy.

**Co-payment and subsidy**
Patients are expected to co-pay part of their medical expenses and to pay more when they demand a higher level of service. Government subsidies help to keep basic healthcare affordable.

**Financing framework – The 3Ms and others**
To help Singaporeans to pay for their medical expenses, the government has put in place a financing framework, which consists of Medisave, MediShield, Medisave-approved Integrated Shield Plans and Medifund.

To these have been added the ElderShield and IDAPE, as well as MOH subsidies for the needy in the PCPS, and acute hospital services, intermediate care services, and long term care services. The quantum of subsidy is determined by means testing.

Together, these frameworks form the 5 layers of support for healthcare financing in Singapore.

- First layer – Heavy government subsidy of up to 80% of the total health bill in acute public hospital wards.
- Second layer – Self funded or family funded financing e.g. savings and Medisave.
- Third layer – Insurance e.g., MediShield, ElderShield.
- Fourth layer – MOH subsidy for the needy – PCPS, Acute, ILTC services – the quantum of subsidy depends on means testing.
- Fifth layer – “Safety net” financing – Medifund.

**SINGAPORE HEALTHCARE FINANCING SCHEMES**
The different financing schemes are described in some detail in this section of the paper.

**I. Medisave**
- Introduced in April 1984.
- A national healthcare savings scheme which helps individuals put aside part of their income depending on age group.
- From 1 July 2011, the Medisave contribution ceiling has been revised to $41,000.
- Pays for personal or immediate family’s hospitalization, day surgery and certain outpatient expenses, e.g. Chronic Disease Program.

**Raising the Medisave withdrawal limits for outpatient expenses under the new Medisave400**
To help Singaporeans better manage chronic diseases like diabetes, high blood pressure, lipid disorder and stroke in the outpatient setting, the Medisave withdrawal limit allowable for such outpatient treatments will be raised from $300 to $400 per Medisave account, per year. The scheme will be renamed Medisave400.

Medisave400 can also be tapped on for preventive mammogram screening and selected vaccinations. About 112,000 chronic disease patients will stand to benefit from the scheme.

**Use of Medisave for Outpatient treatment** – subject to withdrawal limits:
- Approved Drugs for HIV/AIDS up to $550 per month.
- Radiotherapy and Chemotherapy for cancer patients.
- Hyperbaric Oxygen Therapy up to $100 per treatment.
- Desferrioxamine Drug and Blood Transfusion for Thalassaemia up to $350 per month.
- Outpatient Intravenous Antibiotic Treatment.
- Rental of Devices for Long-Term Oxygen Therapy and Infant Continuous Positive Airway Pressure Therapy up to $75 per month.
- Renal Dialysis Treatment.
- Immuno-suppressants for patients after Organ Transplant up to $300 per month.
- Outpatient MRI, CT scans and other diagnostics for cancer patients.
- Chronic Diseases – the following conditions are covered under the CDMP programme.
  1. Diabetes.
  2. Hypertension.
  3. Lipid disorders.
  5. Asthma.
  6. Chronic Obstructive Pulmonary Disease (COPD).
  7. Schizophrenia.
  8. Major depressive disorders.
  9. Bipolar disorders – to be introduced soon.
 10. Dementia – to be introduced soon.
- Day Rehabilitation at approved day rehabilitation centres.

Use of Medisave for Inpatient treatment

Medisave can be used for the following charges:

- Daily ward charges.
- Doctor’s fees.
- Surgical operations including the use of operating theatres and
- Inpatient charges for medical treatment, investigations, medicines, rehabilitation services, medical supplies, implants and prostheses introduced during surgery.
- Approved day surgeries.
- Psychiatric treatment, up to $150 per day for the daily hospital charges including a maximum of $50 for the doctor’s daily attendance fees, subject to a maximum of $5000 a year.
- Approved community hospitals, up to $150 per day for the daily hospital charges before 1 June 2010 for $250 per day for daily hospital charges for admission on or after 1 June 2010.
- Approved convalescent hospitals, up to $50 a day for the daily hospital charges $25 per day after 1 June 2010, subject to a maximum of $1500 a year.

Point to note:

- For a hospitalisation claim, the patient must have stayed in the hospital for at least 8 hours (unless admitted for day surgery), or died within 8 hours of being hospitalised.

II. MediShield

- An affordable catastrophic medical insurance scheme for Singaporeans and PR to meet the cost of treatment for serious illnesses or prolonged hospitalisation within Singapore.
- MediShield covers hospitalisation expenses and certain approved outpatient treatments. Health screening procedures (for example, screening colonoscopy) are not claimable under MediShield. However, medical treatments that are required in relation to the health screening procedure can be covered under MediShield.
- MediShield is operated by the CPF Board.
- Opt-out basis.
- Covers Newborns since 1 December 2007 and school-going children from June 2008.
- last entry age is 75 years old.
- coverage up to 85 years old.
- Annual premium increases with age.
- Does not cover the treatment of serious pre-existing illness for which the patient has received medical treatment during the 12 months before the start of MediShield coverage. Certain treatments such as those for congenital anomalies, cosmetic surgery, delivery charges, mental illness and personality disorders are also not covered by MediShield.

III. ElderShield

- Launched in Sep 2002 by MOH as an affordable severe disability insurance scheme.
- Entry age: 40 (opt-out scheme).
- For Singaporeans and permanent residents.
- Provide basic financial protection and help defray out-of-pocket expenses.
- monthly cash payout for a limited period to help pay out-of-pocket expenses for the care of severely disabled persons.
- Eligibility for claim: unable to perform at least 3 of the 6 Activities of Daily Living (ADL) on your own. These activities are: Washing (Bath/Shower), Dressing, Feeding, Toileting, Mobility & Transferring.
- Three ElderShield insurers: Aviva Ltd, Great Eastern Life Assurance Co Ltd and NTUC Income Insurance Cooperative Ltd.
- From September 2007, all Singaporeans and Permanent Residents who turn 40 will be automatically covered under the new ElderShield plan.
- This improved severe disability insurance scheme will pay out $400 a month for up to 6 years or maximum potential payout of $28,800 - compared to the current payout of $300 a month for up to 5 years or maximum potential payout of $18,000. This is equivalent to a 60% or $10,800 increase in benefits.

IV. IDAPE (Interim Disability Assistance Programme for the Elderly (MOH,*))

- IDAPE is a government assistance scheme to provide financial help to needy and disabled elderly Singaporeans who are not eligible for ElderShield because of their age or pre-existing disabilities.
- Administered by NTUC Income.
- If eligible, IDAPE will provide $100 or $150 a month for a maximum period of 60 months.
- Claim requirement is the same as Elderhield.
- However, if you are aged 40 to 69 years as of 30 September 2002, your disability must occur before 30 September 2002.
- Monthly household per capita income is less than $1000.

IDAPE Claims

The claimable amounts are shown in Table 1.

Table 1. IDAPE CLAIMS

<table>
<thead>
<tr>
<th>Household Per Capita income per month</th>
<th>Claim Amount per month for a maximum period of 60 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>$700 and below</td>
<td>$150</td>
</tr>
<tr>
<td>$701 - $1000</td>
<td>$100</td>
</tr>
<tr>
<td>Above $1000</td>
<td>Not eligible for IDAPE</td>
</tr>
</tbody>
</table>

V. MOH subsidy - Means Testing

- For government funded institutions and services which provides step-down care services such as:
  - community hospitals.
HOSPITAL & COMMUNITY RESOURCES, FINANCIAL POLICIES & FUNDING SCHEMES

- nursing homes.
- hospices.
- day rehabilitation centres.
- home care services (home nursing & home medical).

- Amount of subsidy is determined by Means Testing.

What is Means Testing?
A way to focus limited resources for needy Singaporeans, by channeling it to those who need it most.

- implemented at the government-funded nursing homes since 2000.
- implemented at the other intermediate and long term care facilities since 2001.
- Lower-income patients receive more subsidies than the higher-income patients at these facilities.

Means testing for inpatient care at Restructured Hospitals

Rationale for Change:

• Patients who previously selected Class A or B1 may choose Class B2 or C wards.
• May crowd out the lower-income patients, who cannot afford higher class wards and have no choice but to seek treatment in subsidized wards.
• Means testing will help ensure that the lower-income still have access to subsidized wards and are not crowded out by those who could afford private care.

Implementation:

• Patients still retain their freedom to choose their ward class.
• They will still be heavily subsidized for B2 and C wards, but at different rates.
• Higher-income patients will be subsidized less than lower-income patients, but their bills will remain affordable.
• A higher salaried patient in Class B2 will still receive higher subsidy in B2, than if he opts for Class B1.

How is subsidy determined?
For those who are working:

• Subsidy will be based on their income level. The hospitals’ system will extract the income information from the CPF Board’s system and automatically calculate the subsidy level for each patient.
• For patients who are salaried employees, their income will be based on the average monthly income received over the last available 12-month period, including bonuses. It will not be based on just the last month’s salary.
• Voluntary contributions to CPF will not affect the income information obtained from CPF Board.

For those who are self-employed: their income will be based on either:
(a) the monthly income derived from the last available net trade income assessed by the Inland Revenue Authority of Singapore within the last 2 assessment years; or
(b) the income declared to the CPF Board or the income assumed under the CPF laws within the last 2 years.

• Means Test is valid for 12 months.
• Consent from patient needed to retrieve income information from CPF Board.
• If no consent by patient taken, patient’s hospital bill will be based on 65% subsidy for Class C (or 50% subsidy for Class B2).
• For patients who are unconscious or unable to give consent at admission:
  o The hospital staff will follow up with patients to obtain consent.
  o In the meantime, patient will be billed based on the lowest subsidy for the ward class chosen. His hospitalisation bill will be finalised based on the information from CPF Board after consent has been obtained from patient.

Special circumstances and appeals

1. Patients who have been retrenched will be able to receive the maximum subsidy. They will need to show proof that they have been retrenched by their employer.

   If they suffer a loss of income since their last admission, they can inform the hospital staff to retrieve their latest available income information from CPF Board. They will need to provide consent for the hospital staff to do so. Their subsidy level will be based on the latest information retrieved.

2. Patients who do not have an income will receive full subsidy (65% for Class B and 80% for Class C) unless they live in a property with AV exceeding $11,000. The latter will receive subsidy at 50% (at Class B2) at 65% (at Class C). The assessment will be based on the address as registered on their NRIC.

3. Children under the age of 21 will be assessed based on the AV of their residence. For those who have not obtained their NRIC, it will be based on the residence as stated in their Birth Certificate or NRIC of the parent.

4. Appeal
   - for Reassessment.
   - see MSW for additional assistance, e.g. Medifund.
Government Subsidy for Intermediate & Long-term Care (ILTC) Services

Criteria
- Singaporean (Pink IC) & PRs (Blue IC).
- Per capita gross income of $0 to $1400.
- Holder of PA and MFEC to be subsidised at 75%.
- Patients and/or spouse with private properties with annual values of $11,000 or below to be eligible for subsidies if they pass the income criterion.

Table 2. Subsidy Framework from 1st July 2011 - Residential Services

<table>
<thead>
<tr>
<th>Monthly Per Capita Subsidy for PR Subsidy for PR</th>
<th>Income Cut-off</th>
<th>Singapore Citizens From 1 July 2011</th>
<th>From 1 Jan 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ $360</td>
<td>75%</td>
<td>60%</td>
<td>55%</td>
</tr>
<tr>
<td>$361 - $550</td>
<td>70%</td>
<td>55%</td>
<td>50%</td>
</tr>
<tr>
<td>$551 - $750</td>
<td>60%</td>
<td>45%</td>
<td>40%</td>
</tr>
<tr>
<td>$751 - $950</td>
<td>50%</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>$951 - $1,150</td>
<td>40%</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>$1,151 - $1,300</td>
<td>30%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>$1,301 - $1,350</td>
<td>20%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>$1,351 - $1,400</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>&gt; $1,400</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 3. Subsidy Framework from 1st July 2011 - Community-based services

<table>
<thead>
<tr>
<th>Monthly Per Capita Income Cut-off</th>
<th>Subsidy for Singapore Citizens From 1 July 2011</th>
<th>Subsidy for PR From 1 Jan 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $360</td>
<td>75%</td>
<td>60%</td>
</tr>
<tr>
<td>$361 - $950</td>
<td>50%</td>
<td>35%</td>
</tr>
<tr>
<td>$951 - $1,400 (no change)</td>
<td>25%</td>
<td>12.5%</td>
</tr>
<tr>
<td>&gt; $1,400</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Community-based services consist of:
- Day Rehabilitation Centres.
- Dementia Day Care Centres.
- Ex Mentally Ill Day Rehabilitation.
- Hospice Home Medical.
- Hospice Home Nursing.
- Home Medical.
- Home Nursing.

VI. Primary Care Partnership Scheme (PCPS)

To provide convenient and affordable healthcare for needy elderly and disabled Singaporeans, the Ministry of Health (MOH) started the Primary Care Partnership Scheme (PCPS) so that such needy patients can receive subsidised treatment at General Practitioners (GPs) and dental clinics near their homes.

Clinics registered under PCPS have partnered with MOH to provide common outpatient medical treatments and basic dental services for this group of patients. The scheme will also cover treatment for 8 chronic diseases: Diabetes Mellitus (DM), Hypertension (High blood pressure), Lipid Disorders (e.g. High cholesterol), stroke, asthma, COPD, schizophrenia and major depression.

Expansion of the Primary Care Partnership Scheme for private GP and dental care

The following changes will be implemented from early 2012. See Table 4. Existing PCPS members can continue to benefit from the scheme until their card expires. Those who qualify under the current PCPS criteria and wish to apply for the scheme now can do so. Application forms are available at the CDCs and Community Centres.

The qualifying income for the Primary Care Partnership Scheme (PCPS) will be raised from the current $800 to $1,500 per capita monthly household income. At the same time, the age criteria for eligibility will be lowered from the current 65 years old to 40 years old.

There will be two benefit tiers under the expanded scheme.

With this change, 710,000 Singaporeans can receive subsidised care at participating PCPS GP clinics to better manage their chronic conditions. Successful PCPS applicants will receive a healthcare benefits card to identify them as PCPS members to the participating clinics.

There are currently more than 31,000 PCPS members, and 405 participating GP clinics and 170 participating dental clinics.

Table 4. New PCPS Tiers

<table>
<thead>
<tr>
<th>PCPS Tiers</th>
<th>Subsidy received per Acute</th>
<th>Chronic conditions under the CDMP</th>
<th>Dental</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Income equal or less than $ 900 Economically inactive households with AV less than or equal to $13000</td>
<td>$80 (previously $60) increase in annual cap</td>
<td>Up to $256.50</td>
<td></td>
</tr>
<tr>
<td>B. $901 to $1500</td>
<td>$50</td>
<td>Up to $170.50 For selected dental procedures</td>
<td></td>
</tr>
</tbody>
</table>

Eligibility for PCPS

To qualify for PCPS, you must be either:
- A Singapore citizen who is 65 years old or above, with a per capita monthly household income of $800 or below; or
- A Singapore citizen who is disabled i.e. unable to perform at least one of the 6 activities of daily living (ADLs) such as washing/bathing; feeding; toileting; transferring; dressing; and mobility and with a per capita monthly household income of $800 and below and; or
- On the Public Assistance (PA) Scheme.
How to apply for PCPS?
- Apply at any Community Centre/Club or Community Development Council (CDC) under People’s Association (PA).
- Application form to be submitted with the following supporting documents:
  - Applicant’s NRIC.
  - Copies of applicant’s family members’ NRIC.
  - Proof of applicant and family members’ income, such as latest pay slip, IRAS or CPF statements, or letters from employers.
  - Documentary proof of other sources of income such as rental payment from tenants etc., if any.

VII. Other Financial Schemes available - Senior Mobility Fund

The Senior’s Mobility Fund was launched to assist the elderly in getting basic mobility devices to achieve independence in the community. With the funding, the elderly can move around easier, perform necessary tasks like visiting the day rehabilitation centre or venture out of their house and socialise.

Who can apply for the Senior’s Mobility Fund (SMF)?
The applicant needs to fulfill all the eligibility criteria below:
- Singaporean Citizens (SC) aged 60 and above.
- Be means tested (those in the lower 30% income group i.e. <=$30,000).
- Undergo assessment to determine the need and type of mobility device (to be done by a qualified therapist).

What are the types of mobility devices covered under the Senior’s Mobility Fund?

**Low Need Devices**
- Foldable and adjustable Walking frame.
- Foldable and adjustable Walking frame with front wheels.
- Aluminium Walking frame (fixed).
- Reciprocal Walking frame.
- Wide-base Quad stick.
- Narrow-base Quad stick.
- Adjustable Walking stick.

**High Need Devices**
- Standard wheelchair (fixed armrest and footrest, heavy duty).
- Standard detachable wheelchair (detachable armrest and footrest, heavy duty).
- Wheelchair with elevating footplates (detachable armrest and footrest, height adjustable, heavy duty).
- Standard light-weight wheelchair (fixed armrest and footrest, light-weight).
- Standard detachable light-weight wheelchair (detachable armrest and footrest, light-weight).

What is the funding amount?

<table>
<thead>
<tr>
<th>Types of Devices</th>
<th>Funding Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Need Devices: Walking frame, quad-stick, walking stick</td>
<td>90% of actual cost or $135, whichever is lower</td>
</tr>
<tr>
<td>High Need Devices: Wheelchair</td>
<td>90% of actual cost or $180, whichever is lower</td>
</tr>
</tbody>
</table>

For enquiry: Please call AIC at 6603 6800 or email smf.mobility@aic.sg

VIII. Medifund

An endowment fund to help needy Singaporeans who are unable to afford the heavily subsidized charges despite Medisave and Medishield.

- Established in 1993 with an initial capital of S$200 million.
- Interest is used to finance the needy.
- Last resort, not an entitlement.
- The individual will have to apply for help, and the quantum of aid he receives will depend on his circumstances.

Eligibility criteria for Medifund
- Singapore citizens (pink IC).
- For subsidised (B2 and C) medical treatment in approved facilities and medical institutions.
- Medishield of patient, and Medisave of patient and immediate family members to be utilised first where applicable.
- PRs and non-Singaporean PA (recipients of Silver Jubilee Fund) are not eligible.
- Pt without identification papers or with old papers issued by the State of Singapore and are on the hospitals’ permanent waiver list are to be treated as Singaporeans for purpose of the Medifund scheme.
- Burnt-out cases from Woodbridge with no documentary evidence of nationality can apply and be accorded automatic full Medifund assistance.
- Amount of assistance is based on
  - financial circumstances.
  - bill size.

Assessment conducted by Medical Social Workers.

No need to insist on depleting Medisave first
- Although Medifund is intended to be a help of last resort and applicants should first use up his Medisave and the Medisave of his immediate family members (defined as spouse, children, and parents of dependant children) before the remaining liability could be considered for full or partial help from Medifund, there is no need to insist that
  - The children first use up their Medisave.
  - If the children themselves are elderly with their own family to support, or
  - If children themselves are afflicted with illness which require prolonged treatment, e.g., renal dialysis.
  - The patients first use up their Medisave.
  - If the patients themselves are aged.
CONCLUSIONS
Appropriate integration of care, especially in those who have complex medical and social needs will be one way of making the best use of available resources and funds. To help Singaporeans to pay for their medical expenses, the government has put in place a financing framework, which consists of Medisave, MediShield, Medisave-approved Integrated Shield Plans and Medifund. To these have been added the Eldershield and IDAPE, as well as MOH subsidies for the needy in the PCPS, acute hospital services, intermediate care services, and long term care services.

References
Useful websites on healthcare financing in Singapore
• www.moh.gov.sg
• www.cpf.gov.sg
• www.aic.sg

LEARNING POINTS
• The financing philosophy of Singapore’s healthcare delivery system is based on: individual responsibility, and community support.
• To help Singaporeans to pay for their medical expenses, the government has put in place a financing framework, which consists of Medisave, MediShield, Medisave-approved Integrated Shield Plans and Medifund.
• To these have been added the Eldershield and IDAPE, as well as MOH subsidies for the needy in the PCPS, acute hospital services, intermediate care services, and long term care services.
• Together, these frameworks form the 5 layers of support for healthcare financing in Singapore.