

The “UNRISK Study and Program” 2017

Profile of hospital malnutrition and
clinical nutrition practice in the Philippines

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Disclosure

- Software development by PhilSPEN* technical committee and Abbott Nutrition (Philippines)
- Funding for software development and distribution to selected participant hospitals including personnel training and maintenance by Abbott Nutrition (Philippines)

* PhilSPEN: Philippine Society of Parenteral and Enteral Nutrition

Background

- 1995 – first report on prevalence of hospital malnutrition in the Philippines
 - St. Luke’s Medical Center ¹
- 2015 (20 years after) – first survey to identify the factors leading to hospital malnutrition in the Philippines, “The Unrisk Study” ²
 - Abbott Nutrition (Philippines)
 - Philippine Society of Parenteral and Enteral Nutrition
- 2017 – survey on prevalence of malnutrition and hospital clinical nutrition practice, “The Unrisk Program”
 - Abbott Nutrition (Philippines)
 - Philippine Society of Parenteral and Enteral Nutrition (president)

1. Fernando et al. http://philspenonlinejournal.com/1_Fernando_Llido_et_al.pdf

2. The Unrisk Study. http://philspenonlinejournal.com/POJ_0022.html

Objectives

- To update on the prevalence of hospital malnutrition in the Philippines including the “nutritionally high risk population”
- To show the profile on clinical nutrition practice specifically nutrition given to the patient:
 - Regular diet
 - Oral nutrition supplementation
 - Tube feeding practice
 - Disease specific formulas
 - Parenteral nutrition practice

Methodology

- Software development

Nutrition Management Systems

New Patient	View Patient Database	
Admitted Patient	Nutrition Surveillance By Floor - All Admissions	Nutrition Surveillance By Floor - Selected Dates
	Report - Nutrition Surveillance	Report - Nutrition Surveillance Selected Dates
	Nutrition Surveillance New Admissions	
	List of AMD and patients with nutristatus	List of AMD and patient nutristatus, Selected Dates
	Report - List of AMD and Patient NutriStatus	Report - List of AMD and Patient Nutristatus, Selected Dates
	Summary Report: BMI and Nutrition Interention (IN-PATIENTS)	Summary Rpt: BMI and Nutrition Intervention (In-Patient), Selected Dates
	Summary Report: SGA and Nutrition Intervention (IN PATIENTS)	Summary Rpt: SGA and Nutrition Intervention (In-Patient), Selected Dates
List of Discharged Patients	Discharged Patients	Discharged patients on selected dates - Reporting
All Patients Data	Summary Report: BMI and Type of Feeding (ALL PATIENTS)	Data Deployment to Center
	Summary Report: SGA and Nutrition Intervention - (ALL PATIENTS)	1 - Mark Hospital Name
		2 - Send Report Data
		3 - Logbook

Admitted Patient Data - Nutrition Screening and Assessment READ ONLY

PIN	<input type="text" value="12346"/>	PATCODE	<input type="text" value="2"/>
DATE ADMISSION	<input type="text" value="12/12/2016"/>	Date format: day/month/year - Ex: 2/dec/2016 or 2/12/2016	
LAST NAME	<input type="text" value="Manalili"/>	ENTER LASTNAME FIRST LETTER	<input type="text" value="M"/>
FIRSTNAME	<input type="text" value="Juan"/>	ENTER FIRSTNAME FIRST LETTER	<input type="text" value="J"/>
MIDDLE NAME	<input type="text" value="Cruz"/>		
AGE (YEAR)	<input type="text" value="72"/>		
BIRTHDAY	<input type="text" value="05/02/1944"/>	CALCULATED AGE (YEAR)	<input type="text" value="72.9"/>
SEX	<input type="text" value="Male"/>		
ATTENDING MD	<input type="text" value="Dr. Jeff Inciong"/>		
HEIGHT METERS	<input type="text" value="1.55"/>	BMI	<input type="text" value="27.06"/>
WEIGHT KG	<input type="text" value="65"/>	BMI_STATUS	<input type="text" value="Overweight (25.5 - 29.9)"/>
WEIGHT DATATYPE	<input type="text" value="Actual"/>	WEIGHT LOSS %	<input type="text" value="0"/>
UNIT	<input type="text" value="Private Room (3)"/>	<input type="checkbox"/> NUTRITION_RISK	
ROOM NUMBER	<input type="text" value="B01"/>	<input type="checkbox"/> HIGH RISK	
HOSPITAL STATUS	<input type="text" value="Admitted"/>		
DATE DISCHARGE	<input type="text"/>	Date format: day/month/year - Ex: 2/dec/2016 or 2/12/2016	
DISCHARGE_STATUS	<input type="text"/>		

NUTRITION SCREENING - Click "Yes" to each of the following questions

- Is BMI below 18.5 or 30 and above?
- Has the patient lost weight within the last three (3) months?
- Did the patient have a reduced dietary intake in the last week?
- Is the patient severely ill (e.g. in intensive therapy)?

If there is one (1) "Yes" in the questions, click the NUTRITION RISK "Yes"

NUTRITION_RISK

[Open modSGA Form](#)

[Edit Admitted Patient Data Form](#)

[Intervention/Progress Notes](#)

Nutritional Assessment (modified SGA) - ADD/EDIT Form

SGA_ID	<input type="text" value="6"/>		
PatCode	<input type="text" value="4"/>	Name	<input type="text" value="Rosal, Fatima"/>
Wt_Loss	<input type="text" value=" < 10% of usual weight"/>	<input type="text" value="Moderate"/>	<input type="text" value="Moderate"/>
Food_intake	<input type="text" value="Suboptimal"/>	<input type="text" value="Moderate"/>	<input type="text" value="Moderate"/>
Gastro_symptoms	<input type="text" value="Anorexia, diarrhea, severe"/>	<input type="text" value="Severe"/>	<input type="text" value="Severe"/>
Functional_capacity	<input type="text" value="Dysfunction < 3wks, suboptimal work, bedridden < 2 wks"/>	<input type="text" value="Moderate"/>	<input type="text" value="Moderate"/>
Disease_relations	<input type="text" value="No or low stress"/>	<input type="text" value="Normal/Mild"/>	<input type="text" value="Normal/Mild"/>
Physial_exam	<input type="text" value="+1 to +2 subcu or muscle loss"/>	<input type="text" value="Moderate"/>	<input type="text" value="Moderate"/>
Edema_ascites	<input type="text" value="None"/>	<input type="text" value="Normal/Mild"/>	<input type="text" value="Normal/Mild"/>
SGA_GRADE	<input type="text" value="C"/>	<input type="text" value="3"/>	<input type="text" value="3"/>
NUTRISTATUS	<input type="text" value="Severe Malnutrition"/>		
BMI	<input type="text" value="Underweight (< 18.5)"/>	<input type="text" value="2"/>	<input type="text" value="2"/>
ALBUMIN	<input type="text" value="2.5 - 3.4 g/dL"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
TLC	<input type="text" value=">1500"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
SUM: NUTRISK SCORE	<input type="text" value="6"/>		
PLS RE-ENTER NUTRISK_SCORE	<input type="text" value="6"/>		
NUTRISK_LEVEL	<input type="text" value=">5"/>	<input type="text" value="High Risk"/>	<input checked="" type="checkbox"/> HIGHRISK - Please click this button if NUTRISK LEVEL is "High Risk"

Intervention / Progress Notes ADD/EDIT Data

PIN	<input type="text" value="12348"/>	PATCODE	<input type="text" value="4"/>
DATE ADMISSION	<input type="text" value="14/12/2016"/>		
LAST NAME	<input type="text" value="Rosal"/>		
FIRSTNAME	<input type="text" value="Fatima"/>		
MIDDLE NAME	<input type="text" value="Dy"/>		
AGE (YEAR)	<input type="text" value="65"/>		
BIRTHDAY	<input type="text" value="03/12/1951"/>		
SEX	<input type="text" value="Female"/>		
ATTENDING MD	<input type="text" value="Dr. Aurora Tanzo"/>		
HEIGHT METERS	<input type="text" value="1.67"/>	BMI	<input type="text" value="17.93"/>
WEIGHT KG	<input type="text" value="50"/>	BMI_STATUS	<input type="text" value="Underweight (< 18.5)"/>
WEIGHT DATATYPE	<input type="text" value="Actual"/>	WEIGHT LOSS %	<input type="text" value="5"/>
UNIT	<input type="text" value="Rm312 - male"/>	<input checked="" type="checkbox"/>	NUTRITION_RISK
ROOM NUMBER	<input type="text" value="ICU1"/>	<input checked="" type="checkbox"/>	HIGH RISK
HOSPITAL STATUS	<input type="text" value="Admitted"/>		
DATE DISCHARGE	<input type="text"/>	Date format: day/month/year - Ex: 2/dec/2016 or 2/12/2016	
DISCHARGE_STATUS	<input type="text"/>		

NUTRITION INTERVENTION

FEEDING TYPE

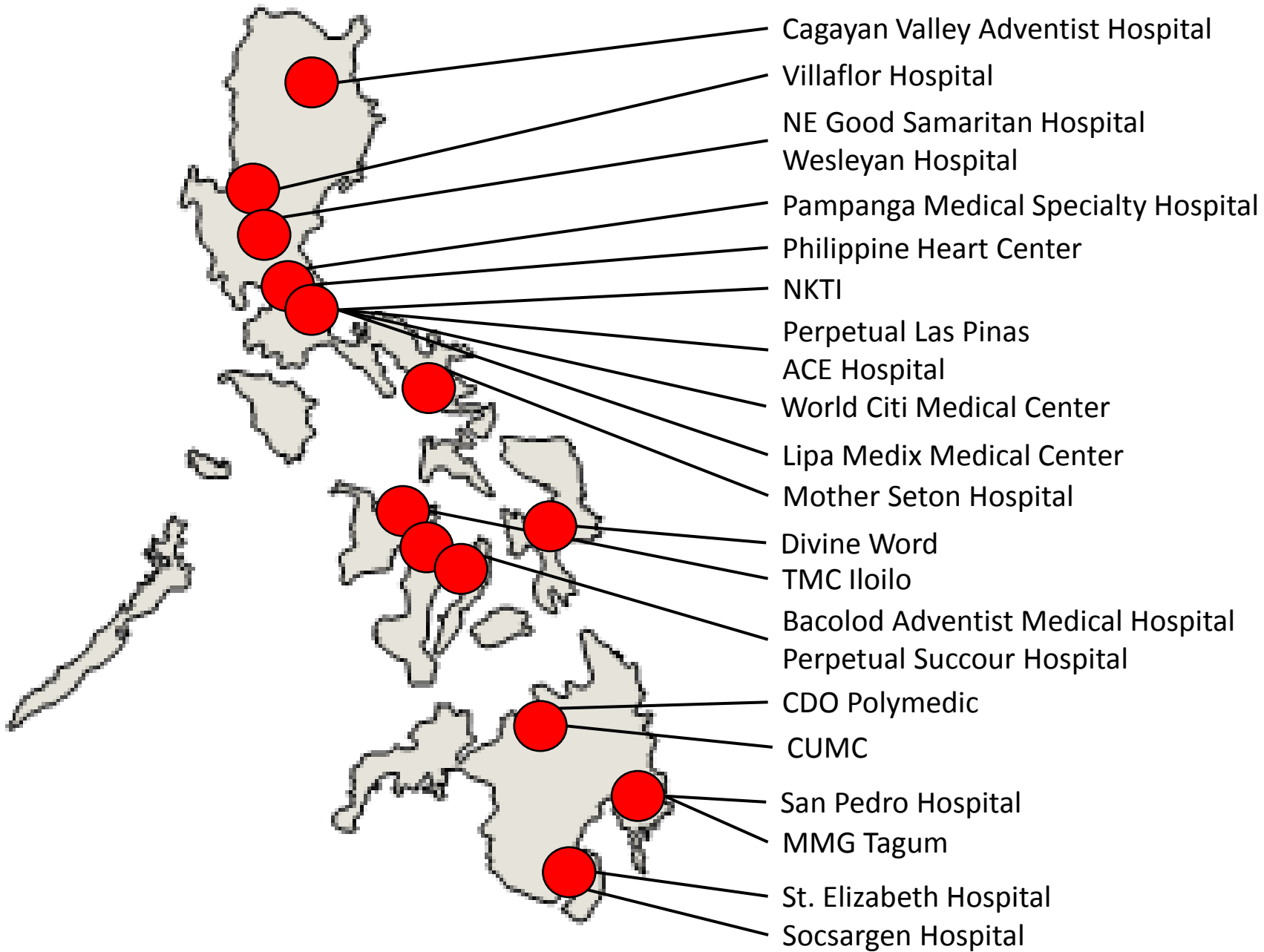
FEEDING ROUTE

IF EN, WHAT TYPE?

FFUP_NOTE

Methodology

- Software development
- Assigned to selected hospitals in the Philippines



MAP OF THE PHILIPPINES

Methodology

- Software development
- Assigned to selected hospitals in the Philippines
- Dietitians trained to use the software and follow up patients through the clinical nutrition process:
 - Nutrition screening and assessment
 - Nutrition care plan formulation and delivery
 - Patient follow up and reporting
- Period of data gathering: January to August 2017 (7-8 months)

Results

- Prevalence of malnutrition and nutritionally high risk patients

Results:

22 hospitals

N = 22,701

BMI

- Normal = 57%
- Underweight = 9%
- Overweight = 25%
- Obese = 9%

SGA "C" = 14%

Code	Hospital	UW	NOR	OW	OB	Total
1	ace hospital	13	58	34	12	117
2	bacolod adventist	136	975	247	54	1412
3	cagayan valley	130	829	175	32	1166
4	cdo olymedic	88	676	369	181	1314
5	cumc	20	217	184	79	500
6	divine world	47	288	155	55	545
7	lipa medix	172	963	510	165	1810
8	mmg tagum	132	1192	412	129	1865
9	nkti	95	420	178	67	760
19	ne good samaritan	21	408	88	13	530
11	pampanga med spec	99	834	329	153	1415
12	perpetual succor	70	528	261	114	973
13	perpetual las pinas	99	1120	825	322	2366
14	phil heart center	186	939	531	171	1827
15	socsargen hosp	90	392	200	63	745
16	elizabeth hospital	68	509	172	101	850
17	villaflor hospital	130	707	227	90	1154
18	wesleyan hospital	100	412	205	55	772
19	world citi	68	509	172	101	850
20	medical city - iloilo	54	456	247	120	877
21	mother seton hospital	116	302	133	42	593
22	san pedro hospital	15	182	47	16	260
	total	1,949	12,916	5,701	2,135	22,701
	Percent	9%	57%	25%	9%	

Results:

Code	Hospital	UW	NOR	OW	OB	Total
1	ace hospital	13	58	34	12	117
2	bacolod adventist	136	975	247	54	1412
3	cagayan valley	130	829	175	32	1166
4	cdo olymedic	88	676	369	181	1314
5	cumc	20	217	184	79	500
6	divine world	47	288	155	55	545
7	lipa medix	172	963	510	165	1810

- N = 22,701
- Prevalence of malnutrition – BMI based (Underweight + Obese) = 18%
- High Risk Population (SGA “C”) = 14%

						1865
						760
						530
						1415
						973
						2366
						1827
						745
						850
						1154
18	wesleyan hospital	100	412	205	55	772
19	world citi	68	509	172	101	850
20	medical city - iloilo	54	456	247	120	877
21	mother seton hospital	116	302	133	42	593
22	san pedro hospital	15	182	47	16	260
	total	1,949	12,916	5,701	2,135	22,701
	Percent	9%	57%	25%	9%	

Results

- Prevalence of malnutrition and nutritionally high risk patients
- Age profile

Results

Age Grouping

- 0-12y (child)
- 13-17y (teen)
- 18-29y (young adult)
- 30-49y (adult)
- 50-64y (older adult)
- 65y+ (elderly)

Code	Hospital	0-12y	13-17y	18-29y	30-49y	50-64y	65y+	Total
1	ace hospital	0	0	17	30	42	37	126
2	bacolod adventist	21	17	189	333	435	596	1591
3	cagayan valley	0	3	128	269	398	368	1166
4	cdo olymedic	3	0	216	386	356	355	1316
5	cumc	4	0	64	146	140	149	503
	divine world	1	7	55	103	153	226	545
	ipa medix	0	0	438	534	522	353	1847
	mmg tagum	8	7	241	585	573	562	1976
	nkti	6	3	66	217	295	189	776
	ne good samaritan	10	0	61	118	162	186	537
	oampanga med spec	4	9	142	330	393	572	1450
	operpetual succour	37	2	53	91	114	97	394
	operpetual las pinas	0	33	161	276	261	245	976
	ophil heart center	10	4	108	509	961	851	2443
	socsargen hosp	2	0	212	420	296	228	1158
	elizabeth hospital	1	0	351	545	516	420	1833
	villaflor hospital	3	0	118	303	359	453	1236
	wesleyan hospital	0	0	60	146	188	378	772
19	world citi	391	47	153	228	150	115	1084
20	medical city - iloilo	2	2	227	298	298	245	1072
21	mother seton hospital	0	9	55	118	157	290	629
22	san pedro hospital	2	1	42	52	84	80	261
		505	144	3157	6037	6853	6995	23691
		2.1%	0.6%	13.3%	25.5%	28.9%	29.5%	100.0%

Results

Age Grouping

- 0-12y = 2.1%
- 13-17y = 0.6%
- 18-29y = 13.3%
- 30-49y = 25.5%
- 50-64y = 28.9%
- 65y+ = 29.5%

Code	Hospital	0-12y	13-17y	18-29y	30-49y	50-64y	65y+	Total
1	ace hospital	0	0	17	30	42	37	126
2	bacolod adventist	21	17	189	333	435	596	1591
3	cagayan valley	0	3	128	269	398	368	1166
4	cdo olymedic	3	0	216	386	356	355	1316
5	cumc	4	0	64	146	140	149	503
6	divine world	1	7	55	103	153	226	545
7								1847
8								1976
9								776
10								537
11								1450
12								394
13								976
14								2443
15								1158
16								1833
17								1236
18								772
19								1084
20	medical city - iloilo	2	2	227	298	298	245	1072
21	mother seton hospital	0	9	55	118	157	290	629
22	san pedro hospital	2	1	42	52	84	80	261
		505	144	3157	6037	6853	6995	23691
		2.1%	0.6%	13.3%	25.5%	28.9%	29.5%	100.0%

- 30 years old + = 84%
 - 30-49y (adult) = 26%
 - 50-64y (older adult)= 29%
 - 65y+ (elderly) = 30%
- Above 50y = 59%

Results

- Prevalence of malnutrition and nutritionally high risk patients
- Age profile
- Diet ordered and feeding profile

Results

code	hospital	reg_diet	ons	en	en_pn	pn alone	reg_diet_pn	total
1	ace hospital	116	5	1	0	0	0	
2	bacolod adventist	1023	1	57	1	0	0	
3	cagayan valley	1145	10	5	1	0	0	
4	cdo olymedic	1243	4	2	0	0	0	
5	cumc	423	0	1	0	0	0	
6	divine world	117	409	6	4	0	0	
					1	2	1	
					0	0	0	
					1	0	0	
					1	18	1	
					1	0	1	
					1	0	0	
					0	1	0	
					0	0	0	
					0	0	0	
					0	0	0	
					0	0	0	
					0	2	0	
19	world citi	0	0	0	0	0	0	
20	medical city - iloilo	0	0	0	0	0	0	
21	mother seton hospital	0	0	0	0	0	0	
22	san pedro hospital	0	0	0	0	0	0	
	total	11800	887	187	11	23	3	12911
		91%	7%	1.4%	0.09%	0.18%	0.02%	

- Regular diet/natural food (*reg_diet*)
- Regular diet with oral supplementation (*ons*)
- Regular diet with parenteral nutrition supplementation (*reg_diet_pn*)
- Enteral nutrition alone (*en*)
- Enteral nutrition with supplementary parenteral nutrition (*en_pn*)
- Parenteral nutrition alone (*pn alone*)

Results

- Regular diet/natural food (*reg_diet*)
- Regular diet with oral supplement
- Regular diet with parenteral supplement (*reg_diet_pn*)
- Enteral nutrition (*en*)
- Enteral nutrition supplement
- Parenteral nutrition alone (*pn alone*)

code	hospital	reg_diet	ons	en	en_pn	pn alone	reg_diet_pn	total
1	ace hospital	116	5	1	0	0	0	
2	bacolod adventist	1023	1	57	1	0	0	
3	cagayan valley	1145	10	5	1	0	0	
4	cdo olymedic	1243	4	2	0	0	0	
5	cumc	423	0	1	0	0	0	
6	divine world	117	409	6	4	0	0	
7	lipa medix	540	24	39	1	2	1	
18	wesleyan hospital	711	0	8	0	2	0	
19	world citi	0	0	0	0	0	0	
20	medical city - iloilo	0	0	0	0	0	0	
21	mother seton hospital	0	0	0	0	0	0	
22	san pedro hospital	0	0	0	0	0	0	
	total	11800	887	187	11	23	3	12911
		91%	7%	1.4%	0.09%	0.18%	0.02%	

- Regular diet/natural food = 91%
- Oral nutrition supplementation = 7%
- Enteral nutrition (tube feed) = 1.5%
- Parenteral nutrition = 0.3%

Results

code	hospital	blender	std formula	disease_sp	elemental	total
1	ace hospital	0	0	1	0	1
2	bacolod adventist	1	11	49	0	61
3	cagayan valley	3	2	6	0	11
4	cdo olymedic	1	1	1	0	3
5	cumc	0	0	0	0	0
6	divine world	0	1	2	3	6
7	lipa medix	0	27	22	0	49
8	...	0	0	0	0	0

Enteral nutrition = 1.5% of total feedings

- Standard formula = 56%
- Disease specific formula = 37%
- Blended diets = 6%

18	wesleyan hospital	0	16	7	0	23
19	world citi	0	0	0	0	0
20	medical city - iloilo	0	0	0	0	0
21	mother seton hospital	0	0	0	0	0
22	san pedro hospital	0	0	0	0	0
	Total	20	194	126	5	345
	Percent	6%	56%	37%	1%	100%

Results

code	hospital	blender	std formula	disease_sp	elemental	total
1	ace hospital	0	0	1	0	1
2	bacolod adventist	1	11	49	0	61
3	cagayan valley	3	2	6	0	11
4	cdo olymedic	1	1	1	0	3
5	cumc	0	0	0	0	0
6	divine world	0	1	2	3	6
7	lipa medix	0	27	22	0	49
8	...	0	0	0	0	0
9	...	0	0	0	0	0
10	...	0	0	0	0	0
11	...	0	0	0	0	0
12	...	0	0	0	0	0
13	...	0	0	0	0	0
14	...	0	0	0	0	0
15	...	0	0	0	0	0
16	...	0	0	0	0	0
17	...	0	0	0	0	0
18	...	0	0	0	0	0
19	...	0	0	0	0	0
20	...	0	0	0	0	0
21	...	0	0	0	0	0
22	...	0	0	0	0	0
23	...	0	0	0	0	0
24	...	0	0	0	0	0
25	...	0	0	0	0	0
26	...	0	0	0	0	0
27	...	0	0	0	0	0
28	...	0	0	0	0	0
29	...	0	0	0	0	0
30	...	0	0	0	0	0
31	...	0	0	0	0	0
32	...	0	0	0	0	0
33	...	0	0	0	0	0
34	...	0	0	0	0	0
35	...	0	0	0	0	0
36	...	0	0	0	0	0
37	...	0	0	0	0	0
38	...	0	0	0	0	0
39	...	0	0	0	0	0
40	...	0	0	0	0	0
41	...	0	0	0	0	0
42	...	0	0	0	0	0
43	...	0	0	0	0	0
44	...	0	0	0	0	0
45	...	0	0	0	0	0
46	...	0	0	0	0	0
47	...	0	0	0	0	0
48	...	0	0	0	0	0
49	...	0	0	0	0	0
50	...	0	0	0	0	0

Disease specific formula = 37% of all EN

- Diabetes = 38%
- Building up = 28%
- Immune = 22%
- Renal = 8%
- Elemental = 4%

Total	20	194	126	5	345
Percent	6%	56%	37%	1%	100%

Results

- Prevalence of malnutrition and nutritionally high risk patients
- Age profile
- Diet ordered and feeding profile
- Nutritional status and feeding profile

Results

bmi	total	high risk	%high risk	%reg_diet	%ons	%en	%en_pn	%pn alone	%reg_diet_pn	%pn_total	%en
uw	1101	690	62.7%	88.65%	7.45%	3.09%	0.45%	0.27%	0.09%	0.82%	3.54%
norm	7147	323	4.5%	91.80%	6.39%	1.51%	0.06%	0.21%	0.03%	0.29%	1.57%
ow	3119	213	6.8%	91.38%	7.60%	0.87%	0.00%	0.16%	0.00%	0.16%	0.87%
ob	1258	357	28.4%	91.26%	8.03%	0.64%	0.08%	0.00%	0.00%	0.08%	0.72%
Total	12625	1583	13%	91%	7%	1.40%	0.08%	0.18%	0.02%	0.3%	1.48%

- % regular diet = 91%
- % regular diet with oral supplementation = 7%
- % enteral nutrition = 1.48%
 - % en alone = 1.4%
 - % en and pn = 0.08%
- % parenteral nutrition = 0.3%
 - % pn alone = 0.18%
 - % regular diet + supp pn = 0.02%

Results

bmi	to
uw	
norm	
ow	
ob	
Total	1

- Underweight patients
 - 87% - on regular diet
 - 7.4% - on oral nutrition supplementation
 - 3.5% tube fed
 - 0.8% parenteral nutrition
- “High risk population”
 - 63% of underweights are severely malnourished
 - 43% of underweights are elderly (60y +)

Results

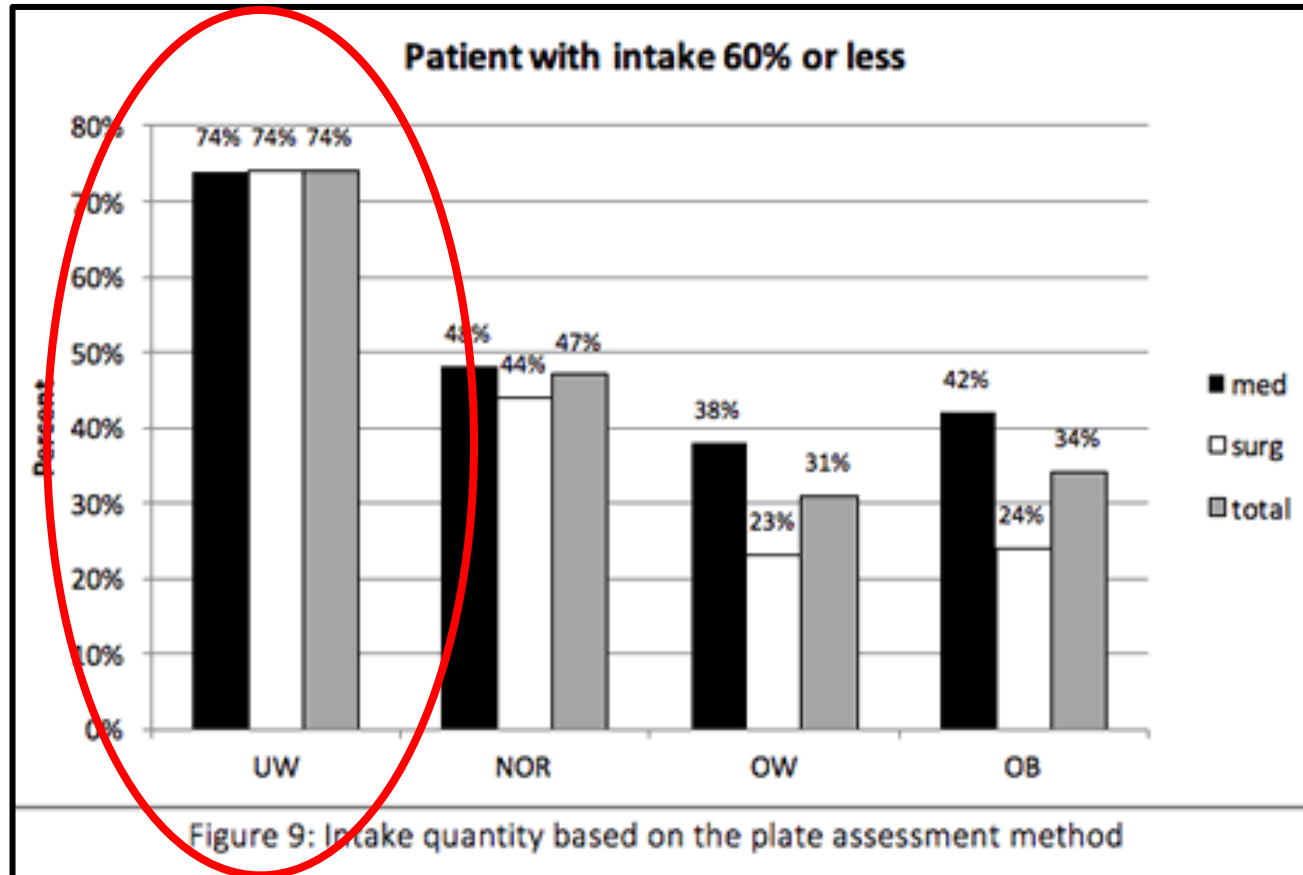
Feeding (n=13,222)	count	% of n	high risk	% high risk	adult (30-49y)	older adult (50-64y)	elderly (60y +)
regular diet	11800	89%	825	7%	12.5%	81.4%	27.6%
regular diet-ons	887	7%	121	14%	17.6%	32.0%	39.1%
en-standard formula	194	1.5%	147	76%	23.7%	27.8%	35.6%
en-disease specific	131	1.0%	42	32%	16.0%	22.1%	58.8%
en-blended	20	0.2%	5	25%	0.0%	20.0%	65.0%
parenteral nutrition	37	0.3%	10	27%	16.2%	32.4%	32.4%

- Oral nutrition supplementation was given to “high risk” patients (14%) and 50y and above age group (71%)
- Tube feed was given mostly to “high risk” patients (25% to 76%)
- Standard formula was given to “high risk” patients (76%) and elderly (36%)
- Disease specific formula was given to “high risk” patients (32%) elderly patients (59%)
- Parenteral nutrition was given to “high risk” patients (27%) and (50y +) patients (65%)

Analysis of 2015 and 2017 surveys

The Unrisk Study* - y2015

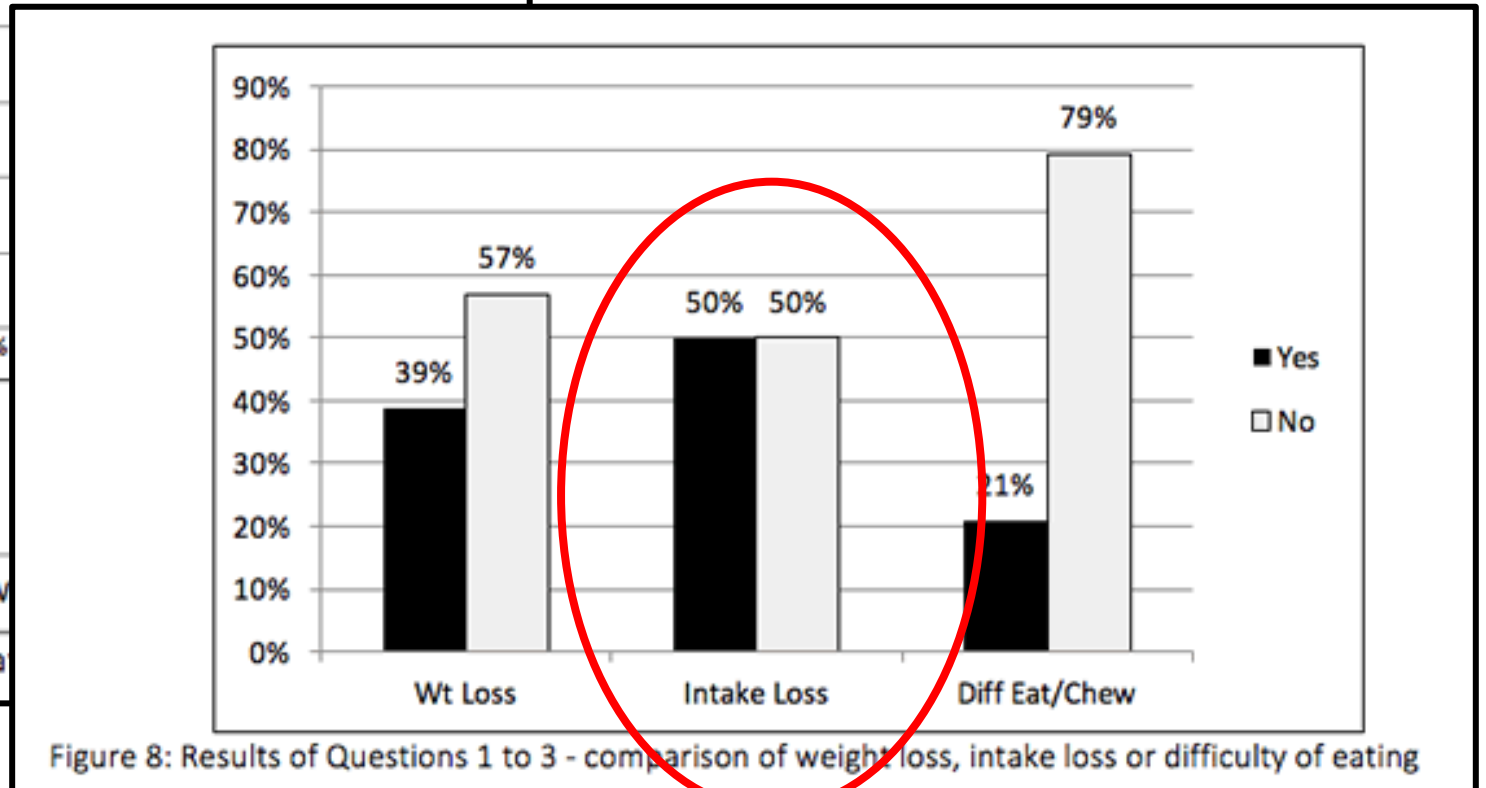
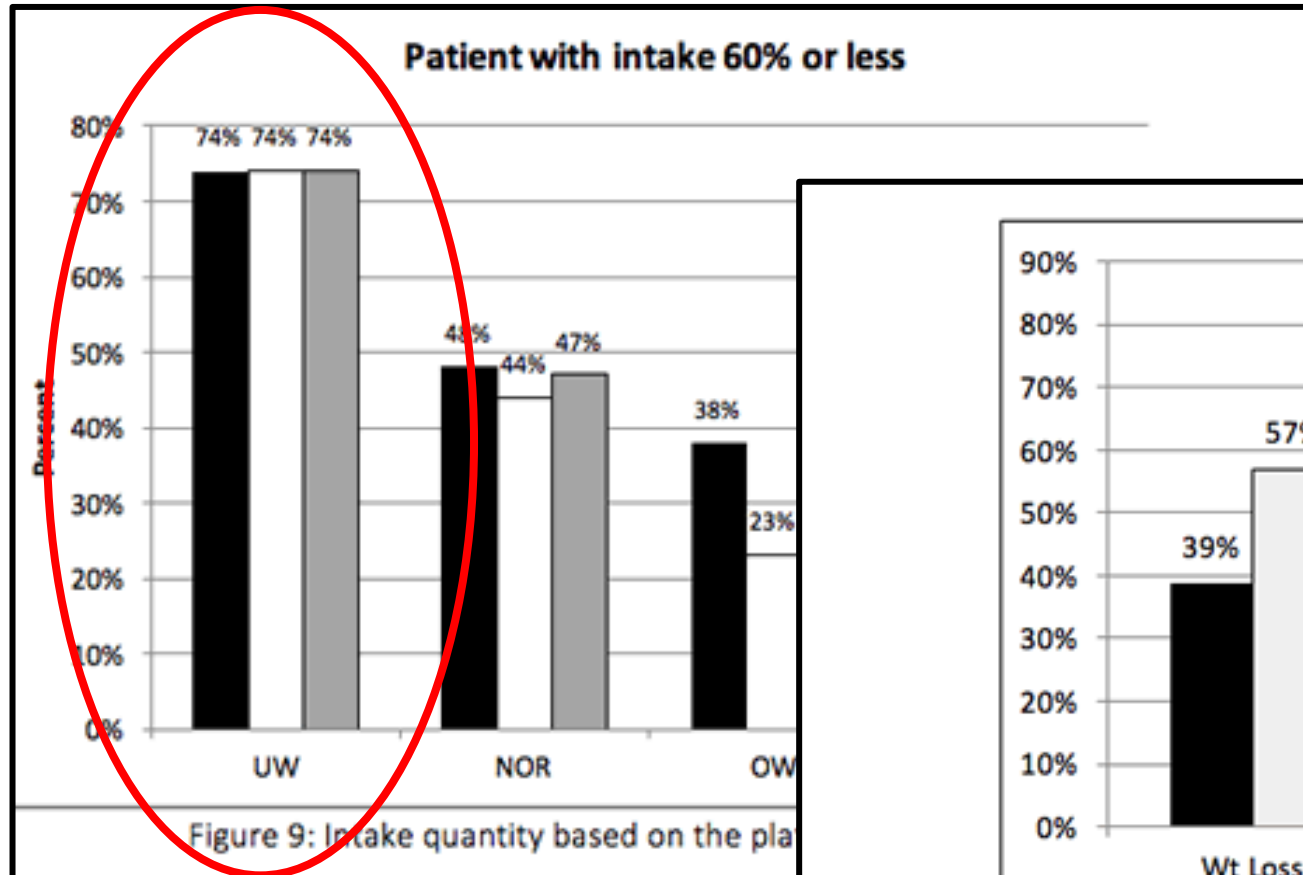
- Underweight patients were eating < 60% of their requirements



*The Unrisk Study. http://philspenonlinejournal.com/POJ_0022.html

The Unrisk Study* - y2015

- Underweight patients were eating < 60% of their requirements
- 50% have loss of intake in the past three months



*The Unrisk Study. http://philspenonlinejournal.com/POJ_0022.html

Results of Unrisk Study 2017

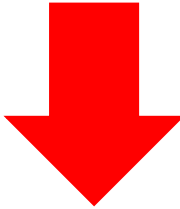
Feeding (n=13,222)	count	% of n	high risk	% high risk	adult (30-49y)	older adult (50-64y)	elderly (60y +)
regular diet	11800	89%	825	7%	12.5%	81.4%	27.6%
regular diet-ons	887	7%	121	14%	17.6%	32.0%	39.1%
en-standard formula	194	1.5%	147	76%	23.7%	27.8%	35.6%
en-disease specific	131	1.0%	42	32%	16.0%	22.1%	58.8%
en-blended	20	0.2%	5	25%	0.0%	20.0%	65.0%
parenteral nutrition	37	0.3%	10	27%	16.2%	32.4%	32.4%

- Oral nutrition supplementation was given to “high risk” patients (32%) elderly patients (59%) and (50y +) patients (65%)
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The Unrisk Program - y2017

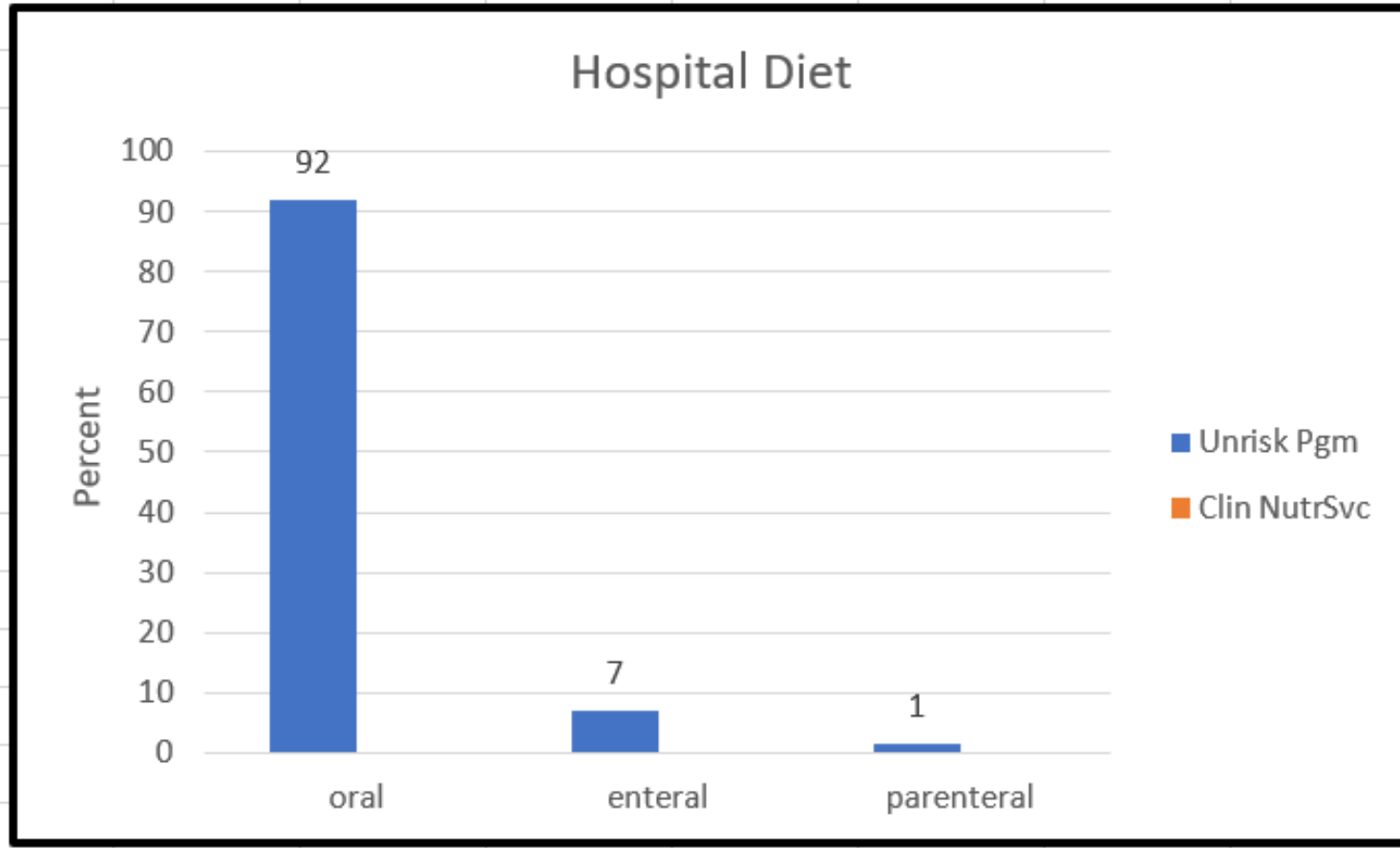
1	BMI
2	underwe
3	normal
4	overwei
5	obese
6	
7	BMI
8	underwe
9	normal
10	overwei
11	obese
..	

- Underweight patients
 - 87% - on regular diet
 - 7.4% - on oral nutrition supplementation
 - 3.5% tube fed
 - 0.8% parenteral nutrition
 - “High risk population”
 - 63% of underweights are severely malnourished
 - 43% of underweights are elderly (60y+)
- 

Observations from the 2015 & 2017 surveys

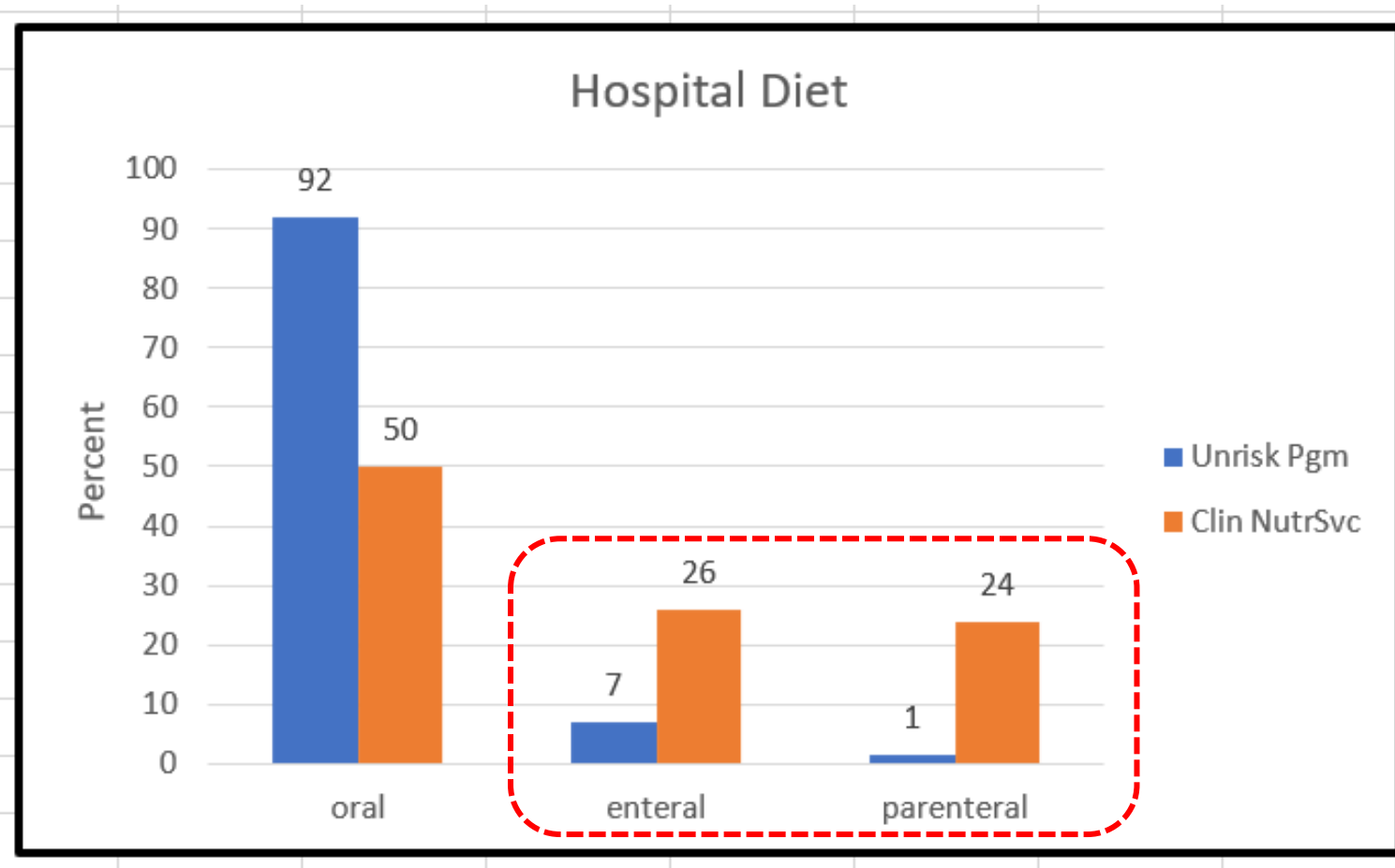
- Main diet order is “Full Diet” – 92%
- There is no intake follow-up – most physicians have no idea if their patients are eating adequately
- This is the major factor for the under-utilization of the following nutrient regimens:
 - Oral nutritional supplementation (= 7.4%)
 - Tube feeding (= 3.5%)
 - Parenteral nutrition (= 0.8%)
 - Although the indications were complied with, it was inadequate
- Nutritionally high risk patients (comprising 82% of the underweight population) have less than adequate feeding (< 60% of computed)
- Most of the population are elderly (59%)

Hospital diet profile - 2017



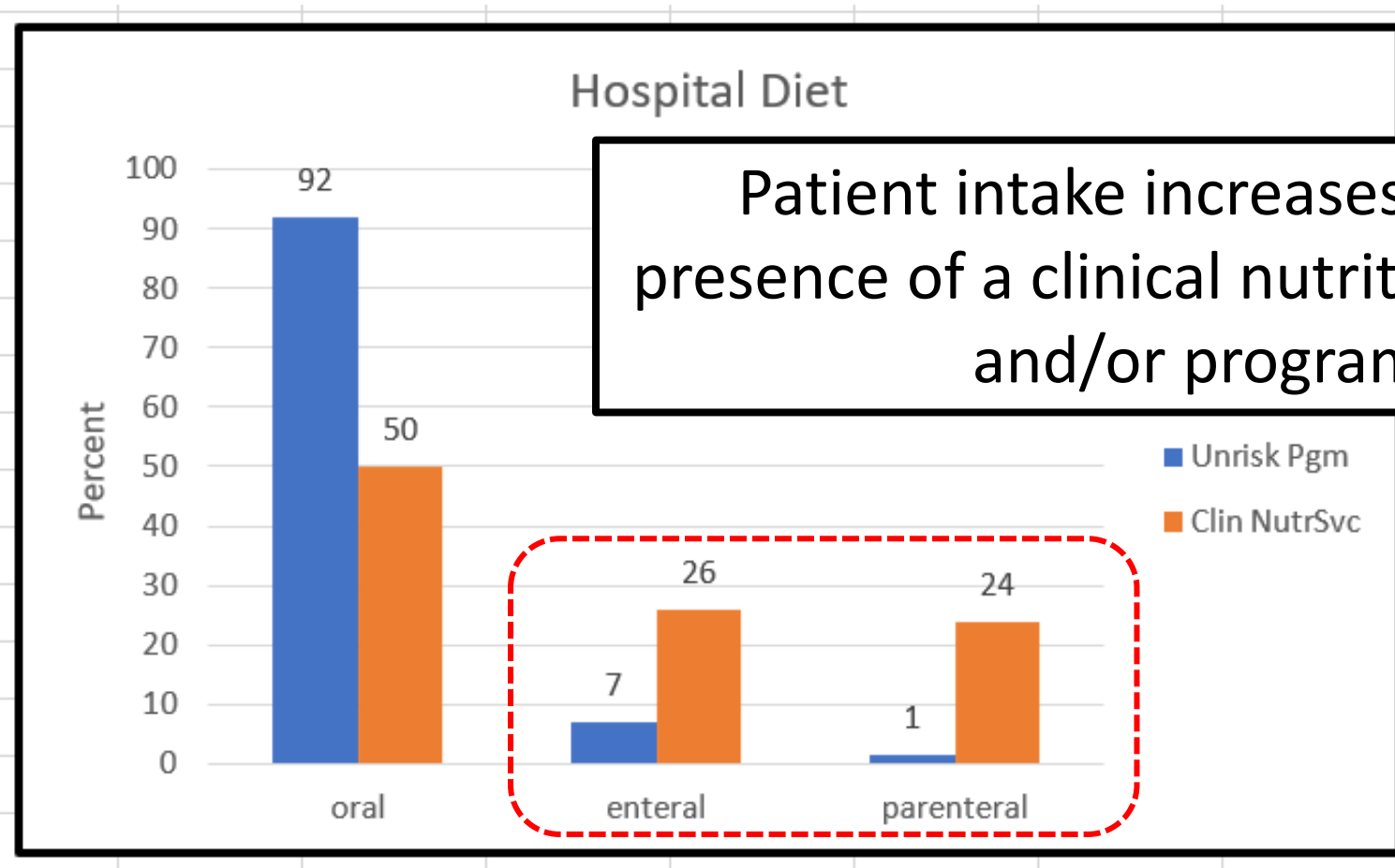
Unrisk Program @ Abbott
Nutrition Philippines:
report on hospital nutrition
2017 (n=22,701)

Hospital diet profile - 2017



- Unrisk program @ Abbott Nutrition Philippines: report on hospital nutrition, 2017 (n=22,701)
- Clin Nutr Svc (SLMC): Abstract #79, PENSA 2017 (n=2022), www.pensa-2017.com

Hospital diet profile - 2017



Patient intake increases with the presence of a clinical nutrition specialist and/or program

- Unrisk program @ Abbott Nutrition Philippines: report on hospital nutrition, 2017 (n=23,691)
- Clin Nutr Svc (SLMC): Abstract #79, PENSA 2017 (n=2022), www.pensa-2017.com

Initial Recommendations

- All underweight and elderly patients:
 - Immediately give oral supplementation
 - For those **with inadequate oral intake in spite of oral supplementation** within the first 48 hours > **increase intake by:**
 - **TUBE FEEDING or ENTERAL NUTRITION**
 - **PARENTERAL NUTRITION**
 - **Calorie counting or intake monitoring for first three days**
- Implement a clinical nutrition service under supervision by a clinical nutrition specialist
- Additional manpower:
 - Monitoring of intake / nutrient supplementation
 - Make recommendations for increased intake to the attending physician

Thank You