SITUATIONAL ANALYSIS and PRIORITY SETTING

Renal Disease Control Program (ReDCoP)
DOH- CAR

I. DATA GATHERING:

OBJECTIVE:

The National Objectives for Health 2011-2016 of the program are to:

1. Reduce deaths (mortality rate) from kidney diseases to less than 10 per 100,000 population from a baseline of 13 deaths per 100,000 population in 2005
2. Decrease the incidence of End Stage Renal Disease (ESRD) from 8.39 to less than 4 per 100,000 population (Baseline: 2008= 8.39/100,000 population)

PROGRAM STATUS

A. INCIDENCE RATE OF ESRD, 2008-2014, CAR

The incidence rate (IR) of ESRD in CAR based on the number of all the new patients in the Hemodialysis Units (HDUs) in CAR has decreased from 2008 (11.4) to 2009 (9.3) but from 2010 up to 2014, it has been increasing from 13.8 in 2008 to 32.2 in 2014 (Figure 1). The picture holds true for patients coming from CAR only with an incidence rate of 9.2 in 2008 to 7.5 in 2009 but increased from 2010 with an IR of 11.5 to 2014 with an IR of 25.9 (Figure 2).

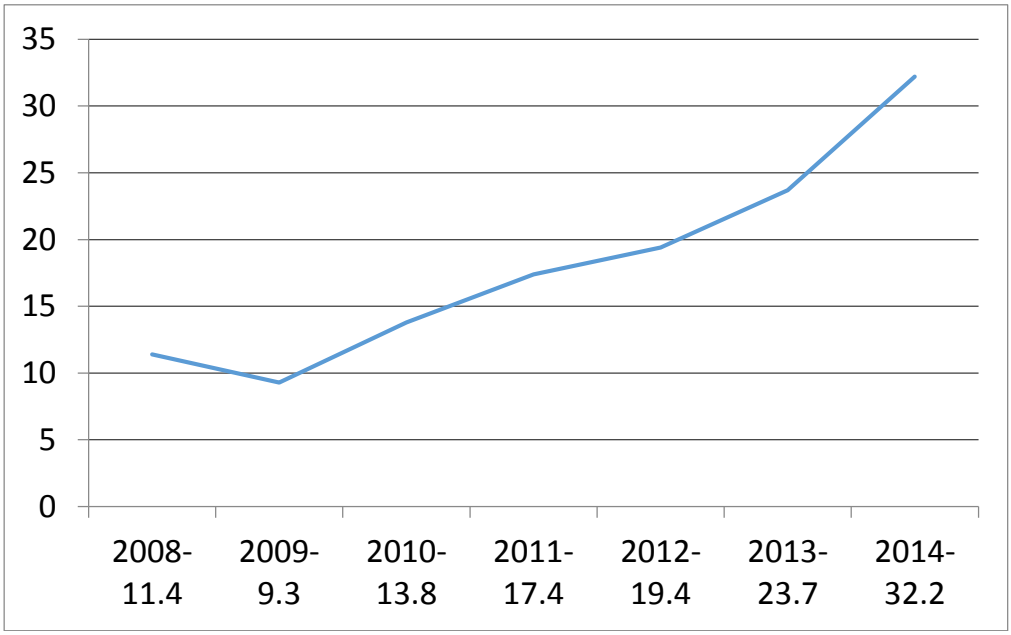

Figure 1 – ESRD Incidence Rate, All HDU Patients, CAR, 2008-2014

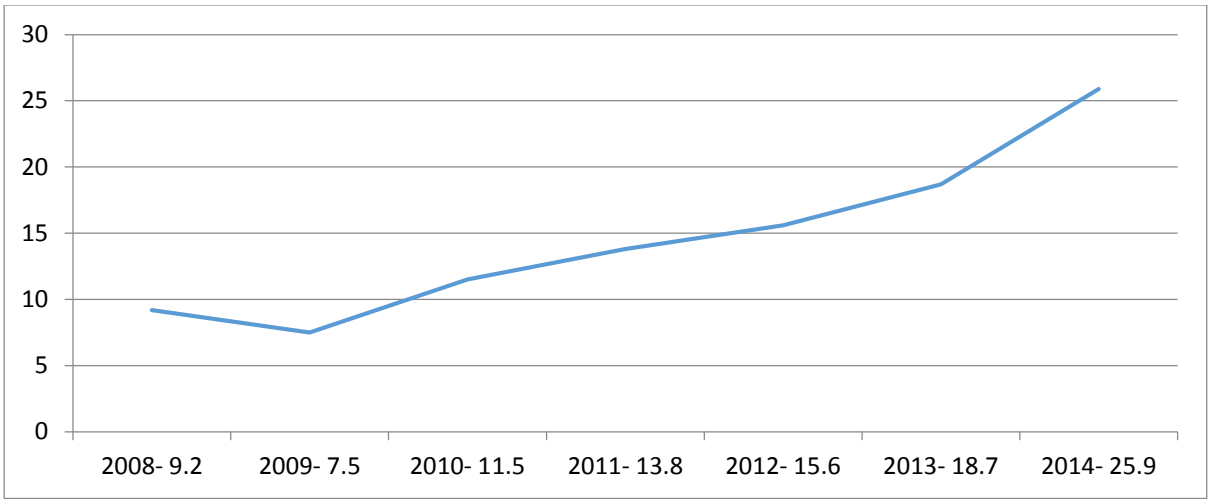

Figure 2- ESRD Incidence Rate, Patients from CAR only, CAR, 2008-2014

B. NUMBER OF NEW CASES OF PATIENTS UNDERGOING HEMODIALYSIS IN CAR, 2008-2014

In the Cordillera Administrative Region (CAR), a total of 2,162 new cases have been monitored in the different hemodialysis units in the region from 2008 to 2014 (Figure 3). Of the 2,162 new cases, 80.2% are from CAR (1,735). The other 19.8% (427) are from other regions, particularly Region I.

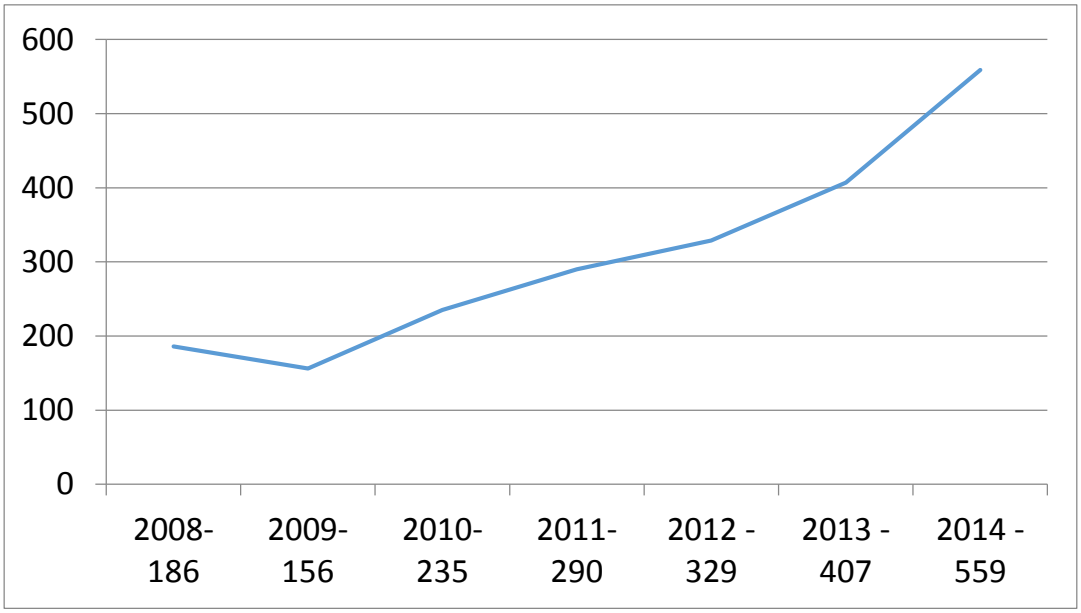

Figure 3- Annual New Cases of Patients Undergoing Hemodialysis, CAR, 2008-2014

C. NUMBER OF ANNUAL NEW CASES PER PROVINCE, CAR, 2008-2014

The hemodialysis units in CAR cater not only to patients in the region but also to patients from other regions as seen in Table 1. The same table shows also the municipality from where most of the patients undergoing hemodialysis come from in CAR.

Table 1- Number of HDU Patients per Province, CAR, 2008-2014

Province	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**Total**	**Municipality with the most # of cases**
Abra	17	21	17	24	13	29	37	158	Bangued (49= 31%)
Apayao	0	1	0	1	1	1	1	5	Conner (5= 100%)
Baguio City	74	61	89	104	113	159	161	761	Baguio City (761=100%)
Benguet	47	39	64	82	103	100	145	580	La Trinidad (220= 38%)
Ifugao	0	1	5	4	4	4	11	29	Lagawe (8= 27.5%)
Kalinga	1	1	1	2	7	3	37	52	Tabuk City (34= 65%)
Mt. Prov.	11	1	19	13	23	25	58	150	Bontoc (54= 36%)
Total (CAR)	**150**	**125**	**195**	**230**	**264**	**321**	**450**	**1,735**	
Incidence Rate (CAR only)	**9.2**	**7.5**	**11.5**	**13.8**	**15.6**	**18.7**	**25.9**		
Others:									
Region I	29	26	37	44	56	66	87	345	
Region II	3	4	3	9	4	12	11	46	
Other regions	4	1	0	7	5	8	11	36	
TOTAL	186	156	235	290	329	407	559	2,162	
Incidence Rate (All patients)	11.4	9.3	13.8	17.4	19.4	23.7	32.2		

D. TOP THREE CAUSES OF ESRD, CAR, 2OO8-2014

ESRD is caused by a primary renal or systemic disease. The top three diseases that cause ESRD in the country and in CAR (Figure 4) are still Diabetic nephropathy, hypertensive nephrosclerosis, and glomerulonephritis (GN).

In 2008, glomerulonephritis (GN) topped the cause of ESRD in CAR with 59 cases. It was followed by Diabetic nephropathy then Hypertensive nephrosclerosis with 50 and 45 cases, respectively. **In 2009**, Diabetic nephropathy was the number one cause with 57 cases, followed by Hypertensive nephrosclerosis then GN with 53 and 40 cases, respectively. **In 2010**, Hypertensive nephrosclerosis caused 81 cases of ESRD, followed by 73 cases of Diabetic

nephropathy and 60 cases of GN. **In 2011**, Hypertensive nephrosclerosis caused 111 cases of ESRD, followed by 75 cases of Diabetic nephropathy then by 75 cases of GN. **In 2012**, there were 160 cases due to Hypertensive nephroschlerosis, 83 cases due to Diabetic nephropathy, and 44 cases due to GN. **In 2013**, there were 144 cases each for both Hypertensive nephrosclerosis and Diabetes nephropathy followed by 42 cases of GN then 40 cases of Chronic Pyelonephritis (CPN). **In 2014**, there were 209 cases of Hypertensive nephrosclerosis followed by 187 cases of Diabetic nephropathy, 45 cases of CPN and 43 cases of GN.

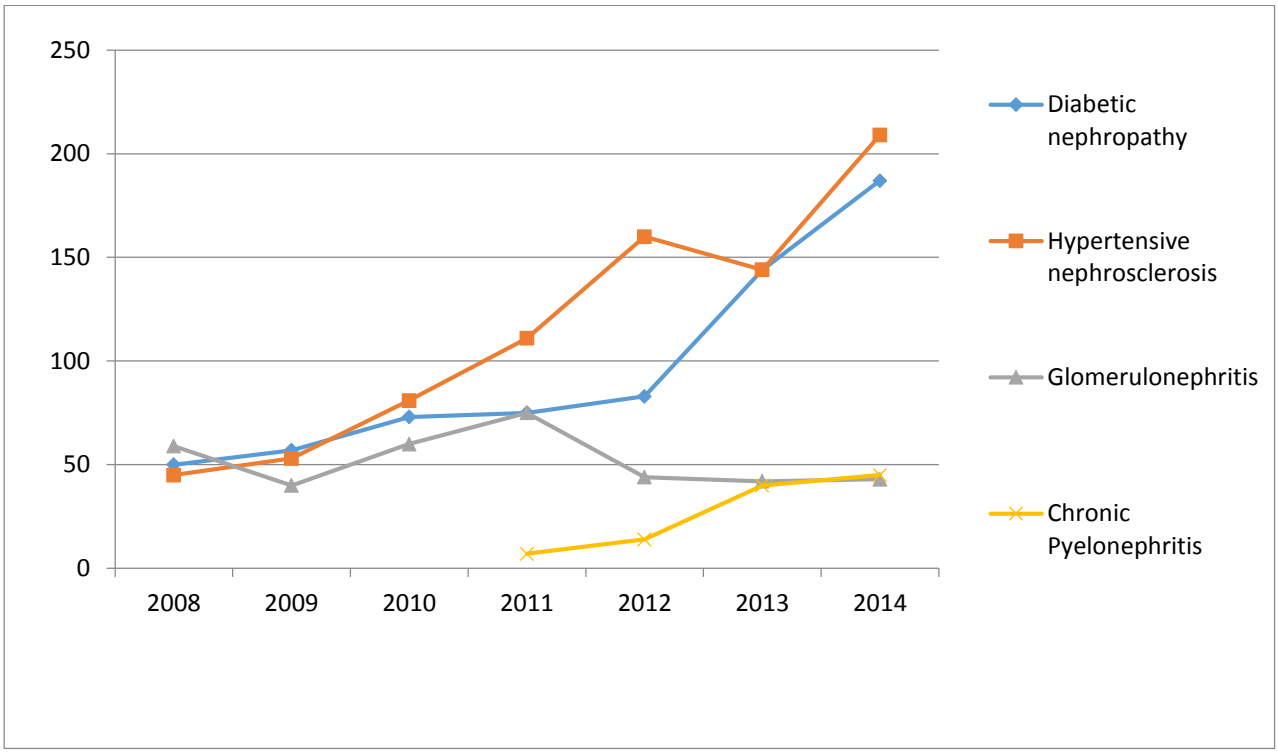

Figure 4. Top 3 causes of ESRD, 2008-2014, CAR

II. PROBLEM ANALYSIS

a. The data is not a true picture of CAR because:
   a1. There are no data from provinces without hemodialysis units like Apayao and Ifugao
   a2. Those accessing hemodialysis services from other regions are not in the picture, like the patients from Kalinga and Ifugao going to Region II and those from Abra and Apayao going to Region I
b. Budget being given from national ReDCoP office is only for mailing and communications (P 10,000.00)
c. Top two causes for seeking hemodialysis services are lifestyle-related diseases, namely Hypertension and Diabetes Mellitus

III. OPPORTUNITIES AND THREATS (external), STRENGTH AND WEAKNESSES

(internal) ANALYSIS

Strengths	Weaknesses	Opportunities	Threats
Presence of Regional and Assistant Regional Program Coordinators	Budget being downloaded for the program from the national ReDCoP office is just for mailing and communications	Presence of Non-communicable Diseases Prevention and Control Program	Abra, Kalinga and Mountain Province have one hemodialysis unit each
Presence of ReDCoP Speakers Bureau (Dr. Alma Suclad for CAR)	DOH Administrative Order 2009-0012 mandate to gather data from hemodialysis units	Presence of NCD program coordinator and Health Education and Promotion Office (HEPO) staff	No hemodialysis units in Apayao and Ifugao
Plan of the program to make the hemodialysis units submit their data directly to the national ReDCoP office through an online registry system	Video IECs produced by the national ReDCoP office that is being presented during PIRs are not seen on the media	Presence of people's craze for Zumba, Fun Runs/ Walks	Presence of numerous Fastfood companies
		Presence of Red Orchid Award	Presence of Tobacco industry
		Presence of Outstanding Healthy Lifestyle Advocacy Awards (OHLAA)	Presence of Alcoholic beverages companies
		Philippine Information Agency (PIA) provides Technical Assistance (information, communication	Presence of high technology gadgets and high technology-related games

		and advocacy assistance) to the ReDCoP Program	
		Presence of hemodialysis units in neighboring regions	Largescale multimedia advertisements of fastfood, gadgets, tobacco and alcoholic beverages
			PhilHealth increased the coverage on the number of days but decreased the financial coverage to patients undergoing hemodialysis

IV. SEGMENTATION TECHNIQUE

Additional data gathered from hemodialysis units in the region are as follows:

A. NUMBER OF ANNUAL NEW CASES BY AGE (≤19 y/o and ≥20 y/o)

Of the total 2,162 new patients undergoing hemodialysis from year 2008 to year 2014, there were 2,118 (98%) patients aged ≥ 20 year-old while 47 (2%) are ≤ 19 year-old as seen in Tables 2a and 2b. The youngest case in the list is an 8 year-old child from La Union seen in 2013 at BHGMC due to Lowe's Syndrome. The next youngest is a 9 year-old child from Pangasinan seen in 2010 at BGHMC due to glomerulonephritis, then followed by a 10 year-old from Baguio City seen in 2013 at BGHMC due to chronic pyelonephritis and followed by a 13 year-old from Baguio City seen in 2010 at BGHMC due to glomerulonephritis..

Table 2a: Number of annual new cases by age ≤19 y/o and ≥20 y/o, 2008-2010 CAR

Province/ City	2008			2009			2010		
	≤ 19	≥ 20	Total	≤ 19	≥ 20	Total	≤ 19	≥ 20	Total
Abra	0	17	17	2	19	21	1	16	17
Apayao	0	0	0	0	1	1	0	0	0
Baguio City	0	74	74	2	59	61	4	85	89
Benguet	2	45	47	0	39	39	4	60	64
Ifugao	0	0	0	0	1	1	1	4	5
Kalinga	0	1	1	0	1	1	0	1	1
Mt. Province	0	11	11	0	1	1	1	18	19

Region I	0	29	29	1	25	26	1	36	37
Region II	1	2	3	0	4	4	0	3	3
Other Regions	0	4	4	0	1	1	0	0	0
TOTAL	3 (2%)	183 (98%)	**186**	5 (3%)	151 (97%)	**156**	12 (5%)	223 (95%)	**235**

Table 2b: Number of annual new cases by age ≤19 y/o and ≥20 y/o, 2011-2014, CAR

Province/ City	2011			2012			2013			2014		
	≤ 19	≥20	Tot	≤ 19	≥20	Tot	≤ 19	≥20	Tot	≤ 19	≥20	Tot
Abra	0	24	24	0	13	13	0	29	29	1	36	37
Apayao	0	1	1	0	1	1	0	1	1	0	1	1
Baguio City	2	102	104	0	113	113	4	155	159	2	159	161
Benguet	0	82	82	5	98	103	2	98	100	2	143	145
Ifugao	0	4	4	0	4	4	0	4	4	0	11	11
Kalinga	1	1	2	0	7	7	0	3	3	1	36	37
Mt. Prov.	0	13	13	2	21	23	0	25	25	0	58	58
Region I	1	43	44	1	55	56	2	64	66	0	87	87
Region II	0	9	9	0	4	4	1	11	12	0	11	11
Others	0	7	7	0	5	5	0	8	8	0	11	11
Total	4 (1%)	286 (99 %)	**290**	8 (2%)	321 (98 %)	**329**	9 (2%)	398 (98 %)	**407**	6 (1%)	553 (99 %)	**559**

B. NUMBER OF ANNUAL NEW CASES BY SEX

From year 2008 to year 2014, as seen in Table 3, of the 2,162 new patients catered to in the different hemodialysis units, 1,258 (58%) were males while 904 (42%) were females.

Table 3 Number of Annual New Cases by Sex, 2008-2011, CAR

Year	Male		Female		Total
	No.	%	No.	%	
2008	110	59%	76	41%	186
2009	87	56%	69	44%	156
2010	146	62%	89	38%	235
2011	176	61%	114	39%	290
2012	173	53%	156	47%	329

2013	231	57%	176	43%	407
2014	335	60%	224	40%	559
Total	1,258	58%	904	42%	2,162

V. PRIORITIZATION OF CONCERNS (based on numbers I to IV)

a. By population: Baguio City followed by La Trinidad, Benguet (based on Table 1)

b. By sex: Male (based on Table 3)

c. By age: 20 year-old and above (Based on Tables 2a and 2b)

Note: Based on Tables 2a and 2b, 20 year-old and above population should be the target priority but since right attitude towards healthy lifestyle is best if started early in life, then those below 20 year-old are also being targeted in Non-communicable Diseases Prevention and Control Program activities.

Prepared by:

SHELLY M. ARAL, MD
Program Coordinator

Noted by:

MA. LUISA L. PARAN, MD, MHA
Chief- LHSD

AMELITA M. PANGILINAN, MD, MPH, CESO IV
Director III
Officer-in-Charge