

CCF: Admission to Discharge “Medical Evaluation Unit Experience”



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AUDIT

- Assessment Unit (MAU) CCF cases
 - Prevalence
 - precipitating factors
 - Inpatient management
 - Representations risk factors

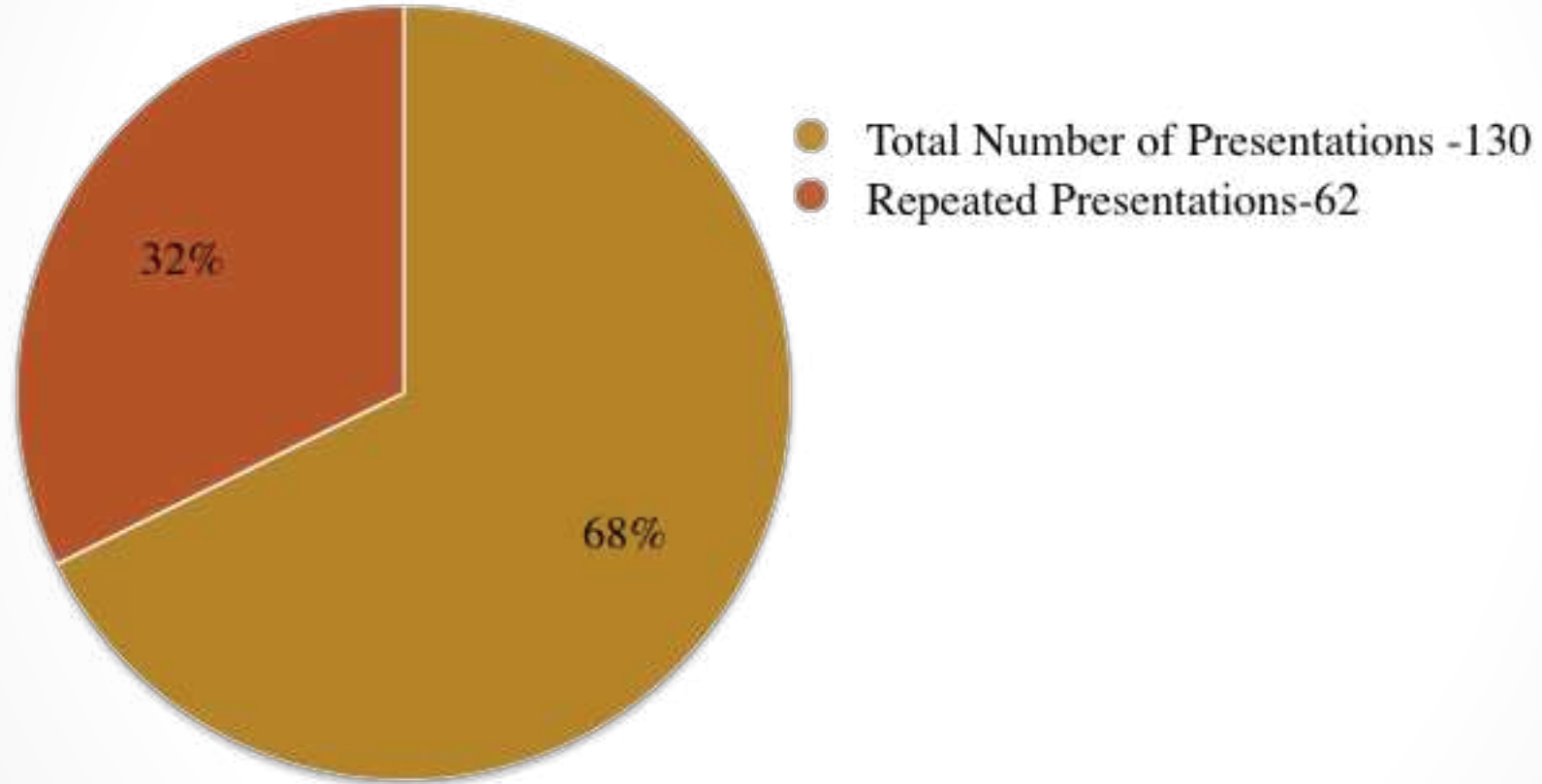
Methods

- Retrospective study.
- Medical records of patients admitted to MAU
 - six months – January to July 2017.
- Demographic and clinical data
- CCF classification
- Management
- Discharge medications
- Readmission risk factors / score
- Readmission rates and reason

Presentation data

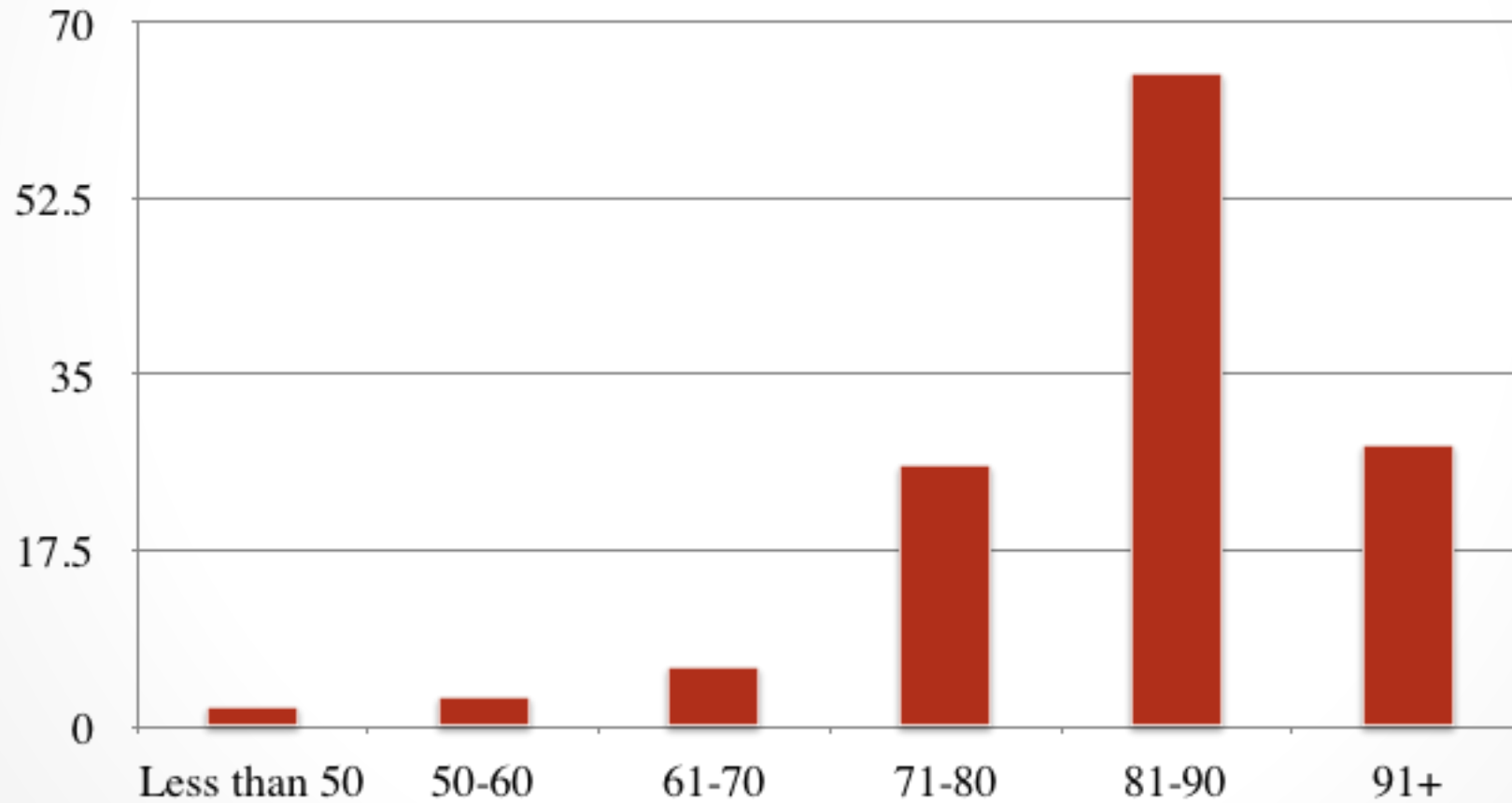
- Total number of patients: 68
- Total number of CCF presentations included in study: 130
- Representation rate = 62 representing to SCGH and other tertiary hospitals
- All representations were included in data collection including those who represented to other public WA hospitals.
- CCF presentations attributed to 10% of MAU presentations
- Most frequent length of stay: 2 days (38 % of presentations)

Total number of presentation and repeated presentation



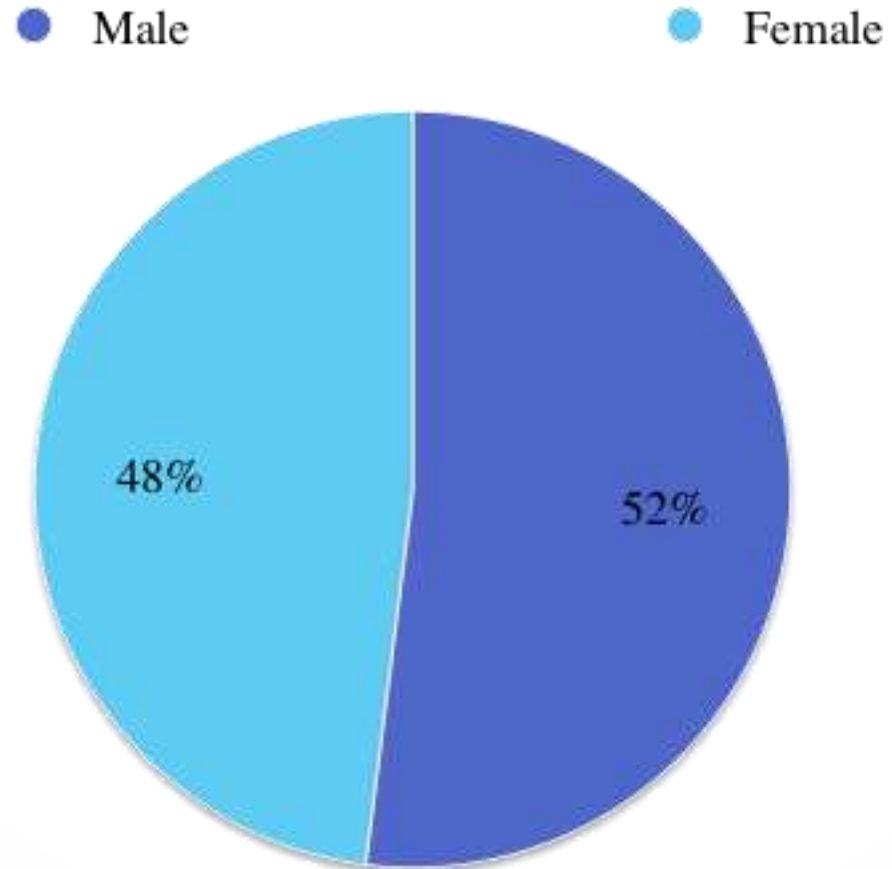
Demographics

- 93 % of the presentations were aged 70 +



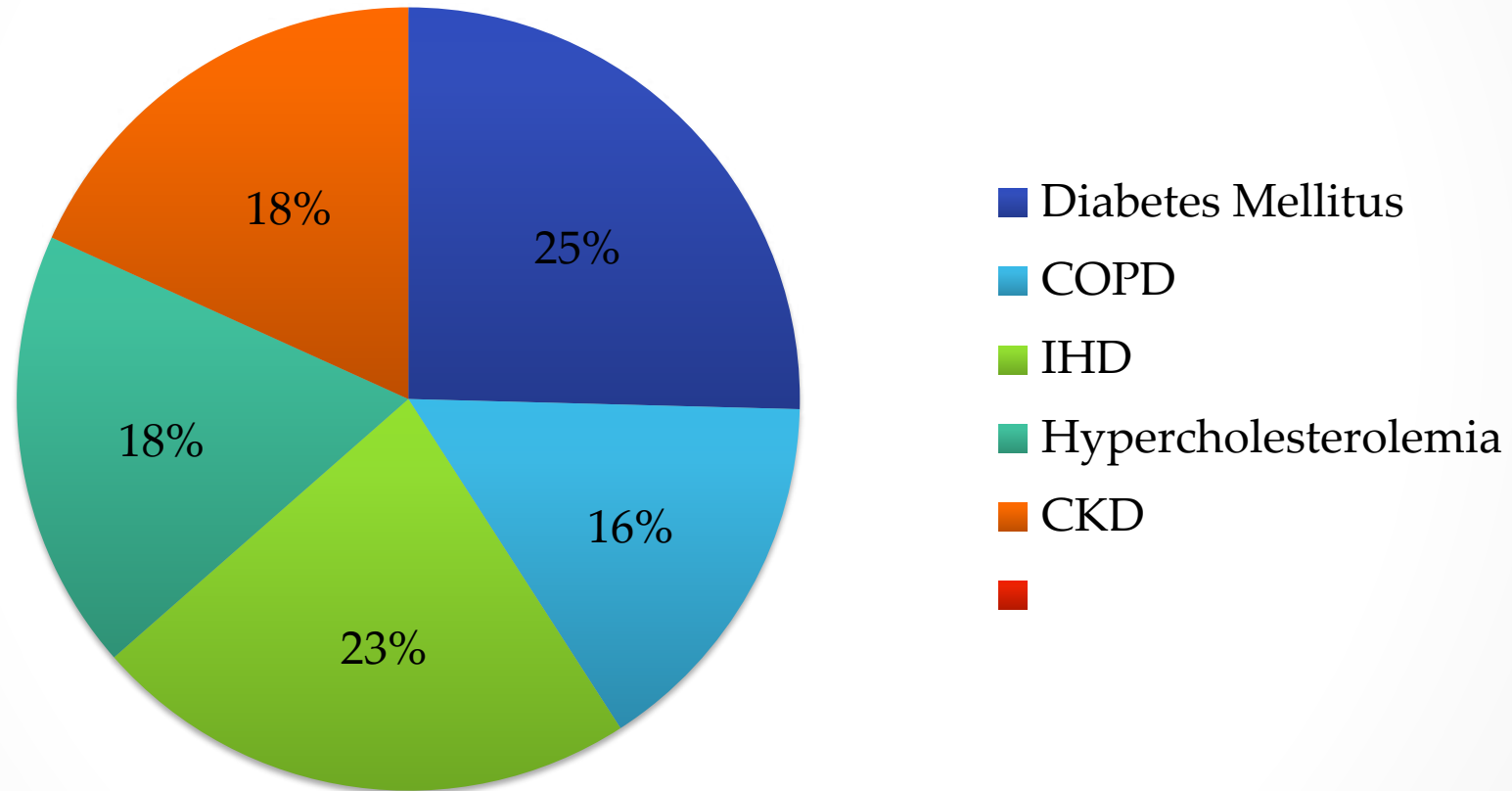
Demographics

- 52 % of the presentations were male and 48 % were female



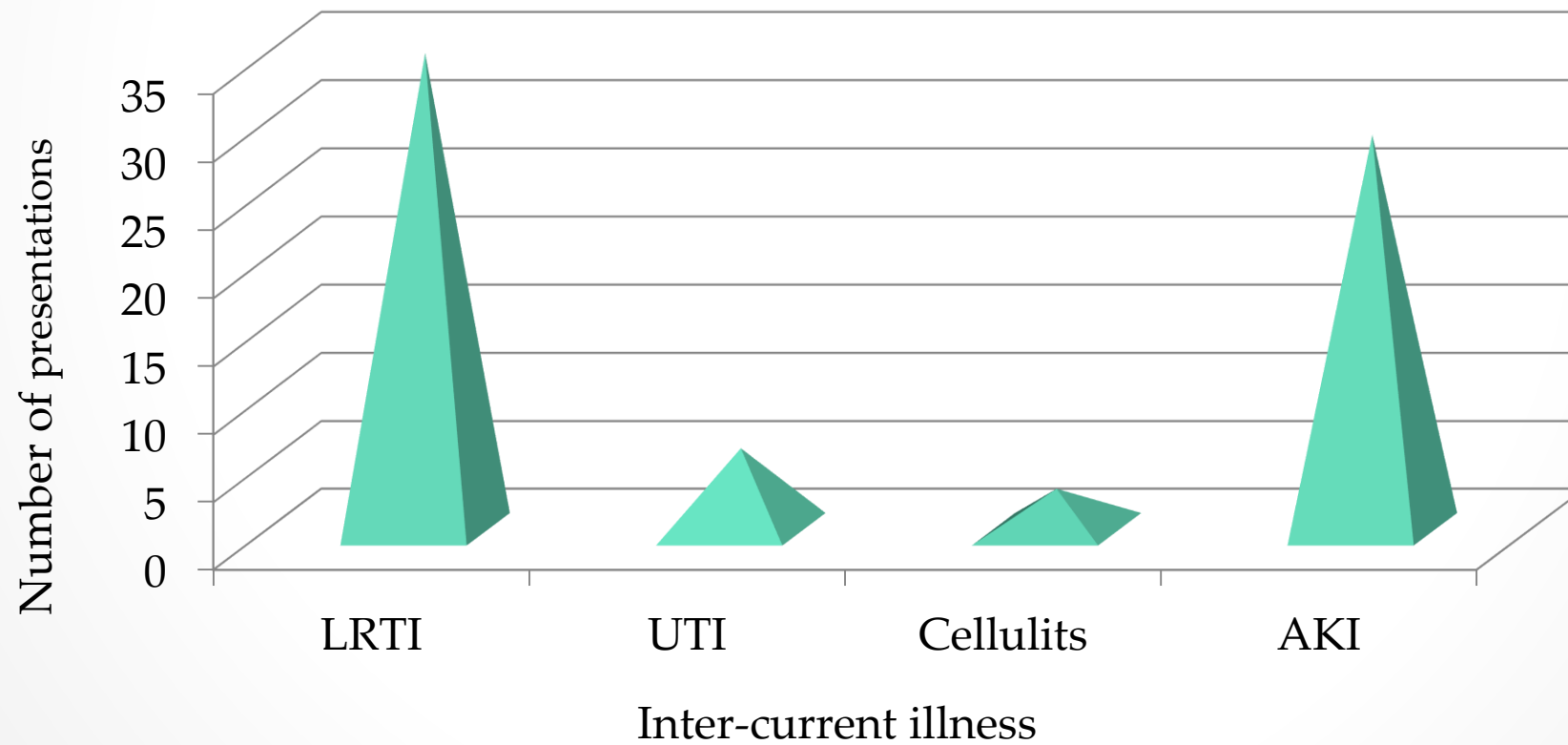
Co-morbidities

Percentage of presentations



Inter-current Illness

- 56 % of presentations had at least one of the below four inter-current illnesses

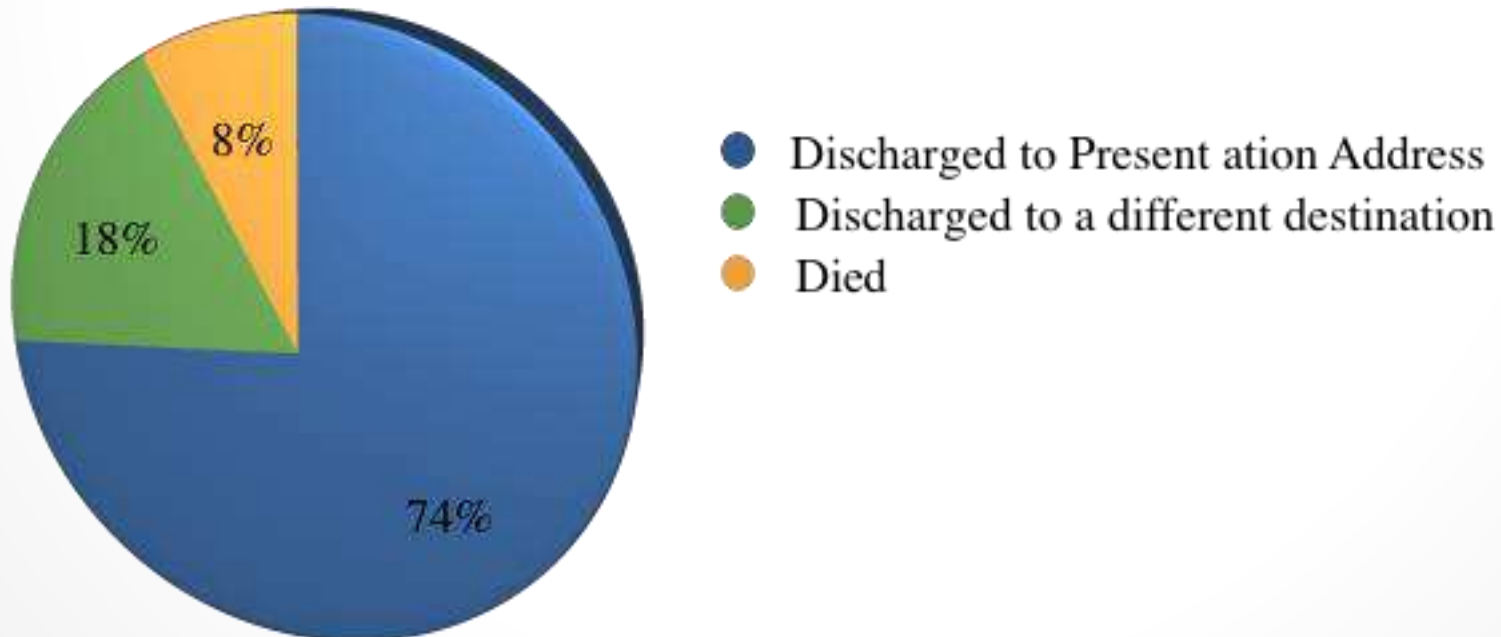


Discharge Destination

- 74 % of presentations were discharged to their presentation address
 - 67 presentations were from home and returned home
 - 29 presentations were from nursing homes and returned to their nursing homes
- 18 % of presentations were discharged to a different destination
 - 2 presentations from home were discharged to a nursing home
 - 17 presentations were transferred to a private hospital
 - 1 presentation was transferred to another public hospital
 - 4 presentations were transferred to rehabilitation
- 8 % of presentations died in hospital

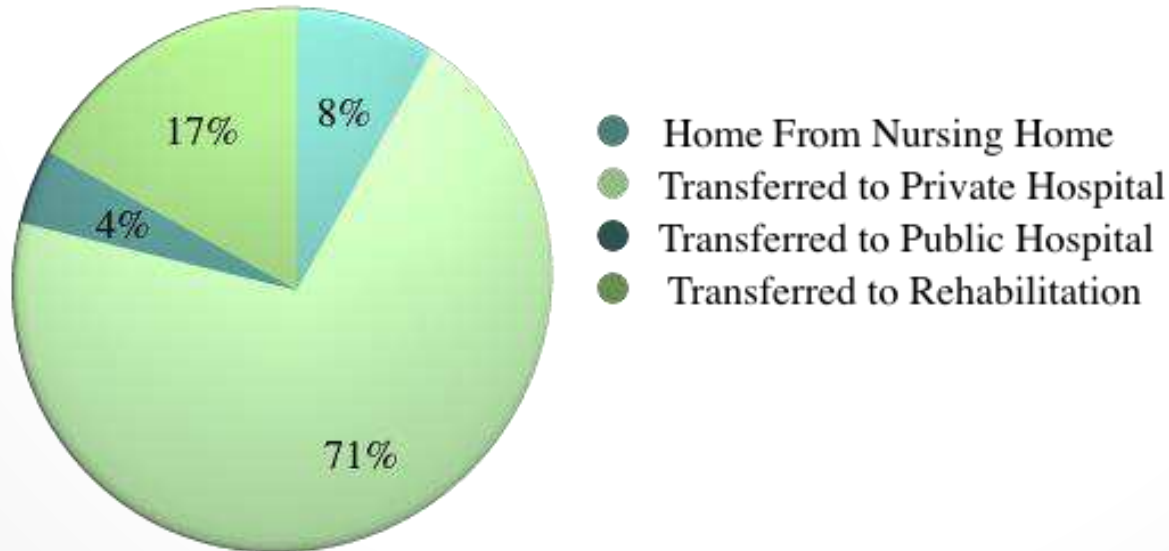
Discharge Destination

- 74 % (96) of presentations were discharged to their presentation address
- 18 % (24) of presentations were discharged to a different destination
- 8 % (10) of presentations died in hospital



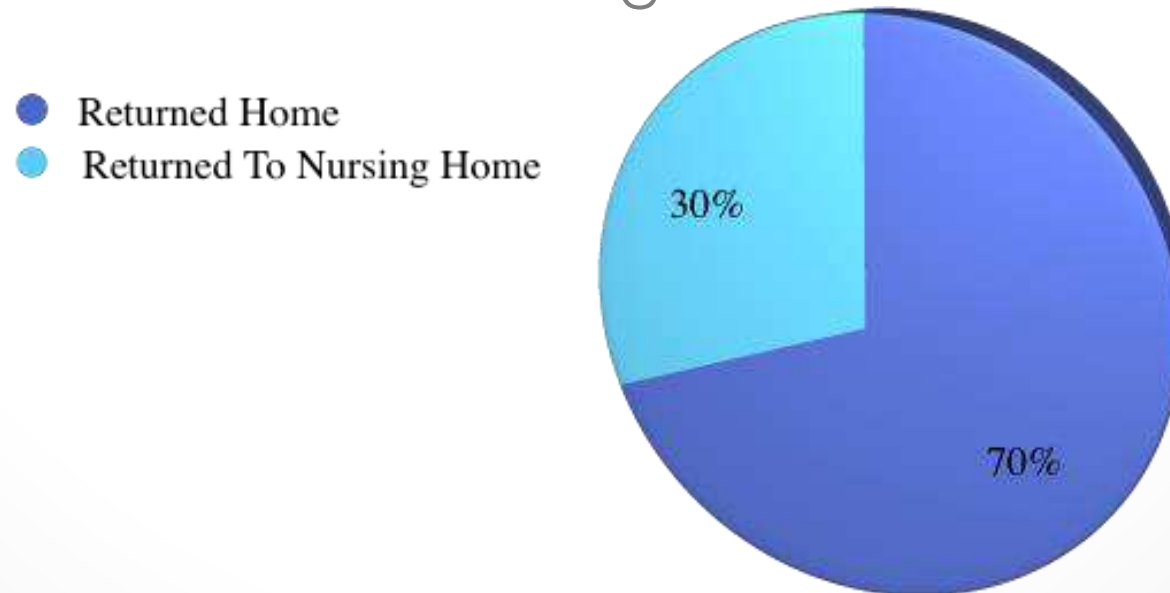
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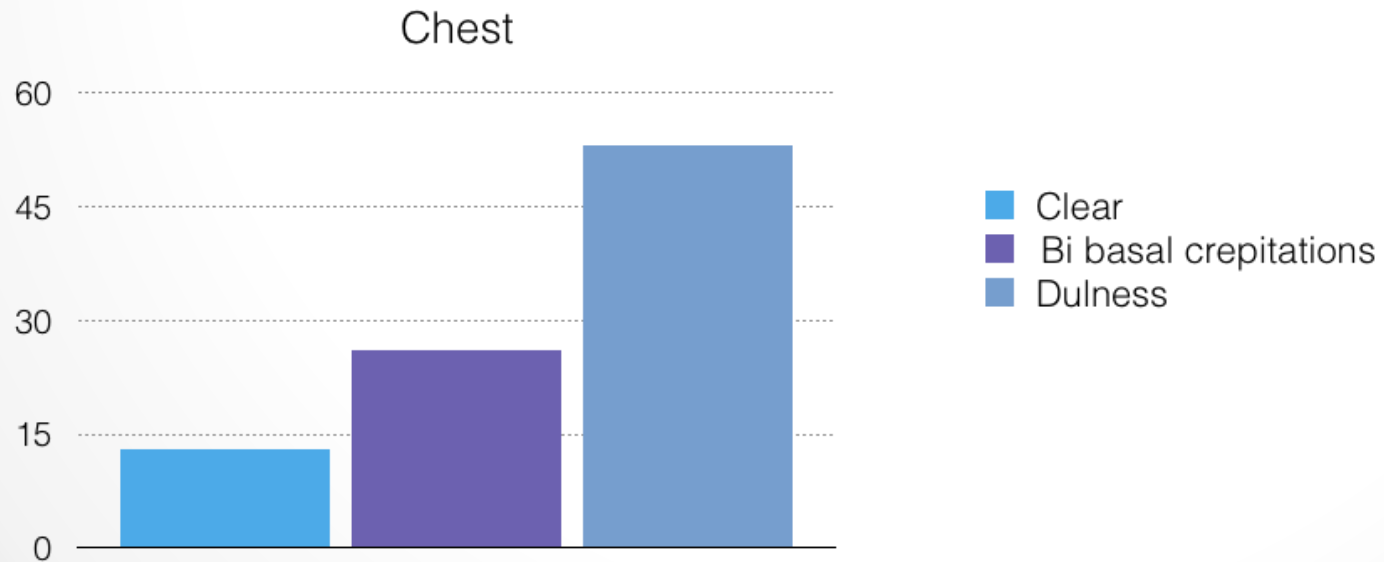
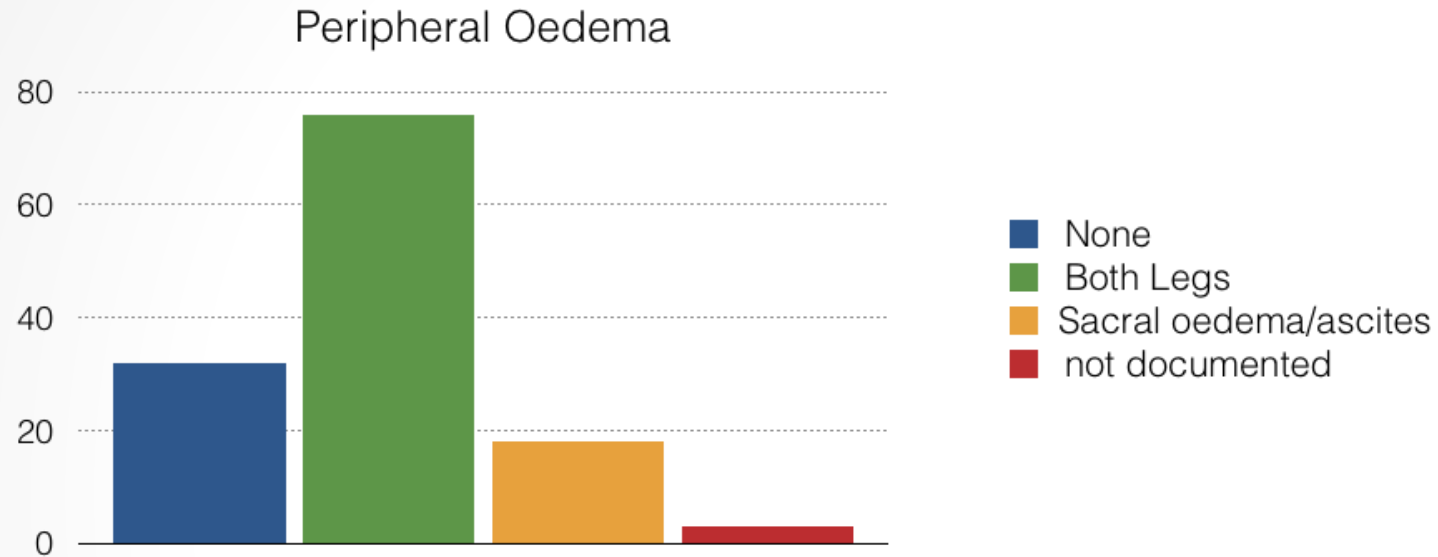


Discharge Destination

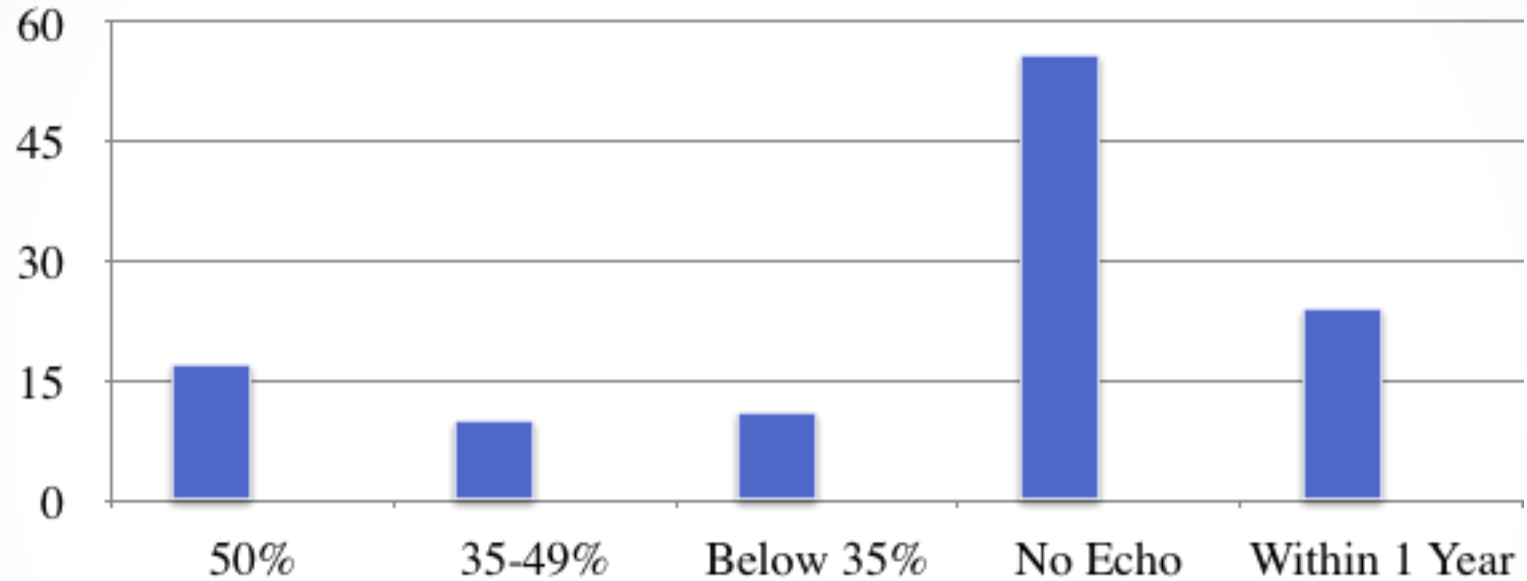
- 74 % (96) of presentations were discharged to their presentation address
- 67 (70 %) presentations were from home and returned home
- 29 (30 %) presentations were from nursing homes and returned to their nursing homes



Clinical signs



Echo/EF

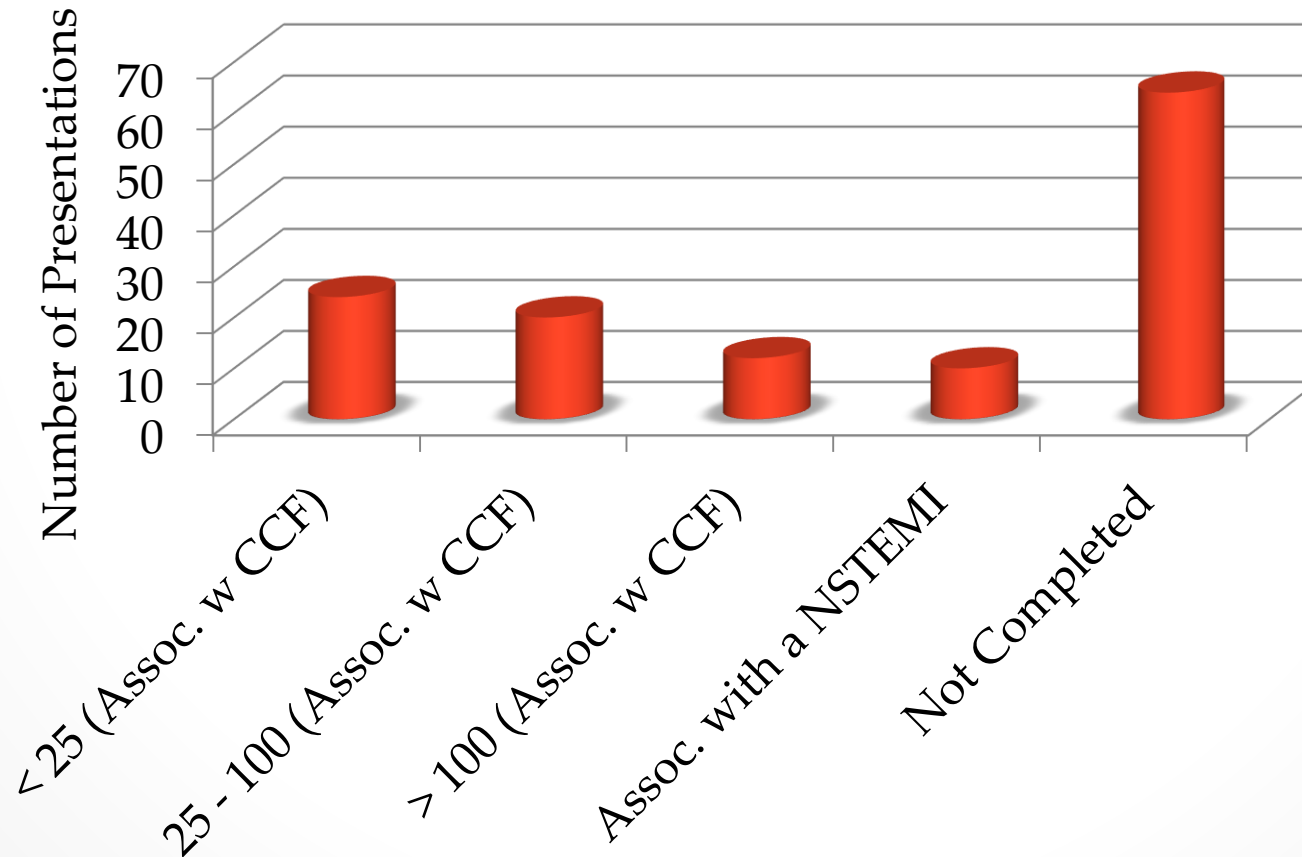


Ejection Fraction	>50 %	17 (including 1 patient at 50% EF)	56 admissions no Echo done 5 admissions has echo within 6 months but with EF not reported on echo 19 echos >6 months old
	35 – 49 %	10	
	Below 35 %	16	

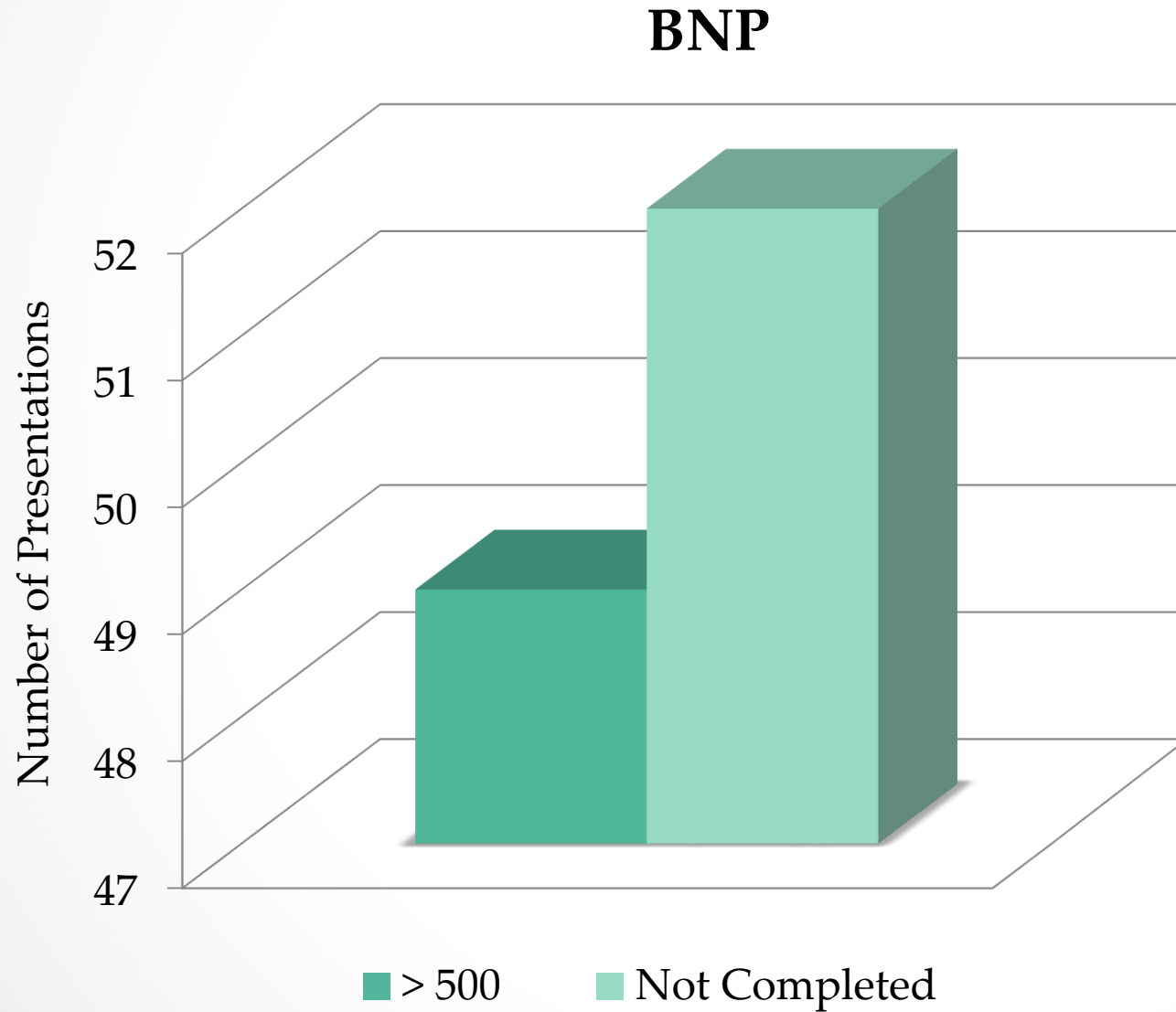
Blood Results

- 14 % of presentations had a Hb below 90
- 27 % of presentations had a raised WCC

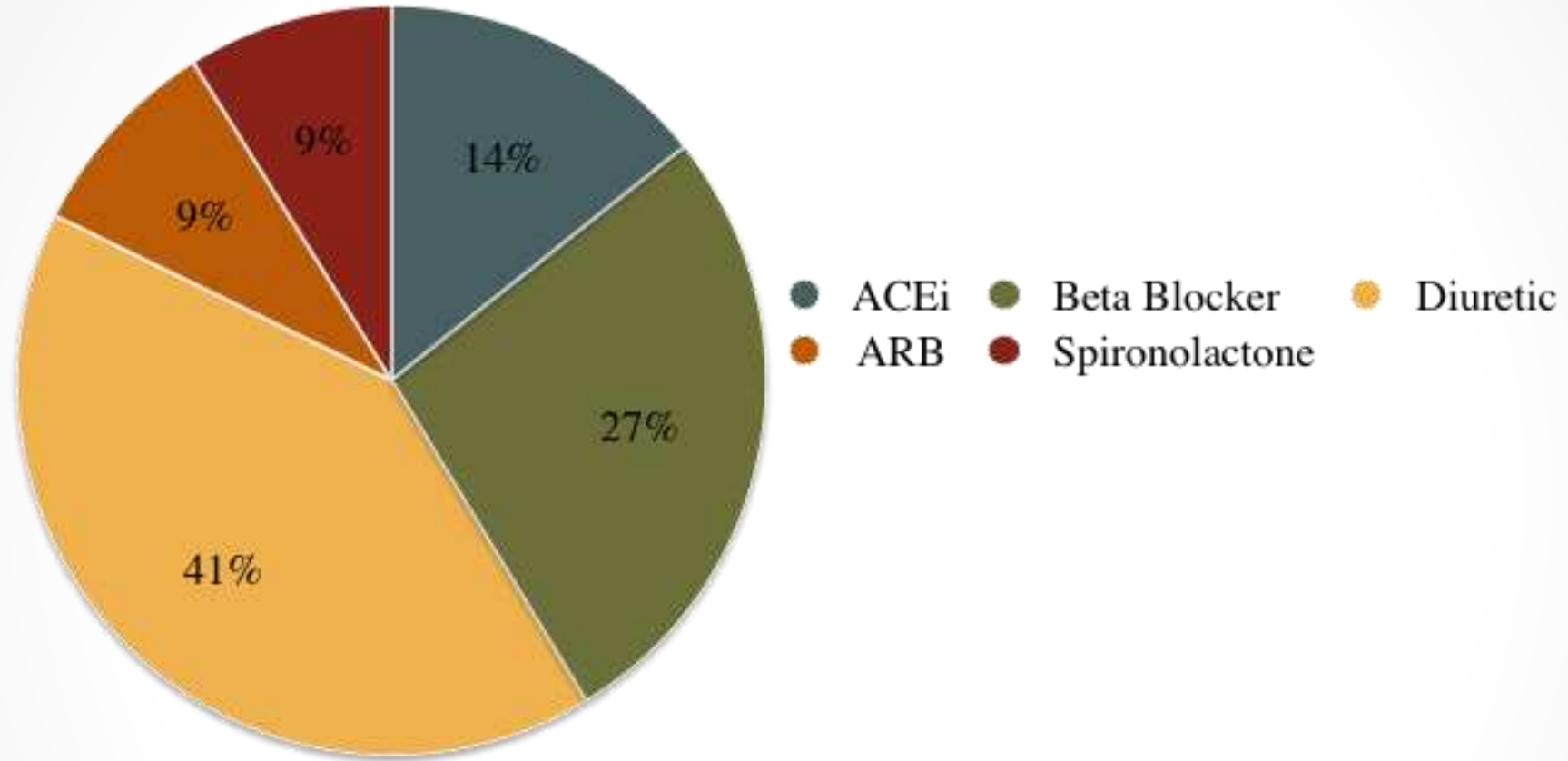
Troponin



Blood Results

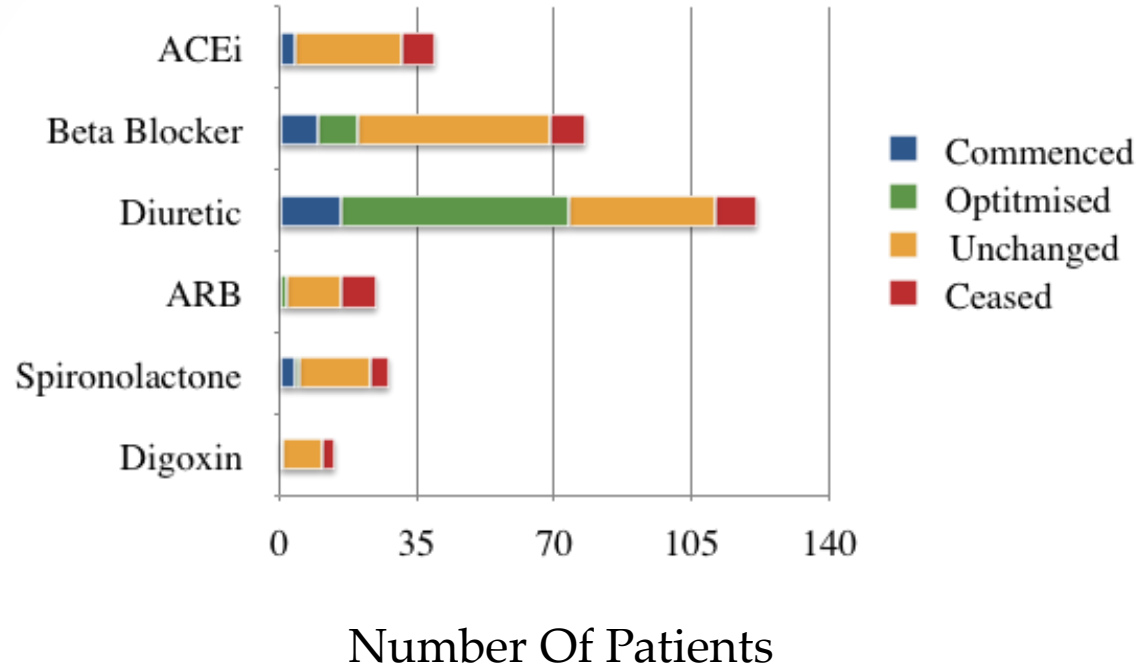


Medications



	ACEi	Beta Blocker	Diuretic	ARB	Spironolactone	Digoxin
On admission	37	70	106	23	23	14

Discharge Medication



On discharge		ACE I	Beta Blocker	Diur etci	AR B	Spironolac tone	Digo xin
	Comme nced	4	10	16	0	4	1
	Optimis ed	0	10	58	2	1	0
	Unchan ged	27	49	37	14	18	10
	Ceased	9	9	11	9	5	3

Inpatient Practice Points

- MAU – documentation
- a) NYHC
- b) Clinical signs
- c) Weight – admission & discharge
- d) Medication compliance
- e) Education: fluid restriction / weight management on discharge
- f) Medication optimization

Readmission Risk scores in CCF

Risk Factors		Score
Age	<70	0
	71 - 80	1
	81 - 90	2
	> 90	3
Comorbidity	DM	1
	COPD	1
	CKD	1
	IHD	1
Other illness	UTI / Cellulitis	1
	LRTI	2
	AKI	2
	Severe sepsis	2
Living situation	NH	0
	Home	2
Troponin Status	Positive	1
BNP	>500	1
NYHC	3	1
NYHC	4	2

Discharge planning

- Representation risk score ≥ 4
 - Telephonic review
 - Nurse /Health practitioner
 - Check list of questions
 - NYHC status
 - Weight
 - Status of co-morbidities
 - Concurrent illness
- Frequent MAU clinic assessment

Summary

- 39 % admissions to MAU → CCF
- Risk factors for representation
 - a) Advanced age
 - b) High comorbid burden
 - c) Infections – LRTI & AKI important
- Lesser cases from NH
 - o a) ? access to nursing care and medical attention
 - o b) ? possible palliative approach
- Clinical assessment /echo/biochemistry - not helpful
- NYHC score often not documented
- Predicting representation risk:
 - o Clinical assessment /echo/biochemistry - not helpful
 - o Trop/BNP – not helpful
 - o *Renal dysfunction – helpful*
- Diuretic dose optimization – 58%
- FU in clinic - crucial

Resources

- PUBMED.
- ACC (American College of Cardiology)guidelines
- ESC (European Society of Cardiology)guidelines
- Uptodate

Contribution

- Dr Sneha Bharadwaj MBBS,MD,FRACP
- Dr Deepti Yagnick MBBS, MD
- Dr Yang Jian Ong MBBS
- Dr Prudence Gregory MBBS
- Dr Jenny MBBS
- Dr Camoren MBBS
- Dr Declan MBBS
- Dr Alex. K MBBS



Thank you