

Is there a DR in the House?

Meditech DR Reporting in Galway Clinic

Walter Lee – Senior IT Data Analyst

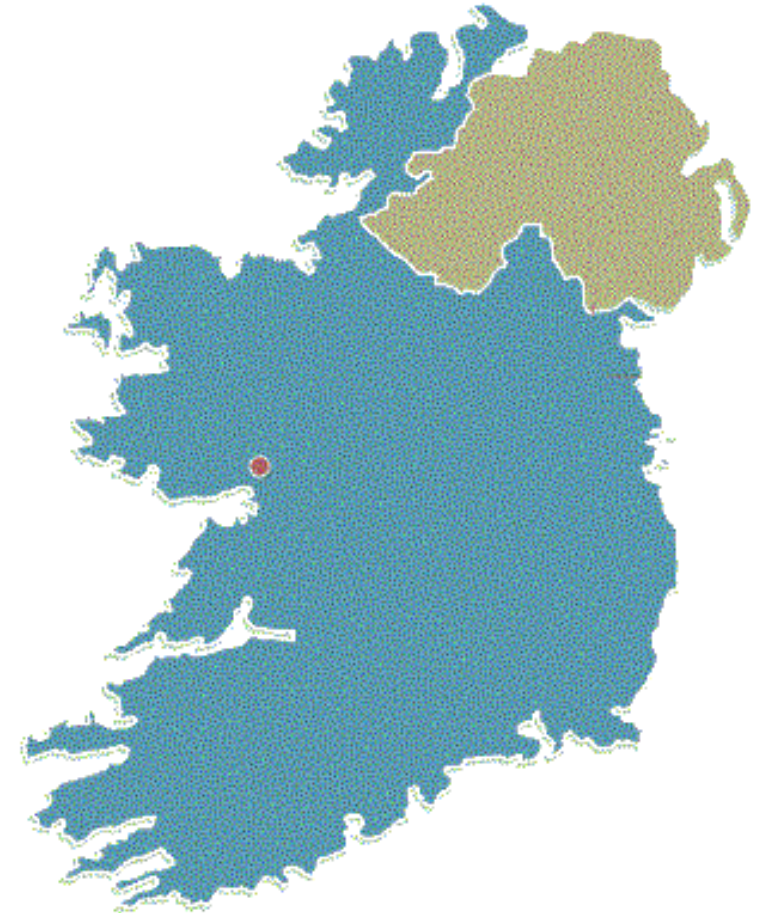


My Agenda Today

- Provide a brief introduction to Galway Clinic
- Share some of our process improvement solutions achieved through DR Reporting
- Detail the Toolset we use for DR Reporting and the reasons for its selection
- Provide a high level overview of the selected toolset features
- Our Meditech DR Observations after over 2 years use
- What are our DR Reporting short term plans
- Questions

Galway Clinic

- Situated in the West of Ireland
- 146 bed hospital opened in 2004
- HIMSS Stage 6 achieved in 2014
- First UK/Ireland hospital to Go LIVE with Meditech 6.1 in May 2017
- First UK/Ireland hospital to Go LIVE with Meditech Expanse in July 2018

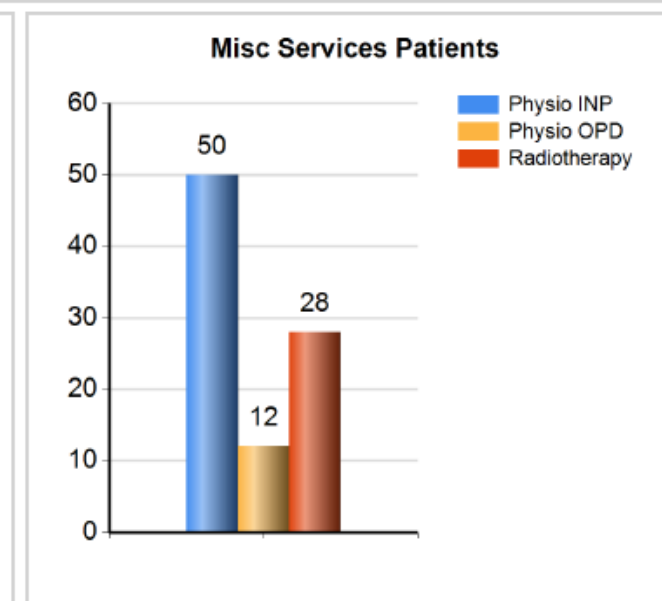
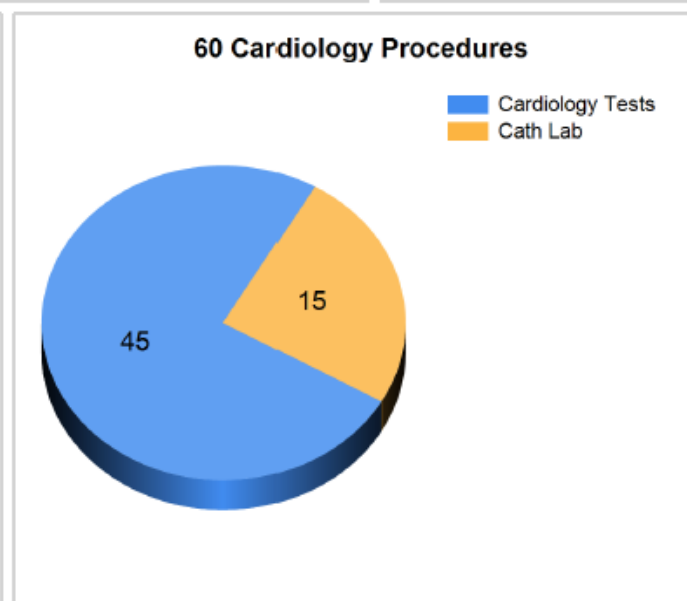
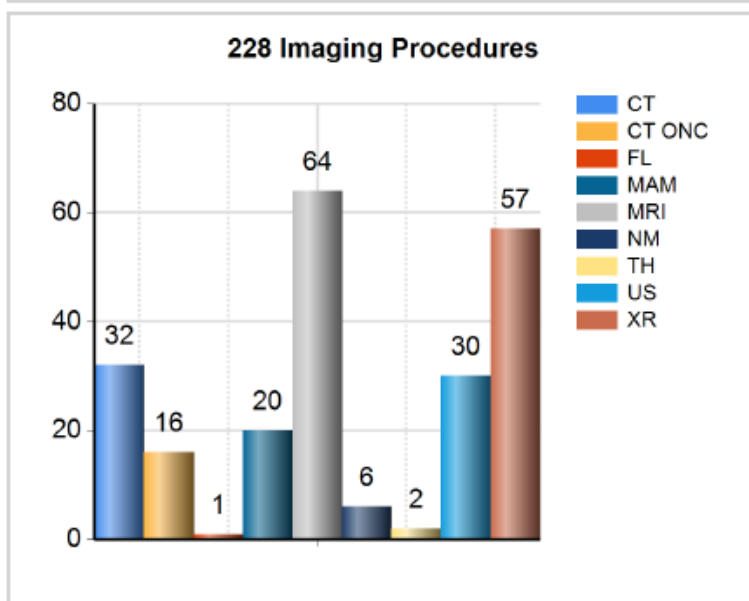
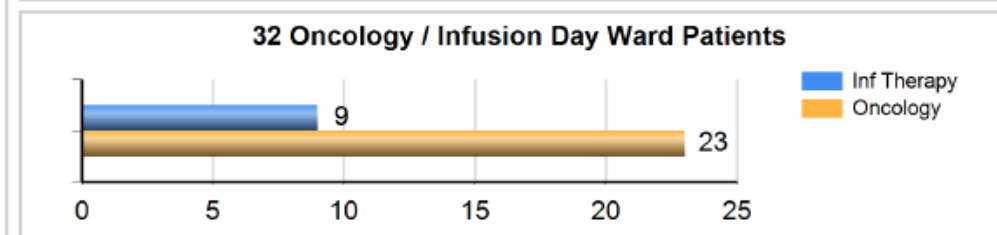
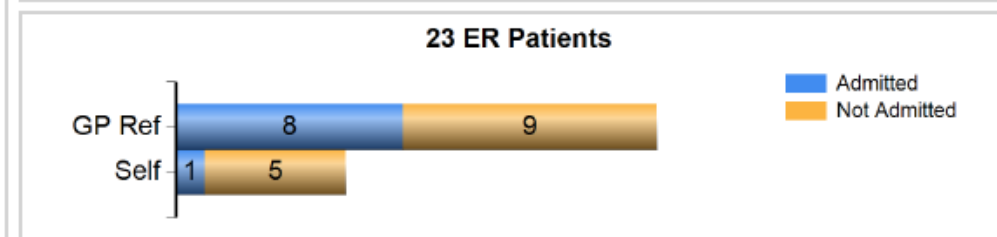
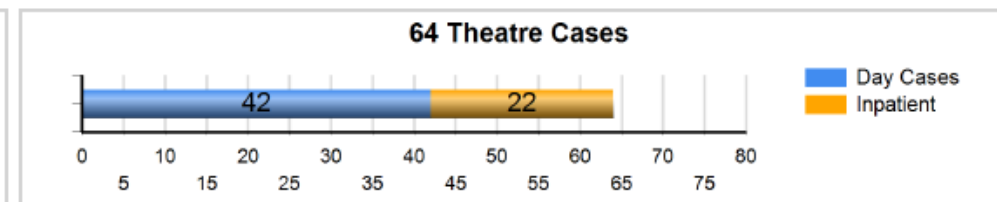
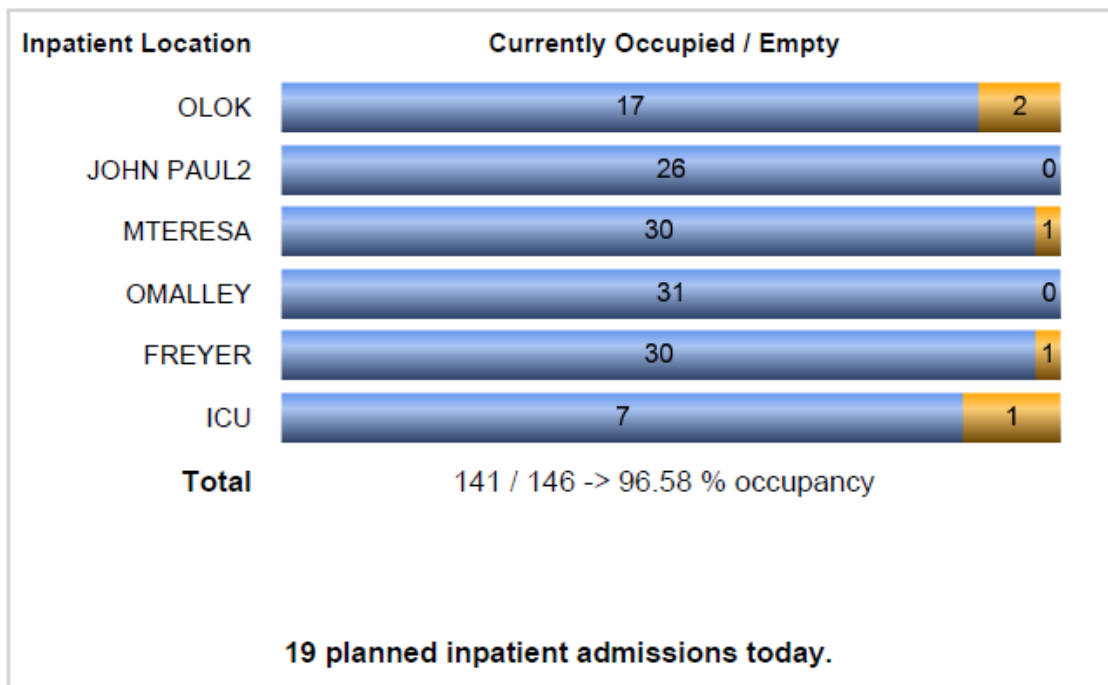


Reporting Solutions Introduction

- Meditech Data Repository (DR) Reports will be presented from many of our departments including:
 - Bed Management
 - Diabetic Nurse Specialist
 - ER
 - Executive/Management
 - Marketing/GP Liaison
 - Oncology
 - Physiotherapy
- Note - Demo data is not LIVE - there is no Patient identifying data included

Report 1 – Executive Dashboard

- Automatically emailed to Management on a daily basis
- Contains current bed occupancy levels and information on the activity in various clinical areas for the previous day



Report 2 – Hypoglycaemic Testing

- Available to Diabetic Nurse Specialist
- Detailing all patients that have tested with very low blood sugar levels
- Used to monitor the reactive retests of these same patients
- Verifies if retest times are inside our documented response windows
- Can be date filtered

	Glucose, POC [900.000] (Department Point of Care [POC])							
	Reference Range: 3.9-5.8 mmol/L							
	Patient Acct Number	Name	Specimen Number	Test Result	Units	Flag	Collection Date Time	Late Verify Date Time (> 12 hrs)
FREYER	Patient Test Count: 8							
	GC0000000	Other, A. N.	0513:P00025R	2.2	mmol/L	L	13/05/2019 06:26	
			Later Test Results within 60 mins :	1.9	mmol/L	L	13/05/2019 06:49	
				3.3	mmol/L	*	13/05/2019 07:20	
	GC0000000	Other, A. N.	0513:P00026R	1.9	mmol/L	L	13/05/2019 06:49	
			Later Test Results within 60 mins :	3.3	mmol/L	*	13/05/2019 07:20	
	GC0000000	Other, A. N.	0513:P00027R	3.3	mmol/L	*	13/05/2019 07:20	
			Later Test Results within 60 mins :					
	GC0000000	Other, A. N.	0516:P00108R	3.6	mmol/L	*	16/05/2019 18:46	
			Later Test Results within 60 mins :	3.6	mmol/L	*	16/05/2019 19:21	
	GC0000000	Other, A. N.	0516:P00109R	3.6	mmol/L	*	16/05/2019 19:21	
			Later Test Results within 60 mins :	4.4	mmol/L		16/05/2019 19:47	
	GC0000000	Other, A. N.	0518:P00025R	3.7	mmol/L	*	18/05/2019 06:31	
			Later Test Results within 60 mins :	3.2	mmol/L	*	18/05/2019 06:52	
				3.9	mmol/L		18/05/2019 07:30	
	GC0000000	Other, A. N.	0518:P00026R	3.2	mmol/L	*	18/05/2019 06:52	
			Later Test Results within 60 mins :	3.9	mmol/L		18/05/2019 07:30	
	GC0000000	Other, A. N.	0518:P00030R	3.9	mmol/L		18/05/2019 07:30	
			Later Test Results within 60 mins :					
IMAGING	Patient Test Count: 1							
	GC0000000	Other, A. N.	0515:P00067R	3.9	mmol/L		15/05/2019 13:40	
			Later Test Results within 60 mins :					
JOHN PAUL2	Patient Test Count: 4							
	GC0000000	Other, A. N.	0513:P00002R	2.1	mmol/L	L	13/05/2019 01:26	
			Later Test Results within 60 mins :	3.1	mmol/L	*	13/05/2019 01:27	
				3.3	mmol/L	*	13/05/2019 01:30	
				3.4	mmol/L	*	13/05/2019 01:42	
				5.3	mmol/L		13/05/2019 02:03	
	GC0000000	Other, A. N.	0513:P00003R	3.1	mmol/L	*	13/05/2019 01:27	
			Later Test Results within 60 mins :	3.3	mmol/L	*	13/05/2019 01:30	
				3.4	mmol/L	*	13/05/2019 01:42	

Report 3 – Future Appointments by Consultant

- Bed Management department report
- Used for forward planning of occupancy levels
- Allows view for x days into future and for any of our consultants
- Utilises drill-down format for patient detail

The tables below are displaying patients under Consultant [Lee, Walter - Suite 99]

Booked patient appointments - Next 31 days

⊕ Endoscopy Surgery - 13	
⊕ MRI Exams - 2	
⊕ Computerised Tomography Exams - 1	
Booked appointments	16

Other upcoming patient visits - Next 31 days

Day Cases - 64	
⊕ Others - 64	
In-patients - 2	
⊕ Surgery - 2	
Other visits:	66

Patients arrived today so far:

Day Cases - 4	
⊕ Surgical Day Ward - 4	
In-patients - 3	
⊕ Mother Teresa - 3	
Arrived today:	7

The tables below are displaying patients under Consultant [Lee, Walter - Suite 99]

Booked patient appointments - Next 31 days

<input type="checkbox"/> Endoscopy Surgery - 13	
<input type="checkbox"/> Gastroscopy +/- Dilation (000194) - 9	
<input type="checkbox"/> Colonoscopy-Both Sides (000455) - 4	
<input type="checkbox"/> MRI Exams - 2	
<input type="checkbox"/> Computerised Tomography Exams - 1	
Booked appointments	16

Other upcoming patient visits - Next 31 days

Day Cases - 64	
<input type="checkbox"/> Others - 64	
In-patients - 2	
<input type="checkbox"/> Surgery - 2	
Other visits:	66

Patients arrived today so far:

Day Cases - 4					
<input type="checkbox"/> Surgical Day Ward - 4					
In-patients - 3					
<input type="checkbox"/> Mother Teresa - 3					
Arrived today:					7

The tables below are displaying patients under Consultant [Lee, Walter - Suite 99]

Booked patient appointments - Next 31 days

⊞ Endoscopy Surgery - 13

⊞ Gastroscopy +/- Dilation (000194) - 9

	Patient Name	MR Nbr	Visit Nbr	Appointment Date
	Other, A.N.	MR111111111	GC0000000	09/09/2019
	Other, A.N.	MR111111111	GC0000000	09/09/2019
	Other, A.N.	MR111111111	GC0000000	09/09/2019
	Other, A.N.	MR111111111	GC0000000	09/09/2019
	Other, A.N.	MR111111111	GC0000000	09/09/2019
	Other, A.N.	MR111111111	GC0000000	09/09/2019
	Other, A.N.	MR111111111	GC0000000	09/09/2019
	Other, A.N.	MR111111111	GC0000000	09/09/2019
	Other, A.N.	MR111111111	GC0000000	09/09/2019

⊞ Colonoscopy-Both Sides (000455) - 4

⊞ MRI Exams - 2

⊞ Computerised Tomography Exams - 1

Booked appointments	16
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Other upcoming patient visits - Next 31 days

Day Cases - 64

⊞ Others - 64

In-patients - 2

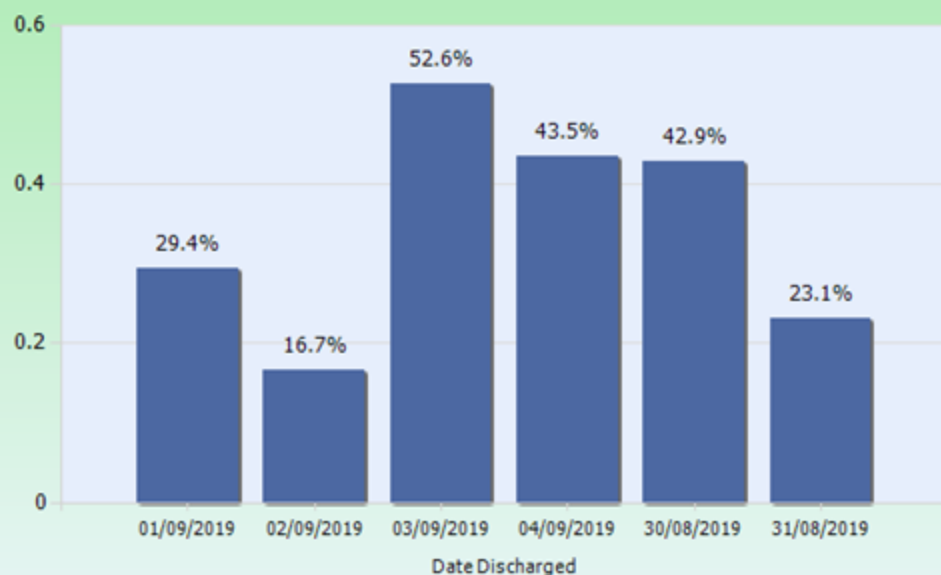
⊞ Surgery - 2

Report 4 – Late Discharges

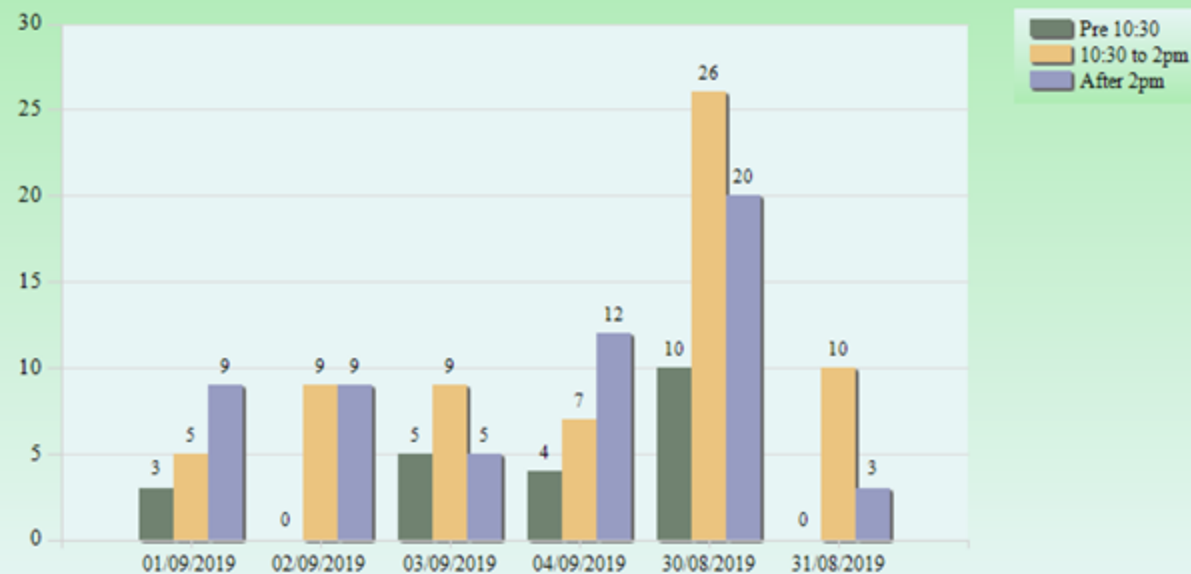
- Target time for our daily patient discharges is 10.30am
- Consultants are requested to actively update patient discharge dates to help improve Bed Management planning
- Report allows review of past performance in this area and the reasons for late discharges on a case by case basis
- Drives communication reminders to consultants

Discharged Patients between 30 Aug 2019 and 4 Sep 2019

% Discharged on planned date



Discharges by time



Discharged Date	No of Patients	No of patients discharged on planned date	% Planned
01/09/2019	17	5	29.4%
02/09/2019	18	3	16.7%
03/09/2019	19	10	52.6%
04/09/2019	23	10	43.5%
30/08/2019	56	24	42.9%
31/08/2019	13	3	23.1%
Total:	146	55	37.7%

Discharged Patients between 30 Aug 2019 and 4 Sep 2019

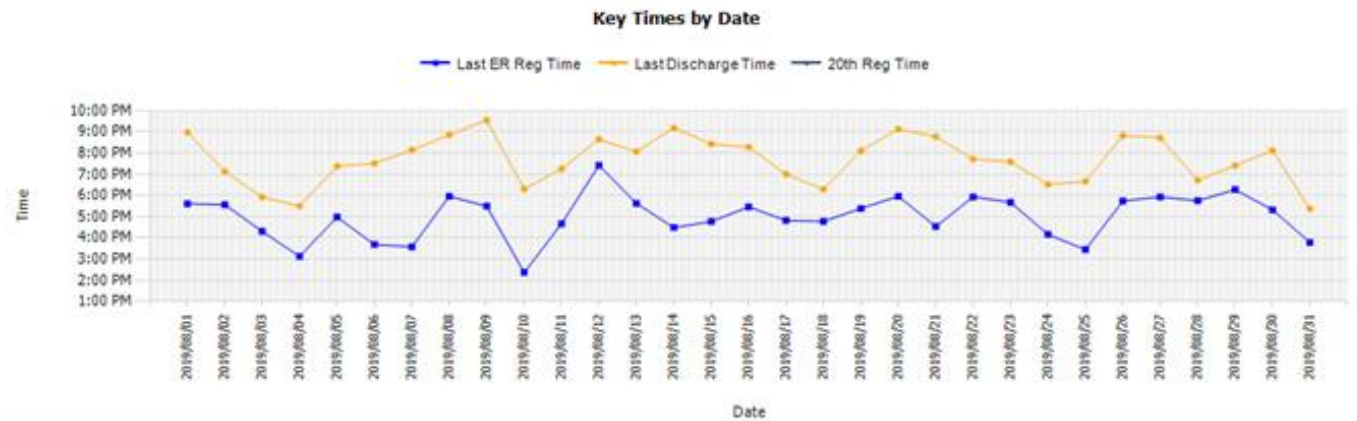
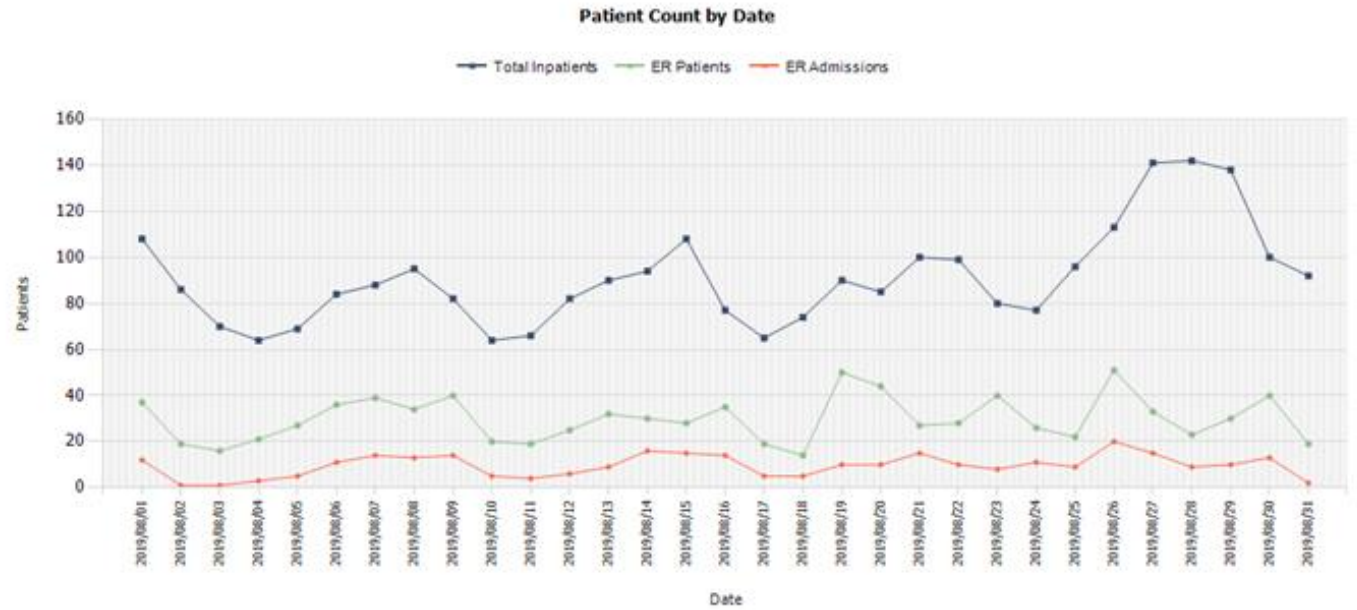
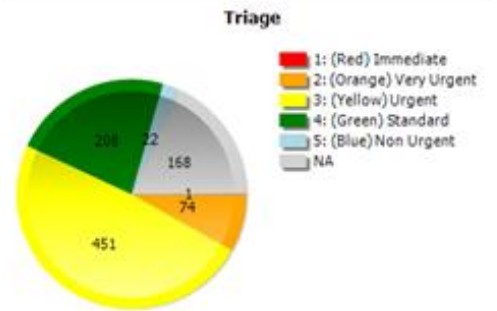
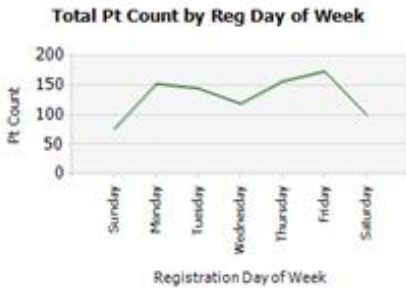


Visit No	Medical Record No	Patient Name	Sex	DOB	Age	ADM Date	ADM Time	DC Date	DC Time	DC From	DC By	DC Disposition	Admit Doctor	Est LOS	Actual LOS	Matched	GP
GC0000000	MR1111111	Other, A.N.	F	02/02/1982	37	28/08/2019	18:16	04/09/2019	19:26	Mother Teresa	Bloggs, Mary	HOM	Lee, Walter	3	7		Test, GP
GC0000000	MR1111111	Other, A.N.	F	02/02/1982	37	02/09/2019	14:06	04/09/2019	19:00	O'Malley	Bloggs, Mary	HOM	Lee, Walter	3	2		Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	03/09/2019	13:22	04/09/2019	18:13	O'Malley	Bloggs, Mary	HOM	Lee, Walter	3	1		Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	03/09/2019	11:14	04/09/2019	17:37	Mother Teresa	Bloggs, Mary	HOM	Lee, Walter	1	1	Matched	Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	03/09/2019	18:46	04/09/2019	17:00	John Paul II	Bloggs, Mary		Lee, Walter	3	1		Test, GP
GC0000000	MR1111111	Other, A.N.	F	02/02/1982	37	02/09/2019	13:40	04/09/2019	16:58	O'Malley	Bloggs, Mary	HOM	Lee, Walter	3	2		Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	03/09/2019	19:17	04/09/2019	16:30	O'Malley	Bloggs, Mary	HOM	Lee, Walter	3	1		Test, GP
GC0000000	MR1111111	Other, A.N.	F	02/02/1982	37	03/09/2019	18:10	04/09/2019	16:29	John Paul II	Bloggs, Mary		Lee, Walter	3	1		Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	02/09/2019	16:19	04/09/2019	14:39	Mother Teresa	Bloggs, Mary	HOM	Lee, Walter	3	2		Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	03/09/2019	10:33	04/09/2019	14:16	Mother Teresa	Bloggs, Mary	HOM	Lee, Walter	1	1	Matched	Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	03/09/2019	11:17	04/09/2019	14:11	Mother Teresa	Bloggs, Mary	HOM	Lee, Walter	1	1	Matched	Test, GP
GC0000000	MR1111111	Other, A.N.	F	02/02/1982	37	03/09/2019	08:45	04/09/2019	14:05	Freyer	Bloggs, Mary	HOM	Lee, Walter	1	1	Matched	Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	03/09/2019	13:28	04/09/2019	14:00	O'Malley	Bloggs, Mary	HOM	Lee, Walter	1	1	Matched	Test, GP
GC0000000	MR1111111	Other, A.N.	F	02/02/1982	37	01/09/2019	17:38	04/09/2019	12:53	O'Malley	Bloggs, Mary	HOM	Lee, Walter	3	3	Matched	Test, GP
GC0000000	MR1111111	Other, A.N.	F	02/02/1982	37	02/09/2019	15:28	04/09/2019	12:44	John Paul II	Bloggs, Mary	HOM	Lee, Walter	3	2		Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	26/08/2019	14:39	04/09/2019	12:38	John Paul II	Bloggs, Mary	HOM	Lee, Walter	5	9		Test, GP
GC0000000	MR1111111	Other, A.N.	F	02/02/1982	37	03/09/2019	16:22	04/09/2019	11:59	Mother Teresa	Bloggs, Mary	HOM	Lee, Walter		1		Test, GP
GC0000000	MR1111111	Other, A.N.	M	02/02/1982	37	03/09/2019	08:24	04/09/2019	11:58	Mother Teresa	Bloggs, Mary	HOM	Lee, Walter	1	1	Matched	Test, GP

Report 5 – ER Dashboard

- Management dashboard for Emergency Room
- Provides patient Triage, age and location demographic information
- Statistical data provided on busiest registration days and times

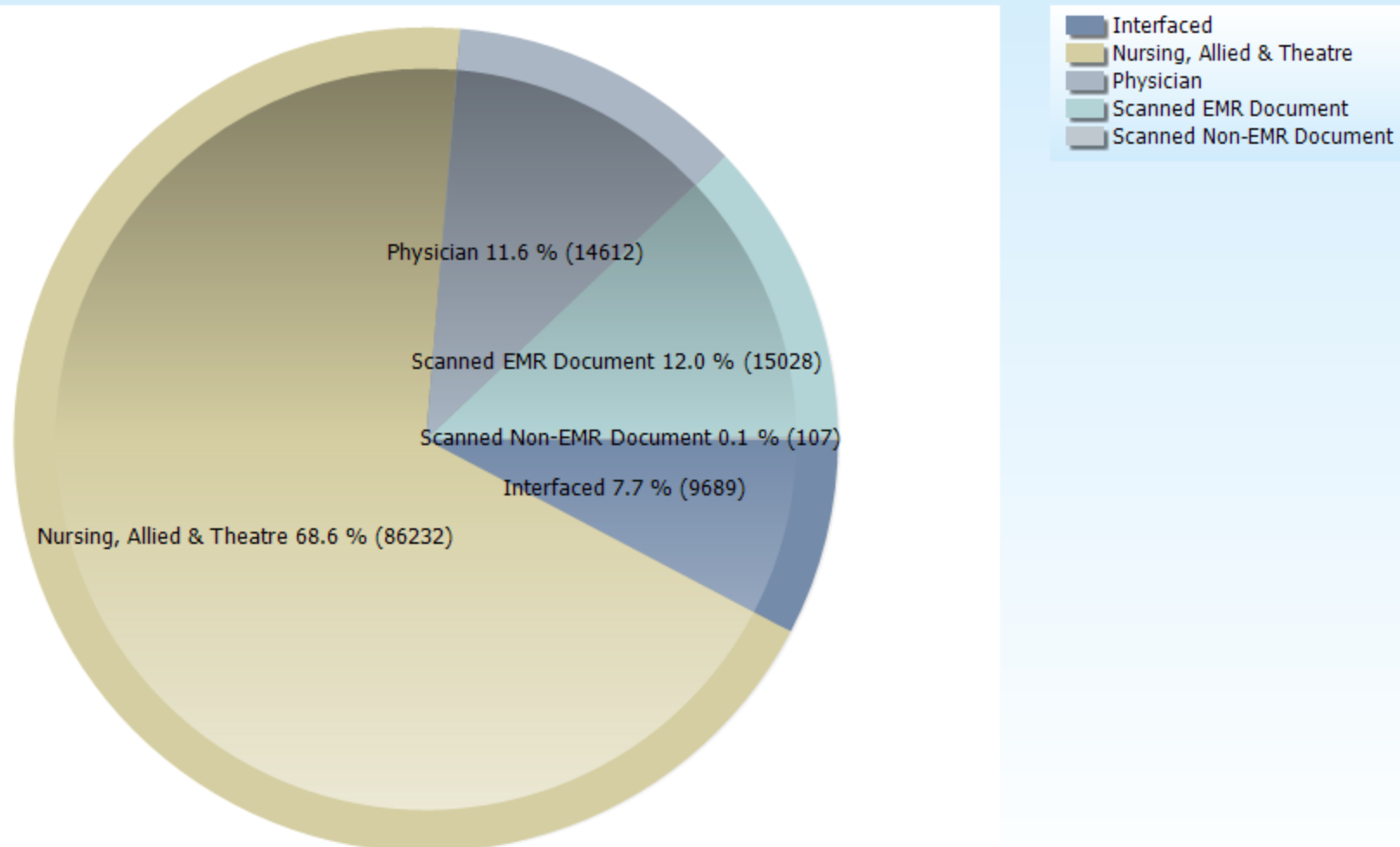
GALWAY CLINIC ER Dashboard



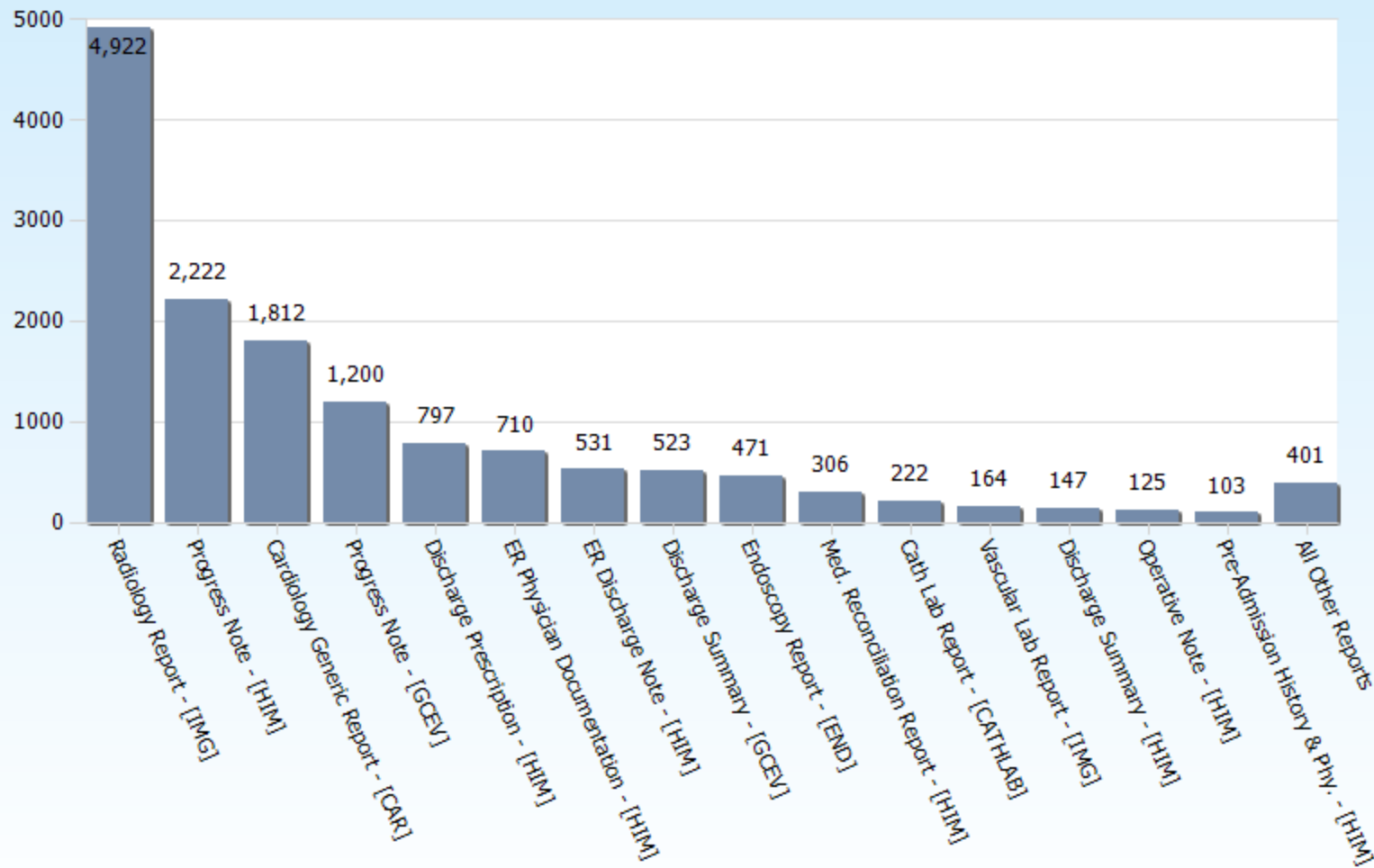
Report 6 – Health Informatics Statistics

- Facilitates the analysis of Scanned vs Electronic document in Meditech
- Drill down by Documentation Area to show internal document types
- Filtered by date range

Scanned versus electronic documentation

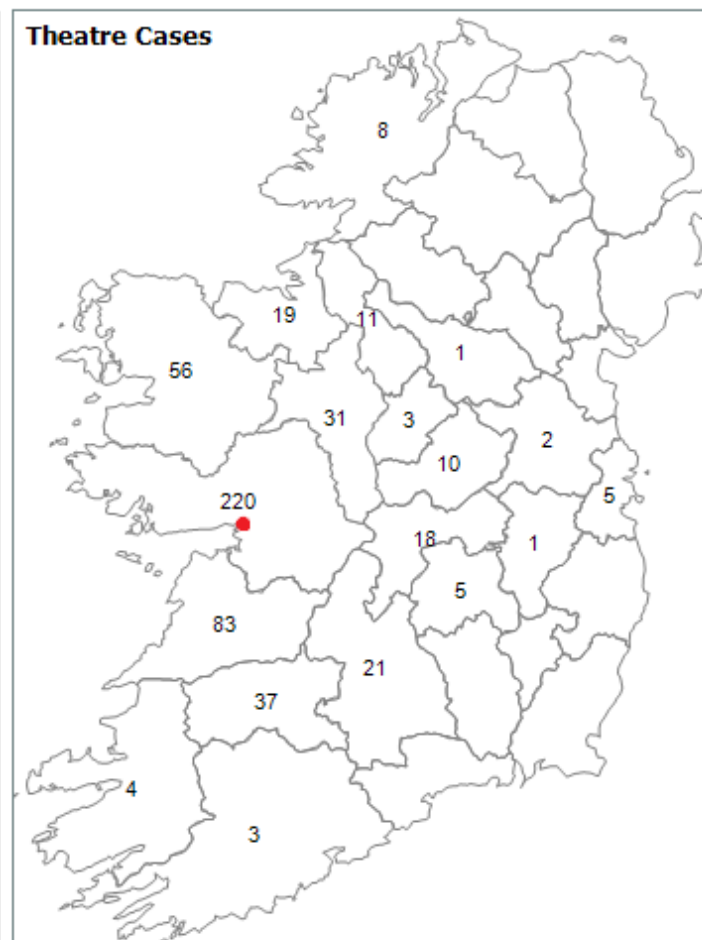
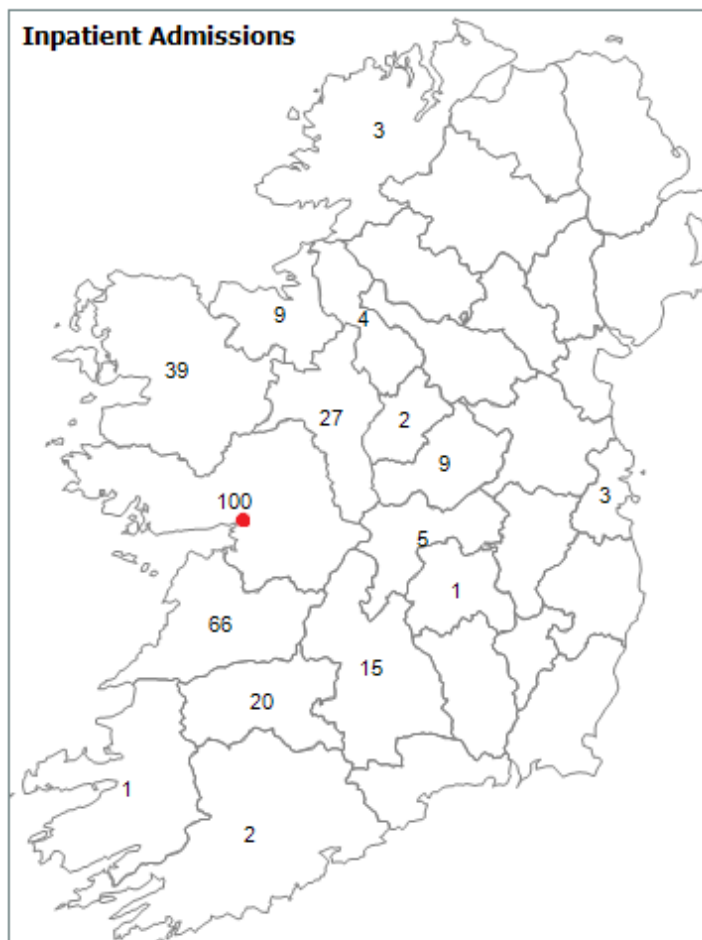
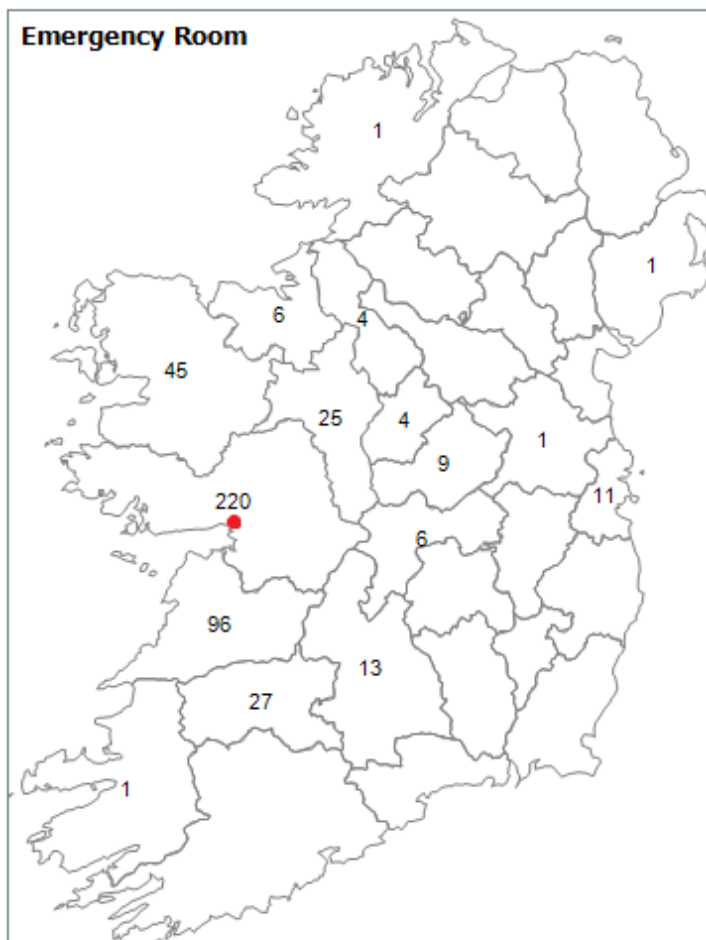


Physician Documentation (ITS)



Report 7 – Patients by Location

- Our Marketing Department run promotional campaigns in National and Local Media and also via GP practice communications
- This report demonstrates the success of campaigns and highlights geographical areas that would warrant further clinic promotional activities



County	# Patients	% of Total
Galway	220	46.12%
Clare	96	20.13%
Mayo	45	9.43%
Limerick	27	5.66%
Roscommon	25	5.24%
Others	64	13.42%
Total	477	

County	# Patients	% of Total
Galway	100	32.68%
Clare	66	21.57%
Mayo	39	12.75%
Roscommon	27	8.82%
Limerick	20	6.54%
Others	54	17.65%
Total	306	

County	# Patients	% of Total
Galway	220	40.89%
Clare	83	15.43%
Mayo	56	10.41%
Limerick	37	6.88%
Roscommon	31	5.76%
Others	111	20.63%
Total	538	

Report 8 – Oncology Chair Utilisation

- Management report used for future patient treatment resource allocation and assessment of historical resource use efficiencies

Oncology Chair Utilisation from 03/09/2019 to 03/09/2019. Utilisation: 91.4 %

Number of cancellations within 2 weeks of the appointment date: 2

Chair	Patient Name	MR Nbr	Visit Nbr	Current Status	Treatment	Nurse Assigned	ARV Time	DEP Time	ADT Time	Time in Chair
Chair 1	Other, A.N.	MR11111	GC00000	REG-CLI	Abiraterone (Oral)	Bloggs, Mary	10:08	11:39		91
Chair 1	Other, A.N.	MR11111	GC00000	REG-CLI	Bevacizumab Q21 Days	Bloggs, Mary	14:26	17:52		206
							Total time for Chair 1 (mins):			297
Chair 2	Other, A.N.	MR11111	GC00000	REG-CLI	Modified FOLFOX C2	Bloggs, Mary	08:53	13:48		295
Chair 2	Other, A.N.	MR11111	GC00000	REG-CLI	Gemcitabine (3/4 wks) C1D8	Bloggs, Mary	14:32			
							Total time for Chair 2 (mins):			295
Chair 3	Other, A.N.	MR11111	GC00000	REG-CLI	Modified FOLFIRI/Bevacizumab C2	Bloggs, Mary	08:30	15:03		393
Chair 3	Other, A.N.	MR11111	GC00000	REG-CLI	5FU/Folinic (OPTIMOX) C12	Bloggs, Mary	15:03			
							Total time for Chair 3 (mins):			393
Chair 4	Other, A.N.	MR11111	GC00000	REG-CLI	Modified FOLFOX C6	Bloggs, Mary	09:00	13:54		294
Chair 4	Other, A.N.	MR11111	GC00000	REG-CLI	Oral Chemotherapy	Bloggs, Mary	14:00	17:01		181
							Total time for Chair 4 (mins):			475
Chair 5	Other, A.N.	MR11111	GC00000	REG-CLI	Nivolumab Q14 Days C10	Bloggs, Mary	09:04	12:29		205
Chair 5	Other, A.N.	MR11111	GC00000	REG-CLI	Bevacizumab Q21 Days	Bloggs, Mary	14:15	17:10		175
							Total time for Chair 5 (mins):			380
Chair 6	Other, A.N.	MR11111	GC00000	REG-CLI	Modified FOLFOX C11	Bloggs, Mary	09:25	17:10		465
							Total time for Chair 6 (mins):			465
Chair 7	Other, A.N.	MR11111	GC00000	REG-CLI	PACLitaxel/CARBOplatin/Bevacizumab C6	Bloggs, Mary	08:36	17:51		555
							Total time for Chair 7 (mins):			555
Chair 8	Other, A.N.	MR11111	GC00000	DIS-IN	DOXOrubicin/Cyclophosphamide (AC) Q14 C2	Bloggs, Mary	08:57		15:53	416
Chair 8	Other, A.N.	MR11111	GC00000	REG-CLI	PAZOPanib (Oral)	Bloggs, Mary	15:52	18:02		130
							Total time for Chair 8 (mins):			546

Oncology Chair Utilisation from 03/09/2019 to 03/09/2019. Utilisation: 91.4 %



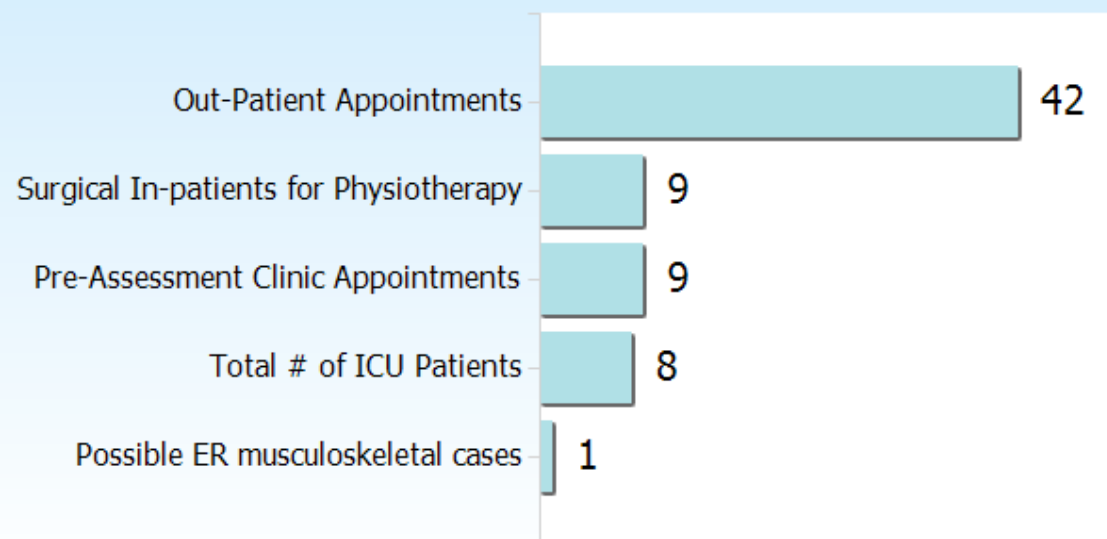
Number of cancellations within 2 weeks of the appointment date: 2

Chair	Patient Name	MR Nbr	Visit Nbr	Current Status	Treatment	Nurse Assigned	ARV Time	DEP Time	ADT Time	Time in Chair
Chair 9	Other, A.N.	MR11111	GC00000	REG-CLI	PERTuzumab/Trastuzumab Q21 Days C2	Bloggs, Mary	09:46	15:56		370
						Total time for Chair 9 (mins):				370
Chair 10	Other, A.N.	MR11111	GC00000	REG-CLI	Bevacizumab Q21 Days	Bloggs, Mary	14:57	17:51		174
						Total time for Chair 10 (mins):				174
Chair 13	Other, A.N.	MR11111	GC00000	REG-CLI	PACLitaxel weekly W8	Bloggs, Mary	08:45	13:32		287
Chair 13	Other, A.N.	MR11111	GC00000	REG-CLI	iMAtinib (Oral)	Bloggs, Mary	14:20	17:10		170
						Total time for Chair 13 (mins):				457
Chair 14	Other, A.N.	MR11111	GC00000	REG-CLI	Modified FOLFOX/PANitumumab C9	Bloggs, Mary	09:17	14:46		329
Chair 14	Other, A.N.	MR11111	GC00000	REG-CLI	riTUXimab 8 weekly	Bloggs, Mary	14:52	17:51		179
						Total time for Chair 14 (mins):				508
Chair 15	Other, A.N.	MR11111	GC00000	REG-CLI	CARBOplatin Q21/PACLitaxel weekly C4D8	Bloggs, Mary	08:41	14:50		369
Chair 15	Other, A.N.	MR11111	GC00000	REG-CLI	Cetuximab Q14 Days	Bloggs, Mary	14:47	17:52		185
						Total time for Chair 15 (mins):				554
Not Assigned	Other, A.N.	MR11111	GC00000	REG-CLI	Check Bloods	Bloggs, Mary	15:29	17:44		135
						Total time for Not Assigned (mins):				135
Side Room	Other, A.N.	MR11111	GC00000	REG-CLI	Enzalutamide (Oral)	Bloggs, Mary	11:35	13:01		86
Side Room	Other, A.N.	MR11111	GC00000	REG-CLI	Oral Chemotherapy	Bloggs, Mary	14:10	17:51		221
						Total time for Side Room (mins):				307
	Utilisation:	91.4%	2		Total Chair Capacity: 6465 mins	Total time in all chairs:				5,911

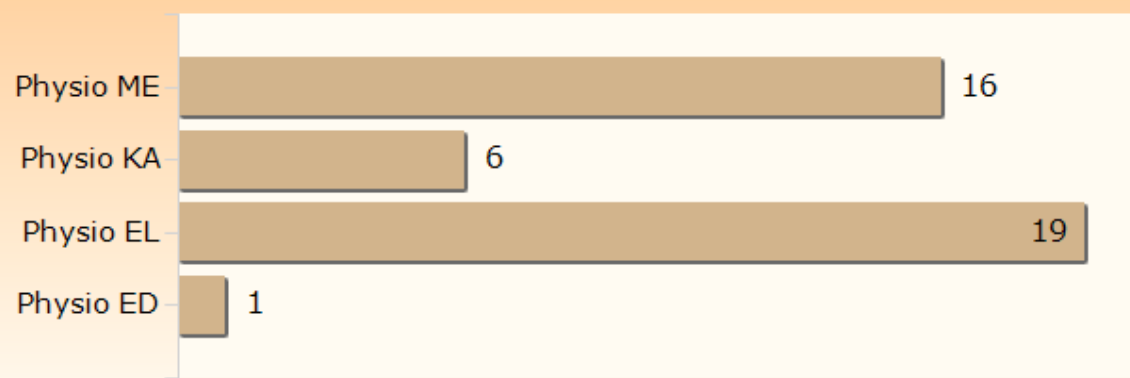
Report 9 – Physiotherapy Dashboard

- Physio Dept Management report used for future resource planning
- Allows further detailed analysis in these areas:
 - Planned Admissions
 - Pre-Assessment clinic
 - Out-Patients
 - Surgical patients
 - In-Patients

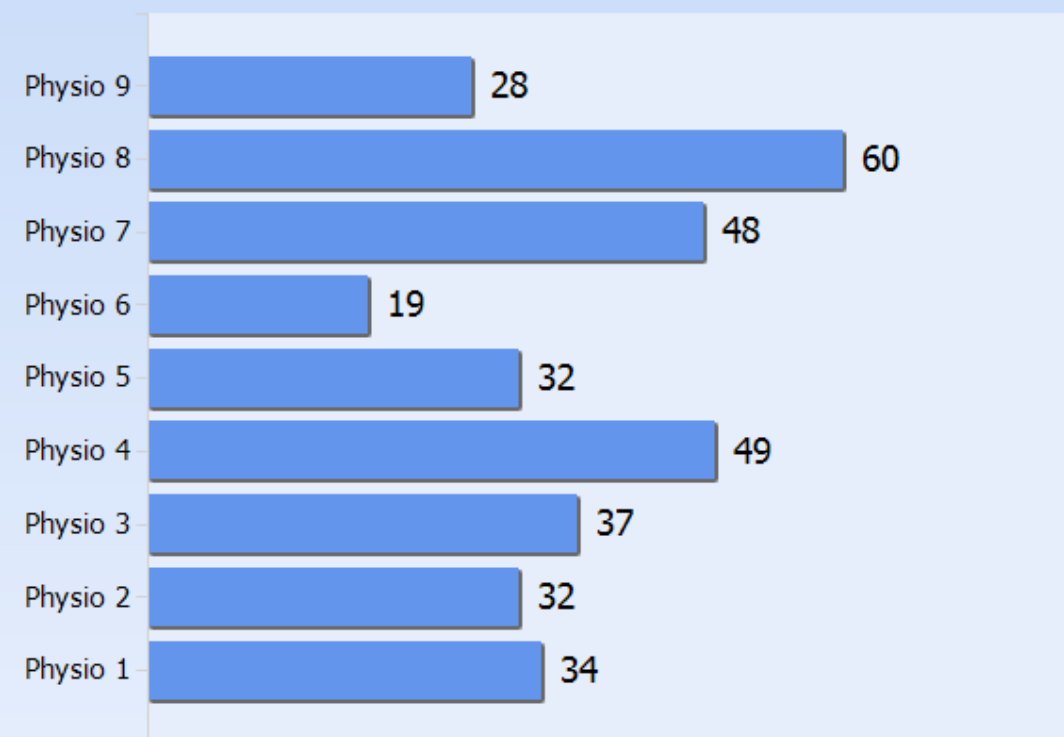
Upcoming Appointments - Next 7 days



42 Out-patient appointments - Next 7 days



339 'In-patient physiotherapy consult' documentations in last 7 days



Links to detailed reports

[Planned admissions](#)

[Out-patients](#)

[Surgical patients](#)

[Pre-assessment clinic](#)

[In-patients](#)

Colour representations: Future Both Past

Surgical patients requiring physio between 06/09/2019 and 13/09/2019







All cases: 9		In-patient cases: 9		Day cases: 0		Major: 9		Inter: 0		Minor: 0		Click here to see all surgical procedures that require physiotherapy treatment			
Patient Name	MR Nbr	Visit Number	Case Type	Severity	Procedure Group	Appointment	Procedure Code	Surgeon	Op date	Op time	Patient Location	Booked By	Appointm ent Date Time	Type	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Cardiology	TAVI (005133)	CATHLAB3	Dr. DA	06/09/2019	08:00	ICU	Bloggs, Jane	06/09/2019	In-patient	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Urology Surgery	Prostatectomy - Robotic (000709)	PROSTATE3	Dr. GA	06/09/2019	07:35	MTERESA	Bloggs, Jane	06/09/2019	In-patient	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Cardiology	TAVI (005133)	CATHLAB3	Dr. DA	06/09/2019	09:35	ICU	Bloggs, Jane	06/09/2019	In-patient	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Vascular Surgery	Carotid Endartectomy (001447)	CAROTID1	Dr. SH			JOHN PAUL2	Bloggs, Jane	06/09/2019	In-patient	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Laparoscopic Surgery	Lap Nephrectomy +Ureterectomy (000918)	NEPHRECTLAP3	Dr. FR			JOHN PAUL2	Bloggs, Jane	06/09/2019	In-patient	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Laparoscopic Surgery	Lap Nephrectomy (000917)	NEPHRECTLAP2	Dr. FR			JOHN PAUL2	Bloggs, Jane	06/09/2019	In-patient	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Orthopaedic Surgery	Total Knee Replacement (003910)	REPLACEMENT6	Dr. BR			TBD	Bloggs, Jane	09/09/2019	In-patient	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Orthopaedic Surgery	Total Hip Replacement (003660)	REPLACEMENT5	Dr. BR			TBD	Bloggs, Jane	09/09/2019	In-patient	
Other, A.N.	MR11111	GC00000	EL	MAJOR	Orthopaedic Surgery	Total Hip Replacement (003660)	REPLACEMENT5	Dr. BR			TBD	Bloggs, Jane	09/09/2019	In-patient	

Report 10 – Antibiotic Delivery in ER

- Facilitates high level analysis of Antibiotic prescribing in ER
- Drill down available to see actual Antibiotics and other meds at a patient level

Antibiotic delivery in ER between 05/09/2019 and 05/09/2019

ER cases:		32	Cases with meds:		18	Cases with antibiotics:		4	Admitted cases:		9	Click here to see all antimicrobial medications in our formulary		
 Patient Name Show RFV?	Arrival Date Time	ER Doctor	Time Seen By Provider	Triaged at	Time of first vitals	Respiratory Rate	O2 Saturation %	Blood Pressure	Heart Rate	Temperature Celsius	Total EWS	Meds 	Antibiotics 	Admitted 
Other, A.N.	05/09/2019 10:02	Dr XXX	13:53	10:09	10:09	15	97%	123/70	56	36				
Other, A.N.	05/09/2019 10:07	Dr XXX	10:14	10:20	10:20	17	99%	179/76	79	36.5	0	5	2	Yes
Other, A.N.	05/09/2019 10:11	Dr XXX	10:20	10:18	10:18	14	98%	146/70	86	36.5		1		
Other, A.N.	05/09/2019 10:16	Dr XXX	10:26	10:24	10:24	15	99%	115/70	54	36.4				
Other, A.N.	05/09/2019 10:27	Dr XXX	10:34	10:51	10:51							1		
Other, A.N.	05/09/2019 10:34	Dr XXX	10:54	10:45	10:45	14	97%	122/60	54	36.3				
Other, A.N.	05/09/2019 10:39	Dr XXX	11:53	10:47	10:47	20	98%	133/83	73	36.1		7		Yes
Other, A.N.	05/09/2019 10:43	Dr XXX	10:54	11:01	11:01	16	97%	159/78	94	35.9	2			
Other, A.N.	05/09/2019 10:49	Dr XXX	10:57											
Other, A.N.	05/09/2019 11:01	Dr XXX	11:37	12:24	12:24	20	97%	122/71	68	36.1				
Other, A.N.	05/09/2019 11:11	Dr XXX	11:32	11:30	11:30	14	99%	129/82	85	36.7	0			
Other, A.N.	05/09/2019 11:46	Dr XXX	11:56	12:34	12:34	14	98%	118/77	82	36.9		2		
Other, A.N.	05/09/2019 12:03	Dr XXX	12:05											
Other, A.N.	05/09/2019 12:43	Dr XXX	12:54	12:55	12:55	16	98%	169/110	77	36.9	1			
Other, A.N.	05/09/2019 12:50	Dr XXX	13:08	13:01	13:01	20	95%	155/95	120	36.8		3		Yes
Other, A.N.	05/09/2019 12:57	Dr XXX	15:01	13:37	13:37	14	97%	152/83	100	36.7	1	2		
Other, A.N.	05/09/2019 13:09	Dr XXX	13:58	13:16	13:16	17	99%	123/76	89	36.4		3		

Patient - Name: Other, A.N. - **MR No:** MR11111 - **Visit No:** GC00000



Prescription	ROA	Schedule	Status	Prescribed at	Prescriber	First eMAR admin	Given
Co-amoxiclav (Teva) 1.2 g vials (10)	IV	SCH	AC	05/09/2019 15:30	Dr. XXXX	05/09/2019 16:28	Y
Metronidazole (Flagyl) 500 mg/100 mL infusion (20)	IV	SCH	AC	05/09/2019 15:30	Dr. XXXX	05/09/2019 16:28	Y

Our DR Reporting History

- A third party licensed tool was used prior to our Meditech 6.x migration project
 - Served its purpose for online provision of MT report data in Magic
 - Knowledgebase for ongoing development resources was limited
 - Limited potential for moving forward with Business Intelligence
 - Expensive cost model

DR Reporting for MT 6.x and beyond!

- Microsoft SQL Server Suite of Products
 - Already licensed by us and successfully used for DR storage and integration purposes
 - Now functionally matured to a level that it can become our Tool of Choice for general reporting and Business Intelligence projects in the future within Galway Clinic
 - Widespread use across many industries – almost infinite resources online
 - Tight integration with our existing Microsoft Office applications

Microsoft SQL Server Suite of Products

- SQL Server -> Database Engine
 - Used for our data storage and warehousing
 - Holds our Meditech Data Repository (DR) – a relational database containing a near real-time copy of all our Meditech data.
 - Contains data relating to all of our In-house developed applications e.g. Online Bookings, RMO Book, Patient Appointment Texting
 - Used by many of our 3rd Party applications also e.g. Qpulse, TMS Time Management, Lean Daycare Workflow Management, MegaPay Payroll, SysAid Support Ticket System, ICIP (ICU Patient Record)

Microsoft SQL Server Suite of Products

- SQL Server -> Reporting Services (SSRS)
 - Web based reporting environment accessible to all network users in Galway Clinic
 - Both report and folder level security utilizes our existing network permissions architecture (Active Directory) to protect access to private data
 - Presents key data in various formats including text based tables, drill downs and chart based presentations
 - Delivery Methods:
 - “Run it yourself” when needed through internet browser
 - Subscription based – email or file download on a user specified schedule. User has full control of this themselves (if desired)
 - Direct ATOM Live data feed into an existing Excel Spreadsheet

SQL Server Reporting Services

- Other key information
 - Reports can be exported by user, or at scheduled run, to various formats including: Excel, Word, PDF, HTML, CSV and XML
 - Tables can contain components such as indicators, sparklines, databars and minimised charts
 - Charts can be presented in various formats including: Bar, Line, Pie, Polar, Scatter and Shape

Microsoft SQL Server Suite of Products

- SQL Server -> Analysis Services (SSAS)
 - Analytical data engine used in Decision Support and Business Analytics
 - Involves creation of tabular or multidimensional data model
 - Models can be used within Reporting Services or Excel
 - Various demos available online e.g. Youtube

Microsoft SQL Server Suite of Products

- SQL Server -> Integration Services (SSIS)
 - Platform for building enterprise-level data integration and data transformation solutions using 3 key steps:
 - **Extraction** of data is possible from many different source systems / data formats.
 - **Transformation** can take place on this data to format it to the required specification of destination system or database.
 - **Loading** of cleansed/transformed data can take place either manually or at any required schedule.

Our Observations – Meditech DR

- Extremely robust environment – no unplanned downtime to date (over 2 years in production)
- Data is **not** real-time so should not be used for LIVE patient care procedures
- Downtime during scheduled Meditech updates can be of various durations – can vary between 2-3 hours to 2-3 days
- Clinic wide processes reliant on DR should have a contingency for any downtime

Our Short-Term Plans

- Over 220 reports now exist in our Microsoft SSRS environment and this number will continue to increase on a weekly basis
- Now actively working on projects to provide end (power) user data cubes and modelling capabilities in areas such as Finance and Radiology
- Microsoft Analysis Services data cubes tightly integrates with Microsoft Excel to provide end user capabilities in this area

Any Questions?

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Thank you



Walter Lee – April 2019