



Financial Aspects Of A Dialysis Facility

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Disclosure

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Changing Trend In Dialysis Delivery

- Principles of dialysis have changed little
- There is clearly a downhill course for dialysis patients (average survival 5-10 years)
- Dialysis care has improved gradually over the decades
- Unadjusted mortality rates dropped nearly 36% (2001-2013, USRDS)
- Dialysis is becoming more expensive
- Dialysis delivery is now more systematic, away from hospital-based
- Corporatization of dialysis delivery is becoming dominant



Why Set Up A Dialysis Centre?

- A profitable business opportunity in medical practice
- Market forecast shows positive long term outlook and continuing future growth
- Explosive increase in number of CKD patients (DM, aging, hypertension and others)
- Low renal transplant rates
- Attractive reimbursements from health insurance (national or private)
- No shortage of CKD stage 5 patients!

Estimated number of people with diabetes worldwide and per region in 2015 and 2040
(20-79 years)

North America and
Caribbean

2015 44.3 million
2040 60.5 million

Europe

2015 59.8 million
2040 71.1 million

Middle East and
North Africa

2015 35.4 million
2040 72.1 million

Western Pacific

2015 153.2 million
2040 214.8 million

South East
Asia

2015 78.3 million
2040 140.2 million

South and
Central America

2015 29.6 million
2040 48.8 million

Africa

2015 14.2 million
2040 34.2 million

World

2015 415 million
2040 642 million

Prevalence of Diabetes around the world

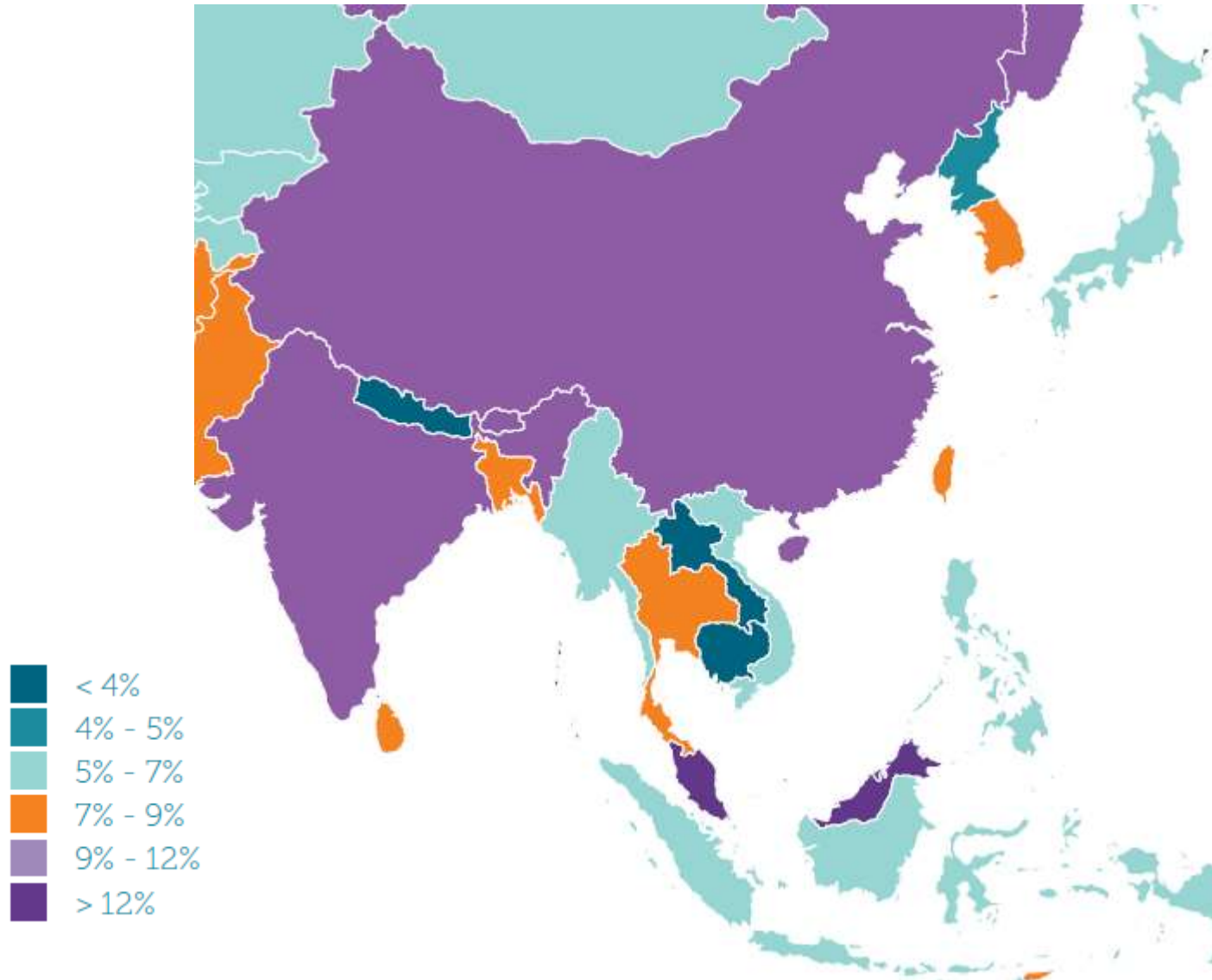
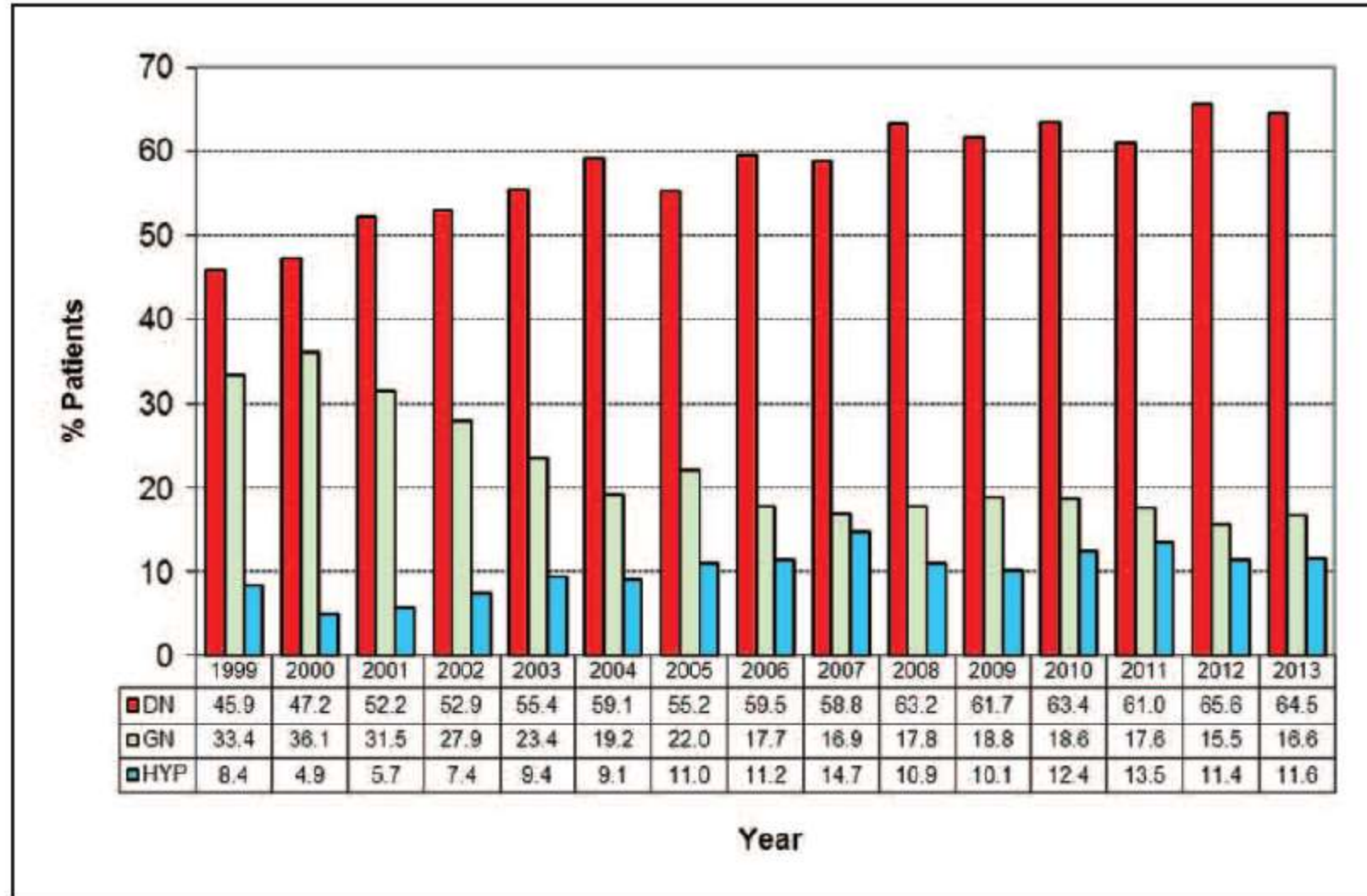


Figure 8.2.1.1: INCIDENT DIALYSIS PATIENTS BY AETIOLOGY (DIABETIC NEPHROPATHY, PRIMARY GLOMERULONEPHRITIS AND HYPERTENSION / RENOVASCULAR DISEASE), 1999 – 2013



Stock and Flow 2012-2016	2012	2013	2014	2015	2016
New dialysis patients	921	976	1041	1090	1166
New transplants (done locally and overseas)	64	88	76	90	93
Dialysis deaths	654	773	764	799	795
Transplant deaths	30	39	32	35	26
Dialysis as at 31 st December	5244	5520	5878	6230	6666
Functioning grafts as at 31 st December	1422	1451	1454	1474	1500

% of Hemodialysis Patients and Dialysis Centres

Dialysis Centres	No of Patients	% of Patients
Nonprofit	3729	64
Private	2114	36

Opening A Dialysis Centre....

- An accredited nephrologist will take the centre stage
- Perform a feasibility study e.g. breakeven patient load, machine leasing to minimize start up cost, an acquisition or ? franchising option
- Study the market – outside consultant
- Check out competitors



How To Start A Dialysis Centre?

- Assemble a team of a nephrologist, dialysis trained nursing staff, receptionist/administrative assistant and a cleaner
- Find a suitable location and usually rent the space
- Ability to fund and staff should be the key size determinants of the facility (8-15 stations)
- Apply for funding to underwrite the dialysis centre start-up (banks, investors) or self-funding
- Purchase supplies and equipment (service contract)
- Apply for an operating licence under the nephrologist in charge from MOH (issuance based on audit findings)

Facilities



4 HOUR TREATMENT TIME,
THRICE WEEKLY



EQUIPPED WITH TV, WIFI,
COMPUTERS, AIR
CONDITIONERS



COMFORTABLE AND
FUNCTIONAL CHAIRS,
BEDS



TOILET

Equipment



HEMODIALYSIS
MACHINES



WATER TREATMENT
SYSTEM



INSTRUMENT
STERILIZERS



STETOSCOPES



BLOOD PRESSURE
APPARATUS



BODY
COMPOSITION
MONITOR

Financial Metrics

- Start-up cost – renovation, equipment (HD machines, RO system), rental deposit
- Revenue - treatment fees, medications sold
- Operating expenses
 - Staff salaries, consultants' fees
 - Rent paid on business property
 - Cost of goods
 - Taxes and licence
 - Bad debts
 - Depreciation, amortization
 - Electricity and water consumption
 - Telephone & communication costs



Incomes For The Dialysis Centre

- Dialysis treatment fees (stable)
- Laboratory tests
- Erythropoietin stimulating agents
- Medications (intravenous antibiotics)
- Total parenteral nutrition



Dialysis Facility Statistics

- 100 patients dialyzing three times per week
- 13 treatments per month per patients (average)
- 1300 dialyses per month
- \$200.00 per treatment
- \$260,000 expected total monthly revenue
- 234,000 (or 90% of monthly revenue) cost of operations

Statement of Cash Flow

	Year 1	Year 2
Revenues		6,837,000
Operating Expenses	202,150	7,310,653
Net Income	(202,150)	(473,653)
Depreciation		13,700
Net Cash Flow	(202,150)	(459,953)

How To Improve Cost Effectiveness Of Dialysis Centres?

- Improve productivity
- Digitise medical records, dialysis data, dialysis prescriptions, billings, insurance claims etc (TDMS)
- Optimize number of dialysis stations to achieve effective staff deployment
- Optimize adequacy of dialysis (treatment frequency, Q_b , dialyser size, HDF)
- Achieve better treatment outcomes (less hospital admissions, improved survival)



A Big Challenge To Improve Dialysis Care

To deliver quality and affordable dialysis!





Don't Forget...

- Keep patient welfare at the forefront of your business model!
- Convenience is the name of the game for today's dialysis patients
- Create a competitive edge for the centre

How To Achieve Better Clinical Outcomes

- Adopt best practice in dialysis care
- Goal setting (KPIs)
- In-house continuous medical and nursing education
- Regular audits (internal)
- Accreditation (e.g. Australian Council on Healthcare Standards)



Headwinds To Setting Up A Dialysis Facility

- Competitive business
- High start up cost
- Manpower shortage (limits expansion plans)
- High rental cost
- Stringent regulatory requirements in licensing (staff qualifications, regular audits)
- Voluntary welfare organisations are major providers and charge less
- Competitive private dialysis market
 - Ownership by multinational healthcare companies, nephrologists or nephrologists/businessmen partnership

Negative Perceptions Of Private Dialysis Facilities



- Profit orientated
- Consumables used are not the most optimal due to profit consideration
- Inadequate dialysis especially for those receiving twice weekly treatments
- Non-profit centres usually insist on thrice weekly dialysis
- Much higher patient mortality rates (19-24%) than non-profit dialysis centres in the USA Health Services Research 2010
- “Less stringent” infection control practice
- Less emphasis on clinical outcomes

What Are The Options For A Nephrologist Contemplating Setting Up A Dialysis Facility?

- Self-owned
- Joint venture with fellow nephrologists
- Joint venture with financial investors
- Paid consultant to a multinational dialysis company
- Salaried consultant to a Voluntary Welfare Organization



Conclusion

- Explosive increase in CKD5 patients (DM, old age, hypertension)
- Dialysis delivery is a growing and profitable business
- Dialysis is expensive and limits accessibility in many countries
- High operating cost and staff shortage are major constraints in expanding dialysis facilities
- Improving dialysis care has been achieved over the years
- Delivery of quality and affordable dialysis remains a challenge!

